

Severe impact on family planning programme due to COVID-19 pandemic in urban population



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ABSTRACT

Background: Contraception and sexual health are a fundamental human right and an integral part of women's health services. Postpartum period is the unique opportunity for counseling and availing contraception. COVID-19 pandemic hindered routine and special services like postpartum clinics has negative impact on family planning services. **Aims and Objectives:** The objective of study was to compare the change in contraceptive services due to COVID-19 in two consecutive financial years (2019–2020 and 2020–2021) at Nil Ratan Sircar Medical College and Hospital, Kolkata, West Bengal, India. **Materials and Methods:** An institution-based, retrospective, and cohort study was carried out in Nil Ratan Sircar Medical College and Hospital among the users of contraceptive services at the department of family planning for the financial year 2019–2020 and 2020–2021. During the period, 226,700 beneficiaries attended department of family planning for the financial year 2019–2020 and 98,584 beneficiaries attended department of family planning for the financial year 2020–2021. Template was generated in MS excel sheet and analysis was done on SPSS software. **Results:** During the year 2019–2020, 94.73% availed combined oral contraceptives while in the year 2020–2021, 93.97% availed combined oral contraceptives. Lap ligation was decreased by 96.42%, post-abortion ligation was decreased by 85%, Interval IUCD was decreased by 79.62% and PAIUCD was decreased by 76%. During the year 2019–2020, OCP was used by the maximum beneficiaries, that is, 219,654 while in the year 2020–2021 OCP was used by 97,353 beneficiaries. **Conclusion:** During COVID-19 pandemic, family planning services suffer a huge setback as it is does not come under emergency services. With the ongoing COVID-19 crisis and continuous need for contraception, there is a need to refocus and motivate eligible couples for long-acting reversible contraceptive methods with significantly lower failure rates.

Key words: Challenges; Contraception services; COVID-19; Family programme

INTRODUCTION

The World Health Organization (WHO) announced the COVID-19 outbreak as a pandemic on March 11, 2020, and India entered a nationwide lockdown on March 25, 2020.¹ Essential health services in India have been majorly disrupted both in the public and private sector during the lockdown, and the health system has been slow to recover while coping with COVID-19 care. Unfortunately, four phases of lockdown and five phases of unlock during first wave of pandemic have forced

several elective health services to shut down limiting the provision of contraceptive services. A similar health-care crisis was reported in the West African Ebola outbreak in 2013–2016.² Closure of interstate borders not only affected the health-care needs but also the import, supply chains and, access to the contraceptive services fuelling the crisis.³

COVID-19 impacted the family planning and reproductive health in almost all countries through disruption to supply chains of contraceptive commodities, closure of these

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services, and public fear about visiting health facilities. At the same time, orders to stay at home, loss of employment, and school closures have also likely impacted typical sexual and reproductive behaviors inside the home. These impacts present a great risk to the health and wellbeing of women and girls in need of family planning and reproductive health services and products. With stay at home orders, and the “work from home culture,” a large number of people living away from their families due to work and other obligations, have returned home. It has led to an increased risk of accidental and unplanned pregnancies. Since at least mid-March, in-person healthcare had been severely limited, with providers needing to limit hours and curtailing in-person visits. Women reported having to delay or cancel sexual and reproductive healthcare and expressed concerns about their ability to afford or obtain contraceptives. Even once all stay at home restrictions were lifted, women could not seek out needed services, due to fears that doing so may expose them or a family member to COVID-19, and providers continued to provide reduced in-person care. The uneven public health response to the pandemic at the federal, state, and local levels prolonged the fear and uncertainty. These disruptions in needed care resulted in continued barriers to obtaining desired contraceptives, increase in pregnancy among women who wanted to avoid them. These outcomes carried negative health, social, and economic consequences. Due to difficulty in providing hospital services, the abortion services were also hampered. In educated class, the need for contraceptive services saw a boost because due to loss in jobs, it was becoming difficult managing a family. However, because of the odd circumstances, the supplies were not enough to meet the increases need. Due to decreased interventional procedures being carried out in hospitals, to meet the needs of the increased abortive services, the general population also had to take the support of illegal abortion services available. It leads to a significant rise in resultant poor condition of the female.

With substantial job losses and broad economic uncertainty, more than one in three women reported that because of the pandemic, they wanted to delay having a child or limit future births. In early half of the pandemic, even with many women reporting that they have increased their consistent use of contraceptives, these changing fertility preferences, combined with barriers to obtaining contraceptives, suggest that the number of women who need to access abortion care has increased. Thus, the pandemic has affected the sexual and reproductive health-care services due to various cofound factor.

Objective of the study was to compare the change in contraceptive services due to COVID-19 in 2 consecutive

financial years (2019–2020 and 2020–2021) at Nil Ratan Sircar Medical College and Hospital, Kolkata, West Bengal, India.

Aims and objectives

By keeping in view this study was designed to compare the change in contraceptive services due to COVID-19 in two consecutive financial years (2019-2020 and 2020-2021) at in a tertiary care teaching hospital in West Bengal

MATERIALS AND METHODS

Type of study

This was a institution-based, retrospective, and cohort study.

Place of study

The study was conducted at Department of family planning of Nil Ratan Sircar Medical College and Hospital, Kolkata, West Bengal, India.

Period of study

The period of the study was 2019–2020 and 2020–2021.

Data concerning the contraceptive services available at the department of family planning for the financial year 2019–2020 and 2020–2021 were obtained. The number of people adopting the services in each category were calculated and presented in a tabular form for proper comparison and observation of the change in trend of contraceptive use due to the COVID-19 pandemic.

Data collection and interpretation

The sources of information were the folders of beneficiaries at department of family planning of Nil Ratan Sircar Medical College and Hospital, Kolkata, during that period.

The case records are studied, analyzed, and compared with suitable statistical method. Correlation between different findings is established by table, bar charts wherever feasible.

Statistical analysis

For statistical analysis, data were entered into a Microsoft excel spreadsheet and then analyzed by SPSS (version 27.0; SPSS Inc., Chicago, IL, USA). Data had been summarized as mean and standard deviation for numerical variables and count and percentages for categorical variables. $P \leq 0.05$ was considered for statistically significant.

Ethical clearance

The study was conducted only after obtaining written approval from the Institutional Ethics Committee (NH/G

and O/2022/87, Date: October 11, 2022). Written informed consent will be taken from every study patient or their logical representative.

RESULTS

An institution-based, retrospective, and cohort study was carried out in Nil Ratan Sircar Medical College and Hospital, Kolkata, West Bengal, India, among the users of contraceptive services at the department of family planning for the financial year 2019–2020 and 2020–2021. During the period, 226,700 beneficiaries attended department of family planning for the financial year 2019–2020 and 98,584 beneficiaries attended department of family planning for the financial year 2020–2021.

In the present study, number of various contraceptive services provided at NRSMCH in the 2 consecutive financial years was tabulated to observe the change and impact of COVID-19 on contraceptive services in our hospital. During the year 2019–2020, 226,700 beneficiaries attended department of family planning amongst them maximum 94.73% availed combined oral contraceptives. During the year 2020–2021, 98,584 beneficiaries attended department of family planning among them maximum 93.97% availed combined oral contraceptives (Table 1).

The contraceptive services as supplied by our hospital have reduced drastically by great numbers in 2 consecutive years due to the impact of the COVID-19 pandemic. Lap ligation was decreased by 96.42%, post-abortion ligation was decreased by 85%, interval IUCD was decreased by 79.62%, and PAIUCD was decreased by 76%. CHHAYA was increased by 33.33% (Table 2).

In the present study, during the year 2019–2020, postpartum sterilization was used by the maximum beneficiaries, that is,

700 while in the year 2020–2021, postpartum sterilization was used by 320 beneficiaries (Figure 1).

In the present study, during the year 2019–2020, OCP was used by the maximum beneficiaries, that is, 219,654 while in the year 2020–2021, OCP was used by 97353 beneficiaries (Figure 2).

DISCUSSION

Sustainable Development Goals 3 (2016–2030):

1. To decrease global MMR <70/100,000 live births
2. To decrease neonatal mortality rate <12/1,000 live births, under 5 mortality <25/1,000 live births
3. Universal access to sexual and reproductive health care services- family planning, information, education, integration of reproductive health into national strategies, and programs
4. Universal health coverage – financial risk protection, access to safe, effective, quality, and affordable essential medicines and vaccines for all.

The COVID-19 pandemic has definitely affected the progress toward the achievement of the SDG. Due to interruption in the supply of the health supplies, the major goal achievements have been severely impacted and affected. It will take a substantial amount of time to get back to the pre-COVID era values.

A drastic change in the use of contraceptive patterns has been seen due to the COVID-19 pandemic. The pandemic has had a huge impact of the family planning and lifestyle pattern of women across the world. In a country like India, various factors play a major role which brings about a huge impact on the health care system. Various factors playing a role in the above mentioned situation can be:

1. Due to the various restrictions on the movement due to the long prevailing lockdown, the facilities were not readily available for the women

Table 1: Distribution of study population according to various types of contraceptives use

Type of contraceptive	Year 2019–2020		Year 2020–2021	
	No.	%	No	%
Postpartum sterilization	697	0.31	327	0.33
PPIUCD (after vaginal or caesarean section delivery)	3809	1.68	1704	1.73
PAIUCD	142	0.06	34	0.03
OCP	4900	2.16	2924	2.97
Lap ligation	28	0.01	1	0.00
Mini lap ligation	33	0.01	16	0.02
Interval IUCD	54	0.02	11	0.01
CHHAYA (Centchroman)	144	0.06	192	0.19
DMPA(Antara)	2108	0.93	732	0.74
Emergency contraceptive pills	11	0.00	5	0.01
Combined oral contraceptives	214754	94.73	92635	93.97
Post-abortion ligation	20	0.01	3	0.00
Total	226700	100.00	98584	100.00

Table 2: Distribution of study population according to percentage of decrease in the number for various methods of contraception

S. No.	Type of contraception	Percentage change in their use
1.	Postpartum sterilization	Decrease by 53.08%
2.	PPIUCD	Decrease by 55.26%
3.	PAIUCD	Decrease by 76%
4.	OCP	Decrease by 40.32%
5.	Lap ligation	Decrease by 96.42%
6.	Mini lap ligation	Decrease by 51.51%
7.	Interval IUCD	Decrease by 79.62%
8.	CHHAYA	Increase by 33.33%
9.	DMPA	Decrease by 65.27%
10.	Emergency contraceptive pills	Decrease by 54.54%
11.	Combined oral contraceptives	Decrease by 56.86%
12.	Post-abortion ligation	Decrease by 85%

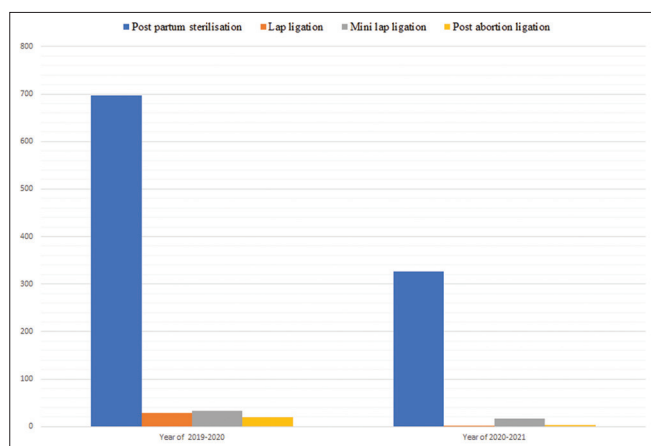


Figure 1: Distribution of study population according to their use of differing methods of permanent sterilization

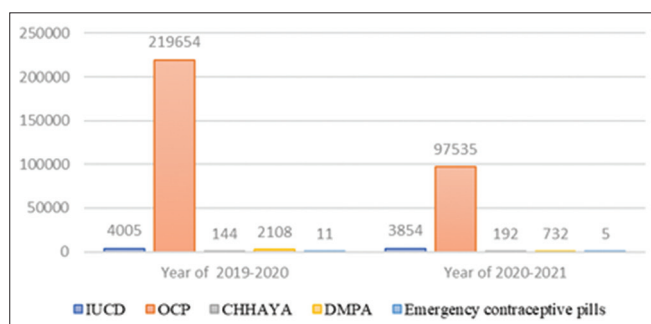


Figure 2: Distribution of study population according to their use of differing methods of temporary contraceptives

2. Due to the fear of the infection, women might be hesitant to attend the hospital for the same
3. As it is not an emergency and people see alternatives for it, women might not be willing to take the risks
4. Due to the emergency situation and various restrictions applied by the government during the lockdown, various services were not for a while. Only emergency procedures were carried out for a while

5. To decrease exposure, the health-care providers and even the patients were reluctant for any procedure which had an alternative
6. Due to the pandemic, a change in the family planning was seen for many families
7. Due to lack of availability of transport, many people could not attend the hospital to avail free services
8. There was a shift in the focus of the government from such long-term policies to a more emergency situation pertaining in the country

In the present study, number of various contraceptive services provided at NRSMCH in the 2 consecutive financial years was tabulated to observe the change and impact of COVID-19 on contraceptive services in our hospital. During the year 2019–2020, 226,700 beneficiaries attended department of family planning among them maximum 94.73% availed combined oral contraceptives. During the year 2020–2021, 98,584 beneficiaries attended department of family planning amongst them maximum 93.97% availed combined oral contraceptives.

In January 2013, the Government of India defined quality postpartum care as one of the important components under reproductive, maternal, newborn, child, and adolescent health (RMNCH+A).⁴ Postpartum care includes contraception, lactation support, and three postnatal visits.

The contraceptive services as supplied by our hospital have reduced drastically by great numbers in two consecutive years due to the impact of the COVID-19 pandemic. Lap ligation was decreased by 96.42%, post-abortion ligation was decreased by 85%, interval IUCD was decreased by 79.62%, and PAIUCD was decreased by 76%. CHHAYA was increased by 33.33%.

During the pandemic to aid this task, various comprehensive guidelines have been issued by international federation of gynecology and obstetrics, faculty of sexual and reproductive healthcare, and Royal college of obstetricians and gynaecologists, the WHO, and centers for disease control and prevention to guide clinicians for continued contraceptive services.⁵⁻⁸

In the present study, during the year 2019–2020, postpartum sterilization was used by the maximum beneficiaries, that is, 700 while in the year 2020–2021, postpartum sterilization was used by 320 beneficiaries.

In the present study, during the year 2019–2020, OCP was used by the maximum beneficiaries, that is, 219,654 while in the year 2020–2021, OCP was used by 97,353 beneficiaries.

In the era of social media and technological advances, virtual consultation, education on reproductive health, and contraception counseling services using teleconsultation through mobile phones (instant messaging) in countries with high COVID-19 burden would facilitate the continuity of these services.⁹

Limitations of the study

This study is institution-based, retrospective, and cohort study. This was done during period of COVID-19 pandemic. In this duration, changing trend of family planning was determined. Further analysis of data for few years is needed.

CONCLUSION

In a huge pandemic like the COVID-19, services like the family planning do suffer a setback as it is not an emergency service. It does affect the women healthcare in general. However, the situation is inevitable. The services should be provided to the maximum extent possible so that the women who can access the same have them available. With improvement in the situation, hopefully this data will show improvement over the next few years.

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ETHICAL APPROVAL

The study was approved by the institutional ethics committee.

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DM and KKP- Involved in the diagnosis and management of the cases; **RD and KPM**- Did the literature search; **VA and KKP**- Wrote the manuscript.

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