

What Impact Have SARS-CoV-2/Covid-19 Pandemic on the Reproductive and Child Health Programme of Uttar Pradesh in India over the 3 months after nationwide Lockdown announcement in March 2020 -A brief analysis

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Research Article

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Abstract

Background: The delivery of reproductive and child health services is of utmost importance and prime concern in India particularly populous states like Uttar Pradesh with limited resources, poor infrastructure and huge demand on healthcare system. The SARS-CoV-2 pandemic had presented a challenge even for developed healthcare systems around the world.

Introduction

The delivery of reproductive and child health services is of utmost importance and prime concern in India particularly populous states like Uttar Pradesh with limited resources, poor infrastructure and huge demand on healthcare system. The women & child group are considered vulnerable group hence this topic needs essential attention.

The SARS-CoV-2 pandemic had presented a challenge even for developed healthcare systems around the world. A sense of fear gripped the whole world due to pandemic and the state of Uttar Pradesh in India is not an exception. The scarce healthcare resources including manpower, infrastructure, transportation (ambulance services) etc. have been largely deployed to tackle the situation of pandemic of Covid-19. This shift has tremendous effect of ongoing various health programmes running previously before the pandemic era.

Pregnant mother & children's are especially more vulnerable groups. The OPD/IPD services also suffered a lot due to pandemic impact as well as field health services are also compromised. The Pandemic situation challenged not only the health system but also community. The people have a sense of fear in meeting others particularly with peoples of healthcare system until unless there is some sort of acute emergency. Moreover most of the beds were reserved for covid-19 patients and as per protocols the community and system both have constrains erupting from the sudden situations of pandemic.

The advocacy for maternal and child health, women empowerment have been done and emphasised by many national and international organisation for several decades considering them especially vulnerable groups in times of disaster such as pandemic. The Covid-19 pandemic has clearly disclosed the weakness of health system to protect above mentioned vulnerable groups. The situation also produced a demand of separate cadre to protect mother and child health in situations of disaster like pandemic. It seems many protective beneficial health services were not delivered in covid-19 era which may produce undesirable and detrimental effects at mass level in coming future.

To understand the real impact of covid-19 on maternal and child health the data analysis for the month of April to June 2020 is compared with previous year 2019 data of 3 months and the facts are presented as table and charts.

OBJECTIVES

The main aim of this research is to find out impact of SARS-CoV-2 pandemic on the Reproductive and Child Health Programme of Uttar Pradesh in India over the next 3 months after Lockdown imposition countrywide in March 2020. For this purpose important indicator related to child & mother health protection i.e. immunisation, maternal health and family planning were taken into consideration.

Materials And Methodology

Materials

Secondary data from HMIS of Ministry of Health & Family Welfare Government of India for 2019 & 2020 were taken for analysis and understanding of impact of pandemic on RCH programme over 3 months after lockdown viz. April/May/June 2020 in Uttar Pradesh. The data obtained is analysed by using Microsoft Office software. Following items are considered to know the impact of Pandemic on delivery of health services to mother and child under RCH programme.

1.Immunisation
BCG-BACILLUS CALMETTE GUERIN
PENTA 3 + DPT 3
DT (2 ND DOSE) OR DPT-5
MEASLES + MR
POLIO (OPV 3)
TETANUS TOXOID (TT10)
TETANUS TOXOID (TT16)
VITAMIN A (1 ST DOSE)
VITAMIN A (5 TH DOSE)
VITAMIN A (9 TH DOSE)

2.MATERNAL HEALTH	3.Family Planning
ANC	Condom user
MATERNAL HEALTH- HOME DELIEVERIES	Oral Pill user
MATERNAL HEALTH – INSTITUTIONAL DELIEVERIES	IUD insertion
	Sterilisation
	Tubectomy
	Vasectomy

Settings & Design:

Different indicators group of RCH programme (immunisation, maternal & child health, family planning) for state of Uttar Pradesh were collected and compared from previous year for the month of April/May/June – 2019 & 2020.

Methodology

All the data obtained were analysed using Microsoft office software. The analysis report is presented as graphs and also in letters. The data for analysis is obtained from MoHFW Govt. Of India web site services.

Results

Results of data analysis regarding RCH performance of Uttar Pradesh during the month of April to June 2020 as compared to previous year 2019 for same months were compared for RCH services.

The immunisation services had been adversely affected during the months analysed as compared to previous year 2019. It seems that not only newborn children but even the older ones have missed proper immunisation services as evident from the data analysis.

For BCG immunisation there is a decrease of 29.0% as compared to previous year 2019 data. Since BCG is given at birth it seems that either less no. of children's is born during this period or many have not received it.

For Penta3 + DPT3 the decrease was 43.1%.

For DT or DPT5 the decrease was 45.1%.

For Measles + MR the decrease was 33.4%.

For OPV3 the decrease was 43.2 %.

For TT10 the decrease was 45.4%.

For TT16 the decrease was 44.6%.

For vitamin A which is given from 9 months of age 1st dose decreased by 16.6 %

Vitamin A 2nd to 9th dose starts from 16 months of age (one dose every 6 month).

Vitamin A 5th dose decreased by 11.3%

Vitamin A 9th dose decreased by 10.9 %

Here it is important to mention that vitamins A as well as OPV both are administered orally. The only difference is that OPV3 is given at the age of 14 weeks whereas vitamin A is started from 9 month onwards. This shows that the immunisation coverage for children of all ages decrease in 2020 April/May/June as compared to 2019 when the pandemic was not in existence.

The full scenario is as follow:

Immunisation	ITEM CODE	NUMBERS ACHIEVED DURING APRIL TO JUNE - 2020	NUMBERS ACHIEVED DURING APRIL TO JUNE - 2019	% INCREASE/DECREASE IN 2020 COMPARED TO 2019
BCG-BACILLUS CALMETTE GUERIN	9.1.2	762618	1073425	DECREASE 29.0%
PENTA 3 + DPT 3	9.1.5,9.1.8	617553	1084744	DECREASE 43.1 %
DT (2 ND DOSE) OR DPT-5	9.5.2	338323	616760	DECREASE 45.1%
MEASLES + MR	9.2.1,9.2.2	795341	1193706	DECREASE 33.4 %
POLIO (OPV 3)	9.1.12	610795	1074508	DECREASE 43.2 %
TETANUS TOXOID (TT10)	9.5.3	269797	493890	DECREASE 45.4 %
TETANUS TOXOID (TT16)	9.5.4	280265	505789	DECREASE 44.6 %
VITAMIN A (1 ST DOSE)	9.8.1	710516	852041	DECREASE 16.6 %
VITAMIN A (5 TH DOSE)	9.8.2	147588	166404	DECREASE 11.3 %
VITAMIN A (9 TH DOSE)	9.8.3	64649	72541	DECREASE 10.9 %

The ANC services and institutional deliveries are important to assess the status of maternal care.

Although home deliveries are reduced but at the same time the institutional deliveries also reduced which is a matter of great concern. The scenario is as below:

MATERNAL HEALTH	ITEM CODE	NUMBERS ACHIEVED DURING APRIL TO JUNE – 2020	NUMBERS ACHIEVED DURING APRIL TO JUNE – 2019	% INCREASE/DECREASE IN 2020 COMPARED TO 2019
ANC	1.1	1120172	1579423	Decrease 29.1%
MATERNAL HEALTH- HOME DELIEVERIES	2.1.1.a,2.1.1.b	81626	110955	Decrease 26.4%
MATERNAL HEALTH – INSTITUTIONAL DELIEVERIES	2.2	531528	655121	Decrease 18.9%

Although there is a general trend of increase in all above indicators every year as the population of India is growing rapidly. The decrease of such important indicators clearly signifies that covid-19 pandemic have a negative impact on delivery of important health services such as maternal and child health

The role of family planning is very important in context of India. All important family planning programmes show a decrease from previous year timeline for the same months indicating that the population control strategy of India also suffered during this period.

Family Planning	ITEM CODE	NUMBERS ACHIEVED DURING APRIL TO JUNE - 2020	NUMBERS ACHIEVED DURING APRIL TO JUNE - 2019	% INCREASE/DECREASE IN 2020 COMPARED TO 2019
Condom user	8.13	244692	428060	Decrease 42.8%
Oral Pill user	8.12, 8.14	168382	252961	Decrease 33.4%
IUD insertion	8.3,8.4,8.5	103233	170656	Decrease 39.5%
Sterilisation	8.2.1,8.2.2, 8.2.3,8.2.4,8.1.1	3986	25251	Decrease 84.2%
Tubectomy	8.2.1,8.2.2, 8.2.3,8.2.4,	3971	24429	Decrease 83.7%
Vasectomy	8.1.1	15	822	Decrease 98.2%

Discussion

The analysis of secondary data obtained from HMIS of Ministry of Health & Family Welfare website for RCH programme **of the state** of Uttar Pradesh shows that the lockdown period & initial early phase of SARS-CoV-2 pandemic have a negative impact over the delivery of RCH health services as well as the indicators are also affected negatively.

Besides the pandemic the state is also having lack of resources, manpower poor infrastructure as well as positive deviance at community level. These are the barriers in fact beside the epidemic. It seems that there is lack of proper plan to deal with such pandemic situation. Providing RCH (reproductive and child health) service is always a big concern for populous state of Uttar Pradesh with high levels of fertility. During the pandemic era it's more challenging to deliver such essential services due to fear factors at community as well as personal level of healthcare staff. Decreasing rate of immunisation can lead to emergence of diseases which is being controlled by such programmes. At the same time poor ANC services can put maternal as well as foetus life in danger. The decrease in family planning services might add more to ongoing population explosion putting more stress on available resources.

Although the state have imposed various measures but it seems to be ineffective to get positive results on RCH programme. The need is to develop a separate cadre for RCH services in order to reap the benefits of demographic dividend in coming years. The Government of Uttar Pradesh should develop a strong strategy to protect maternal and child health in conditions of distress such as covid-19 pandemic. For this the barriers and promoters of RCH programme needs to be dealt in proper way to achieve the maximum output.

Conclusion

The State of have done a lot to deal with covid-19 pandemic but it seems to be insufficient to give the desired results. The barriers of healthcare system and delivery of services should be rectified added with a proper dynamic plan to carry on usual health delivery services even in pandemics & other situations of distress. The state needs to develop an exclusive plan to tackle such situations to ensure delivery of very essential services such as RCH during pandemics or any other natural calamities.

Declarations

Financial Support & sponsorship

Nil

Conflicts of Interest

There are no conflicts of interest

DECLARATION: This paper has not been previously published and is not currently under consideration by another journal. The whole work is solely done by the author. The document is Microsoft word with English (India) language. 2291 words Total.

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References

1. Ministry of Health & Family Welfare Web Services-2021.

Figures

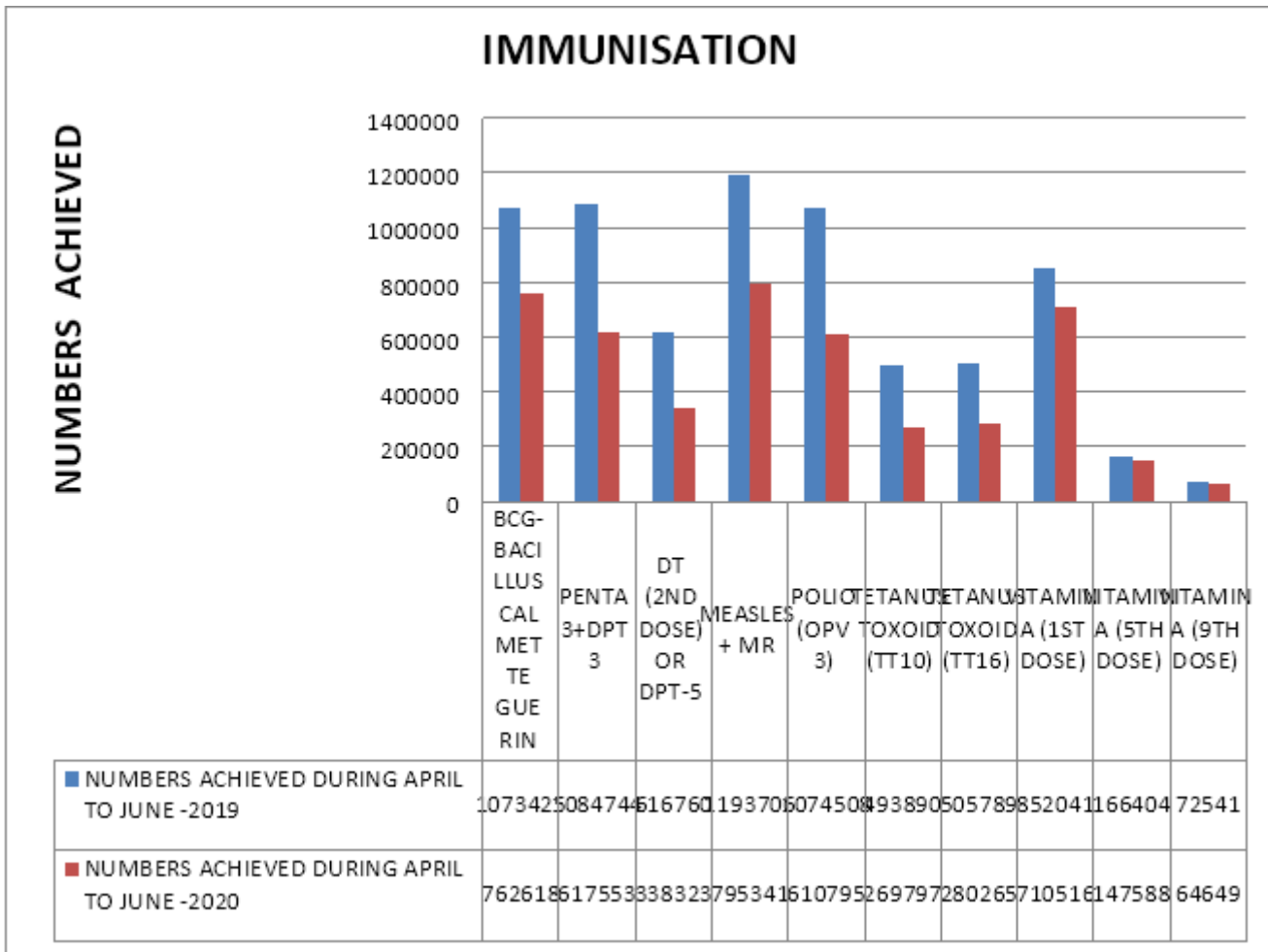


Figure 1

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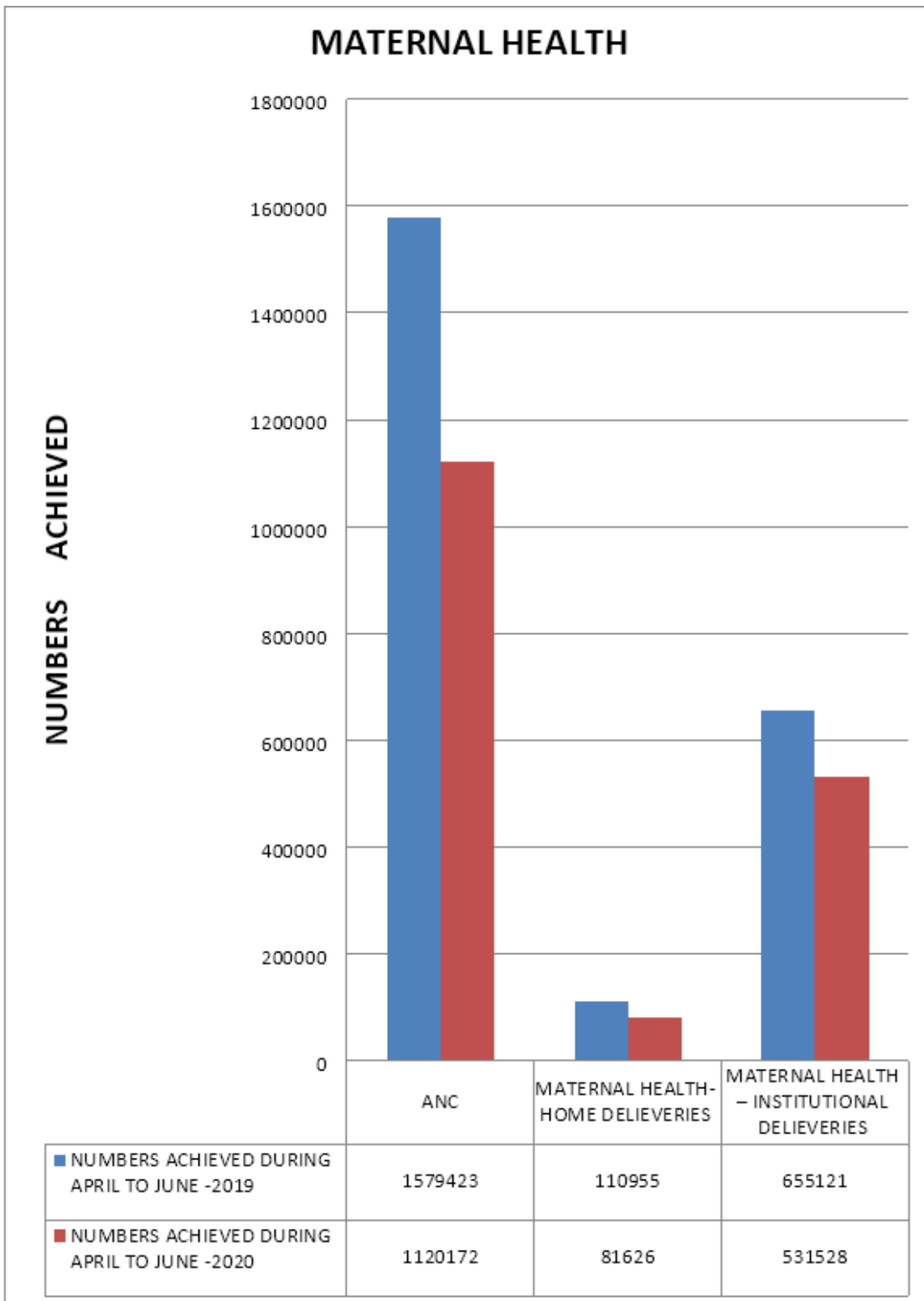


Figure 2

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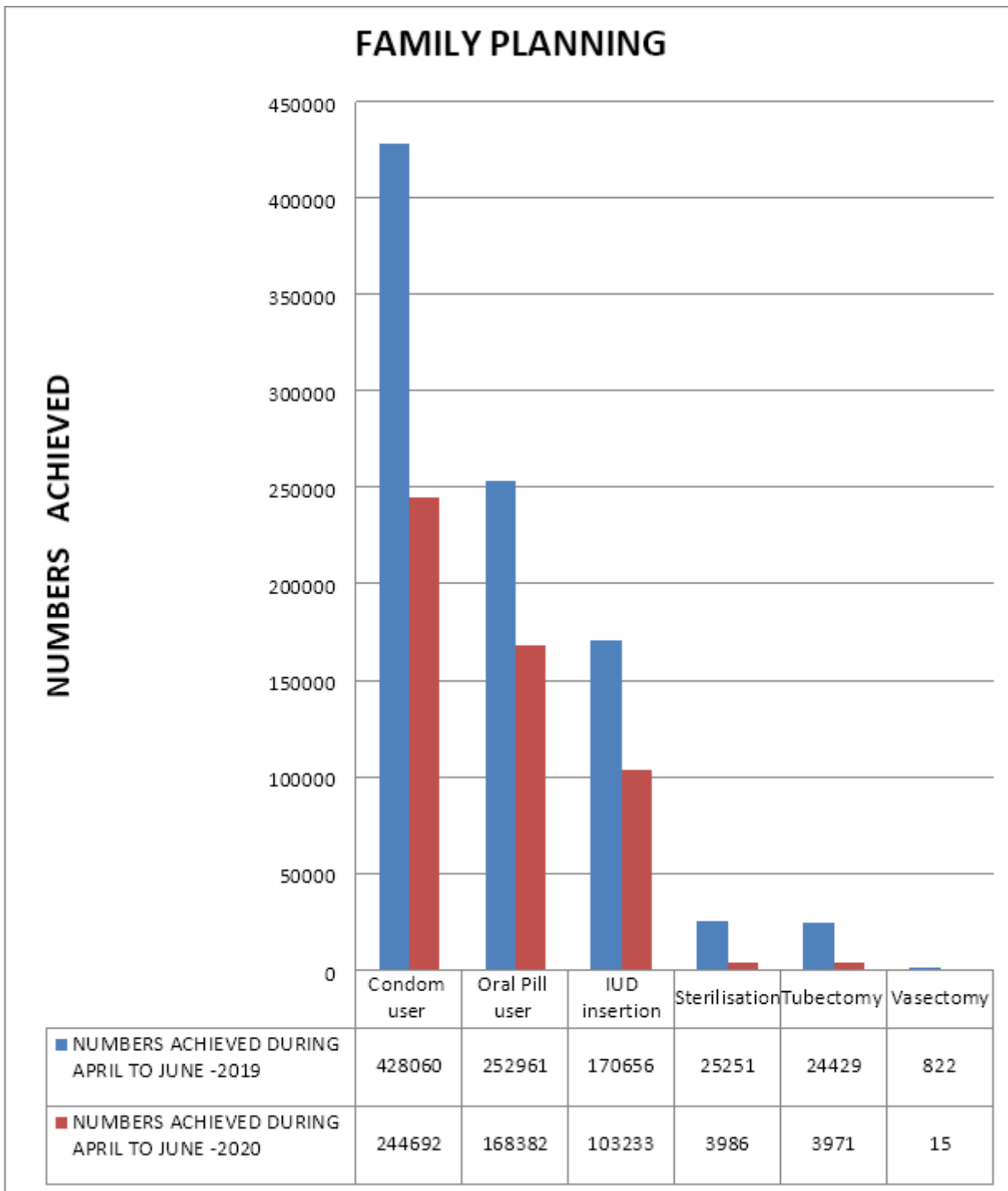


Figure 3

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