

IMPROVING MATERNAL HEALTH CARE IN TELENGANA

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INTRODUCTION

After going through a long tiresome journey of 9 months, a moment of unimaginable joy and epiphany is what a mother feels when a newborn is placed on her arms .But for many pregnant women in India this memory will never come to be and the moment of birth has come to become more frightening than not.

Maternal health which plays a key role in this ,refers to the health of women during pregnancy, childbirth and the postnatal period. While it should be a positive experience, for many it is the lack of education on the topic that becomes a doorway to further complications .

Research says that most maternal deaths are quite preventable with timely management by a skilled health professional working in a supportive environment, Hence showing the need for strict actions to End preventable maternal deaths.

As per the Sample Registration System (SRS) report by Registrar General of India (RGI) for the last three years, Maternal Mortality Ratio (MMR) of India has reduced from 130 per 100,000 live births in SRS 2014-16 to 122 in SRS 2015-17 and to 113 per 100,000 live births in SRS 2016-18.

Our goal is working in accordance with one of India's goals of reducing Maternal mortality ratio under the Sustainable development goal of 'good health and well being', by visualizing the survey(NFHS-5) dataset and to identify the main contributors to the underlying factors that affect Maternal health as per the National Family Health Survey to recognise and analyse them.

OBJECTIVES

The Main objective of analysing the NFHS-5 dataset was to find possible factors and contributors that affect maternal Health in the state of Telangana, and to use these findings to suggest helpful changes for the current system.

The others objectives are to:

- Visualize the related indicators in the dataset
- Compare and contrast the findings over the years
- Identifying potential contributors, their underlying factors to analyse them

METHODS

DESIGN:

Data Analysis, Visualizing the data set through Python

DATA SET:

NFHS -5 dataset for the year 2019-20

TREATMENT:

The dataset includes information collected through the National Family Health survey in the year 2019-20 and provides insight into various Indicators included for the state of Telangana

Our Analysis was on the underlying factors that affect Maternal Health in Pregnant Women, Hence we Analysed and compared the following indicators:

- Females(6 &above) that attended school
- Population living with improved sanitation facility
- Women literacy
- Women with 10 or more years of schooling
- Mothers who took antenatal check-up in first trimester

Mothers having at least 4 antenatal care visits

Mothers whose last birth was protected against neonatal tetanus

pregnant and consumed iron folic acid for 100 days or more

pregnant and consumed iron folic acid for 180 days or more

Registered pregnancies that received (MCP) card

Mothers with postnatal care by a health personnel within 2 days of delivery (%)before the survey

Average expenditure per delivery in a public health facility

Institutional births

Institutional births in public facility

Home births conducted by skilled health personnel

Births attended by skilled health personnel

Births delivered by c-section

c-section births in a private health facility

c-section births in a public health facility

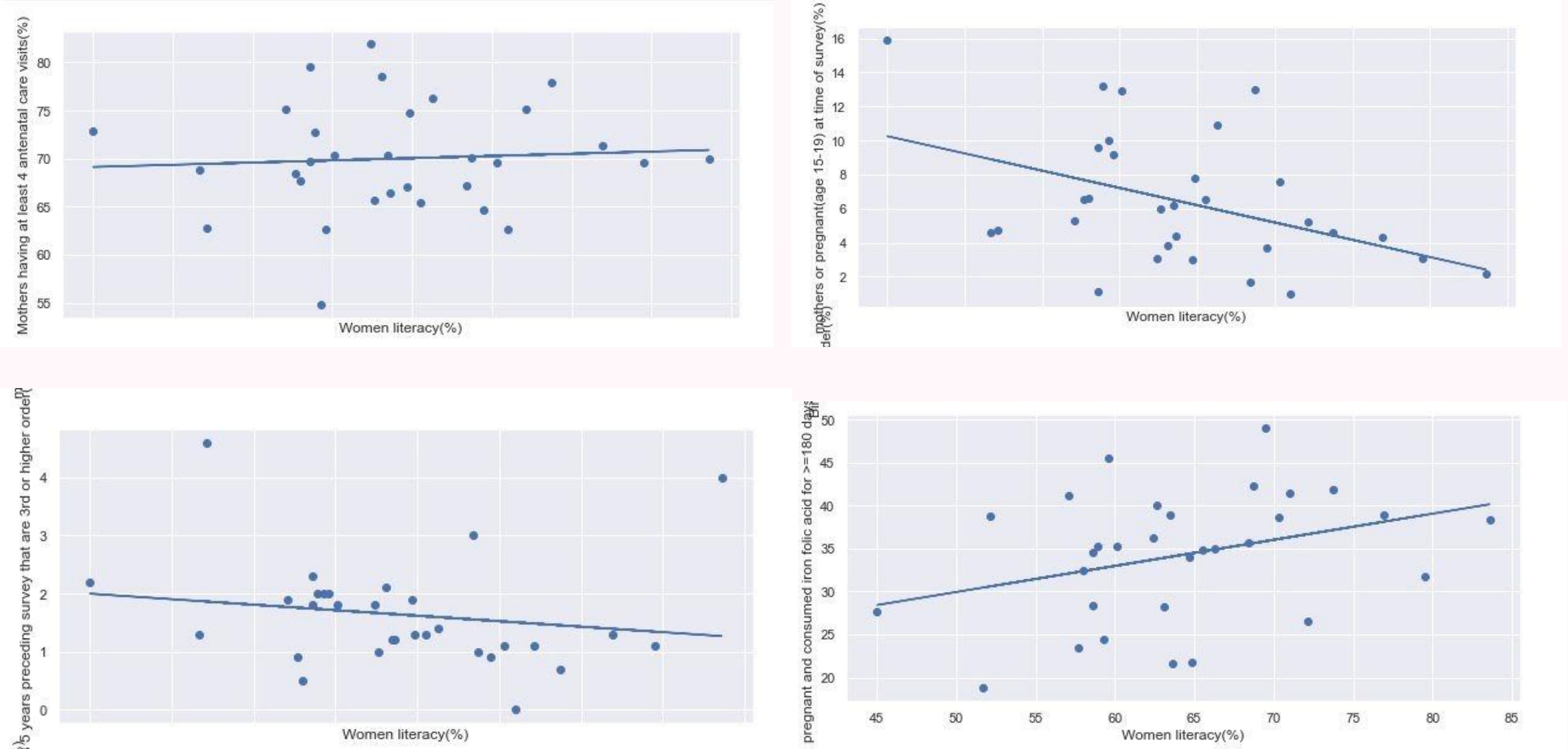
Pregnant women(15-49) who are anaemic

RESULTS

The main findings of our visualization of the NFHS-5 data for all the districts in Telangana are listed below

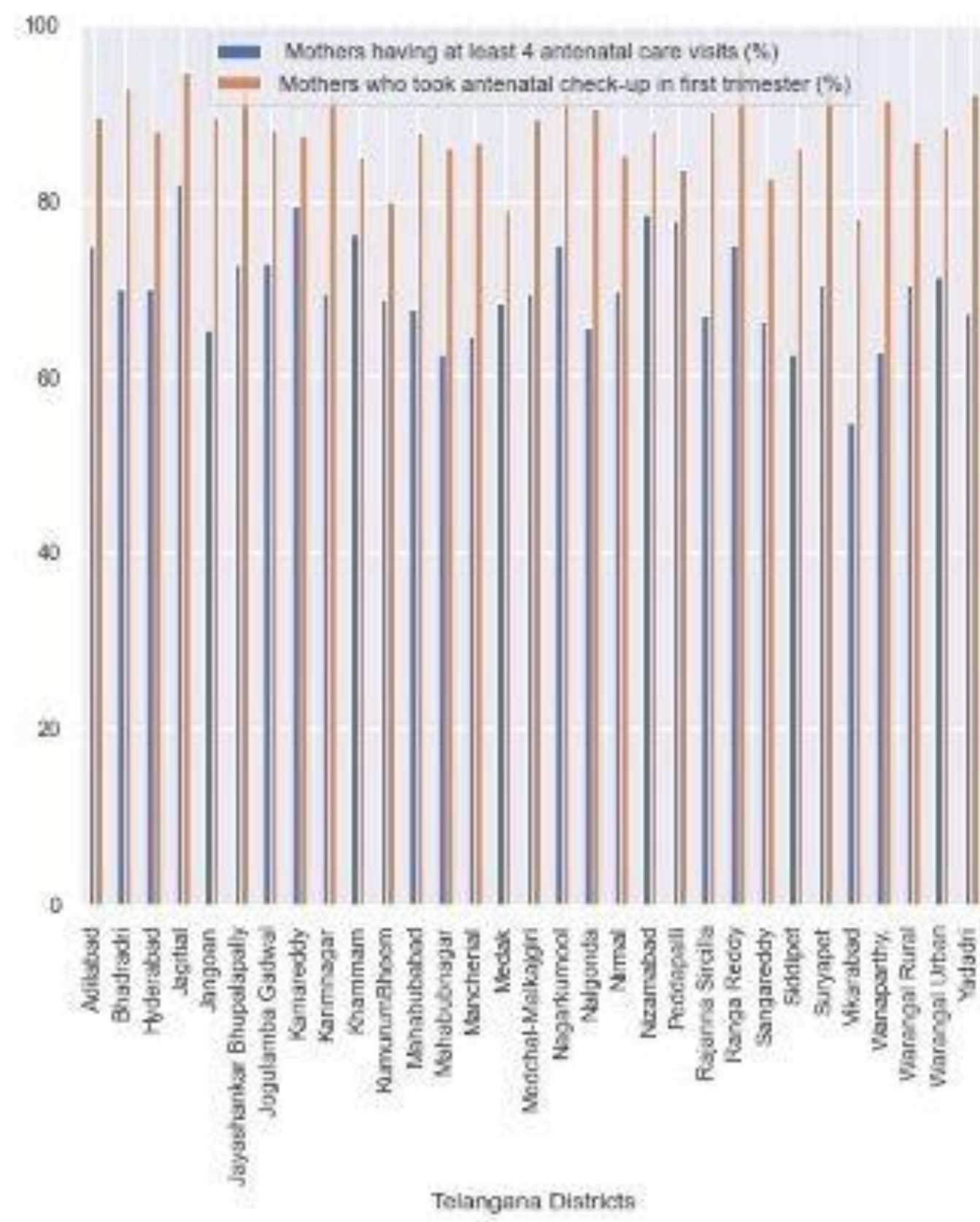
In the Visualization of factors including Women Literacy, Mothers having at least 4 antenatal care visits, mothers or pregnant with age 15-19 at the time of the survey, Births in the 5 years preceding the survey that are third or higher order & pregnant women consuming iron folic acid for 180 days or more, we found that as the literacy rate in women increases, the number of women who are pregnant or mothers at an age of 15-19 years, and women who have 3 or more children, decreases.

This implies that increased literacy in women can possibly lead to improved family planning and reduce pregnancies at a young age for women. The above graphs also show that as the literacy rate in women increases, there is also an increase in women who opt to go for at least 4 antenatal care visits and those that have consumed iron folic acid for more than 180 days during pregnancy. This implies that an increased literacy rate can also possibly increase awareness in women and lead more women to opt for necessary maternal healthcare.

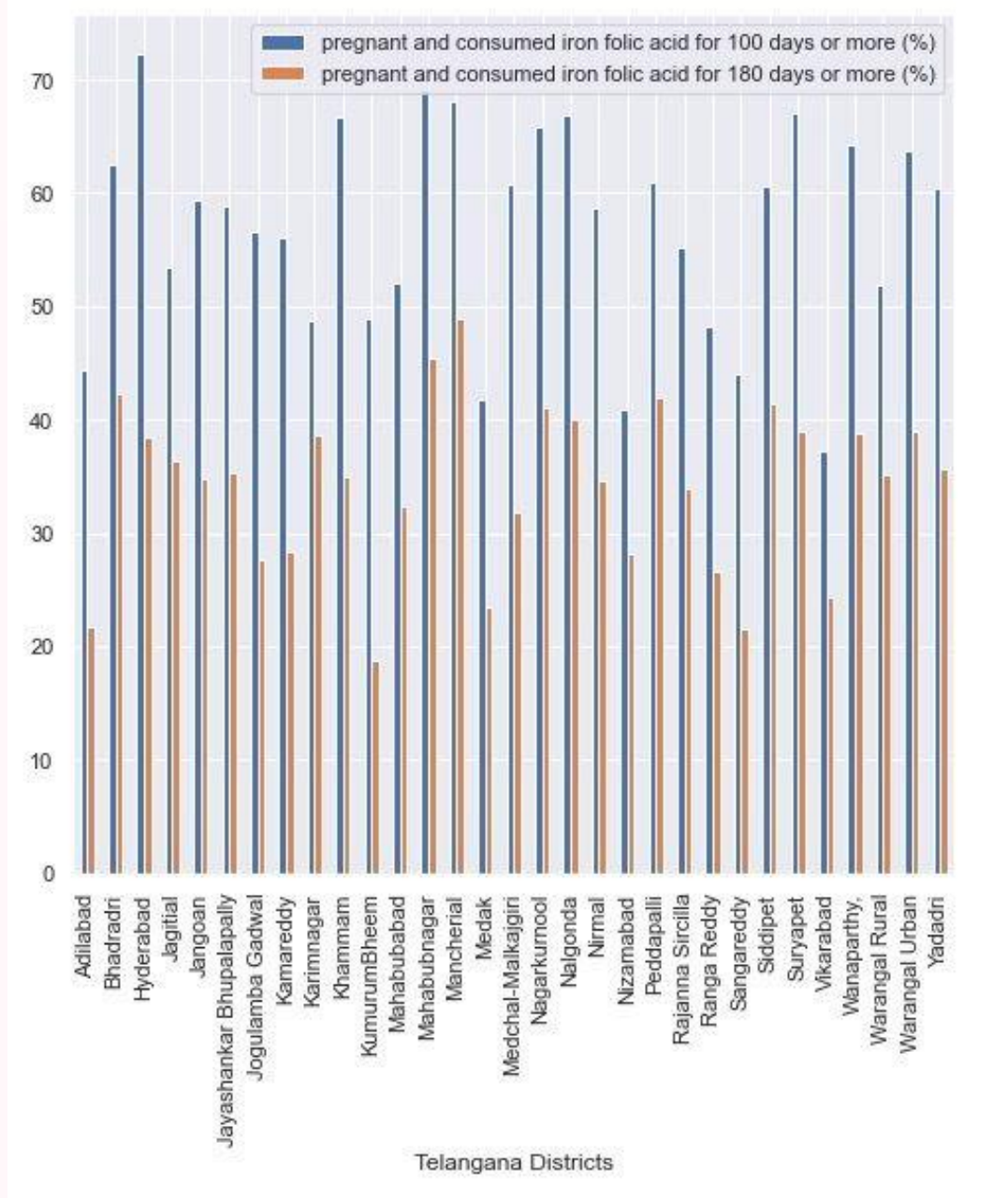


Receiving Antenatal care at least four times, which is recommended by the World Health Organization(WHO), as it increases the likelihood of receiving effective maternal health interventions during antenatal visits

Hence, we compared Mothers having at least 4 antenatal care visits and Mothers who took antenatal check-up in first trimester for each of the districts in Telangana and found as per the graph shows, that the percentage of mothers who took atleast 4 antenatal care visits is significantly less than the percentage of women who took an antenatal check up in the first trimester in all districts.



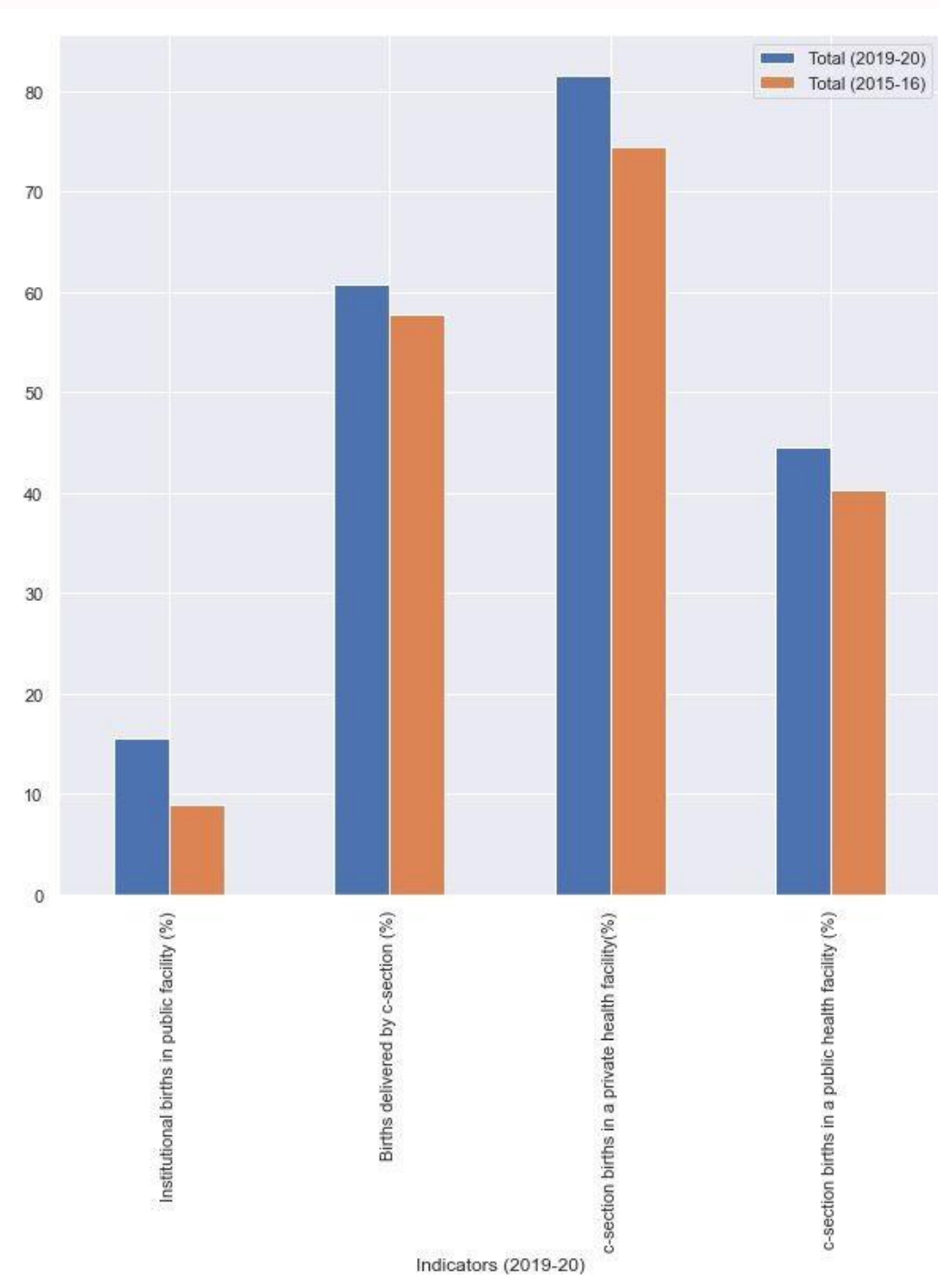
The World Health Organization (WHO) advises all pregnant women to consume a standard dose of 60 mg iron + 400 µg folic acid daily for 6 months to prevent and treat iron deficiency anaemia in women during pregnancy and in the post partum period in order to improve maternal and postnatal health. Hence when we compared pregnant women who consumed iron folic acid for 180 or more days and pregnant women who consumed iron folic acid for 100 or more days it showed that the percentage of pregnant women who consumed iron folic acid for 180 or more days has not even crossed 50%. The maximum being 49% in the district of Mancherial. The percentage of women who consumed iron folic acid for 180 or more days is very less compared to the percentage of women who consumed iron folic acid for 100 or more days. who took an antenatal check up in the first trimester in all districts.



Another noteworthy finding was that in the districts of telangana more percentage of people who opt for a cesarean delivery choose to have it done at a private health facility as compared to a public health facility

And the average out of pocket expenditure in rural areas is Rs. 3966, whereas for urban areas, it is Rs. 3594. But NFHS-5 data for the state of Telangana also indicates that the percentage of institutional births taking place in public facility in rural areas is 53.6 whereas for urban areas it is 43.4.

This means that more people in the rural areas rely on public healthcare facilities for deliveries than the ones in urban areas, but still have to pay more than the people in urban areas.



CONCLUSION

From our analysis of the NFHS-5 dataset we make the following inferences and conclusions

If the literacy rate for women is improved and women are given more access to education and more awareness is generated then it could lead to women opting for better hygiene and care when it comes to their maternal health

If efforts are made to make public health facilities more accessible and affordable in rural areas, for eg: by ensuring public health care facilities have enough skilled health care personal, distributing the MCP card to more pregnant women to generate awareness and ensuring improved sanitation facilities for homes and healthcare centres. Then more women in rural areas will be able to afford and have access to the right maternal health care thereby helping decrease maternal mortality

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