SUSTAINABLE APPROACH TO REDUCE MATERNAL MORTALITY AND MATERNAL MORTALITY POSITION IN INDIA

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Abstract : Making us aligned towards providing best services to the newborns and their mothers, it is the urge of today's world, that everyone needs to come forward and provide a safe environment to every pregnant woman. There are barriers which come in this way due to which a lot of women lose their lives and thus causing maternal mortality. Through this particular study researcher tries to put light on the various government schemes and incentives which have been taken in order to reduce maternal mortality ratio. The declination which has come in the MMR in the past significant years have also been analyzed by the researcher. As the statistical tool, regression analysis is performed in the research in order to find out the expected future MMR and thus analyzing the period until which the UN SDG goal 3 indicator one can be achieved.

Index Terms - Maternal Health, Maternal Mortality Sustainable Development Goal, Maternal Mortality Ratio (MMR).

I. INTRODUCTION

The word maternal health is an umbrella term which includes the entire cycle of women from adolescence to being pregnant and till the birth of the child including its aftercare. Looking back on the previous statistical data of the mothers losing their lives and children's, it showed that the condition was worst but the current situation is improving which is a good sign. Giving this scenario a broader term, and to dig deep inside the various aspects of it one can define the death of a woman during her maternal period as the maternal mortality. As it is a global issue it is very important to put light on the reasons which lead to the maternal mortality, which are excessive bleeding at the time of childbirth, high blood pressure in the pregnancy duration, severe conditions like diabetes and cardiac disease are some of the main reasons in order to reduce the maternal morbidity. The government has turned up with certain initiatives which facilitates the proper health conditions to maternal women which includes various cash incentives and variety of policies and programs which are providing the best healthcare facilities and infrastructure to minimize the maternal morbidity.

II. Review of literature:

- **Sarkar (2017)** The Particular paper puts light on the standard of services which were being provided to pregnant women. The fundamental goal of this study was to analyze the various root causes of maternal mortality. The study was closely related to the maternal death and therefore the data set which was being used is taken from the hospitals which consist of the count of maternal death which took from 2009 to 2014. The result which was concluded from this paper were that it included the percentage of death which occur due to the various reasons and basically showing their individual percentage. It also focused on the various factors which can help to reduce the maternal mortality rate and make world safe for woman. In the duration of study 105 death which were considered as a maternal death took place.

- **Gunawardena (2018)** The major intent behind this paper is to figure out the hindrances which arise at the facility level. That means when the pregnant women delaying in reaching to look for the care, and then delay in reaching the hospital, and then delay in getting aid at the hospital. The database which was taken from the electronic medium which included various research articles, and some research terms like maternal health services and facility level were combined. When the research was performed it was concluded that there was total 30 barriers which arrive as the facility level hindrances, and others which were segregated in 6 themes. It can be concluded from the research that there are certain supply side hindrances which are the cause of maternal mortality in the region, and they need to be improved.

- **Sitaula (2021)** The key goal of this research is to calculate the rate of maternal mortality and identify its correlated risk factors. And also analyzing the reasons of maternal mortality in Nepal at the tertiary care centre. Secondary data was taken into consideration for the analysis. The conclusion that can be drawn from the study are that there was a urge to identify the patients

which were having high risk factors on time with proper paperwork so that proper measures can be taken in the early stages and handle the conditions before getting worse. And there was also a need to address all such delays which are the causes of maternal mortality.

- **Prabhat Jha (2022)** The main objective of this paper was to evaluate both the national and regional inclination and reasons determined distribution of maternal mortality in the country. From the year 1997 to 2020, trends of maternal mortality ratio were analyzed, and studied the various causes which were the reason of maternal death using data sources which were nationally represented. The results which came after performing this study saw a decline in the MMR by 70% from 398 per 1,00,000 live births in 1997 to 1998 to 99 per 1,00,000 in 2020. Regionally analyzing the states which were having high MMR were Assam Chhattisgarh U.P. in the duration of 2016 to 2018. The conclusion that came out of this research was that if the UN 2030 maternal mortality ratio goals have to be achieved then the average rate has to be maintained.

III. Research Design and Methodology:

Below given research design was utilized by the researcher for making the current study a scientific one.

3.1 Collection of Data: Particular study is established on the secondary data itself.

3.2 Scope: This study is based on maternal mortality ratio in India.

3.3 Duration: 2014-2016 to 2028-2030

IV. Analysis:

Secondary Data has been collected from the Press Information Bureau which was released by office of the registrar's journal & census commissioner, India ministry of home Affairs, Government of India. Statistical techniques which have been used for the analysis of the data is regression analysis.

4.1 Specific Research Methodology:

Sr.No.	Objective	Tool
1.	To analyze the current status of maternal mortality and find out the expected MMR	Regression Analysis

V. Need of the study:

This study will provide assistant to the government and scheme makers of maternal mortality in order that if they need to bring changes in the existing infrastructure in order to achieve the UN goal.

VI. Objective:

1. To analyze the current status of maternal mortality and find out the expected Maternal Mortality Ratio.

VII. Analysis and Interpretation

Table 1: Maternal mortality ratio per 100000 live births and their % variation between the 2014 to 2020

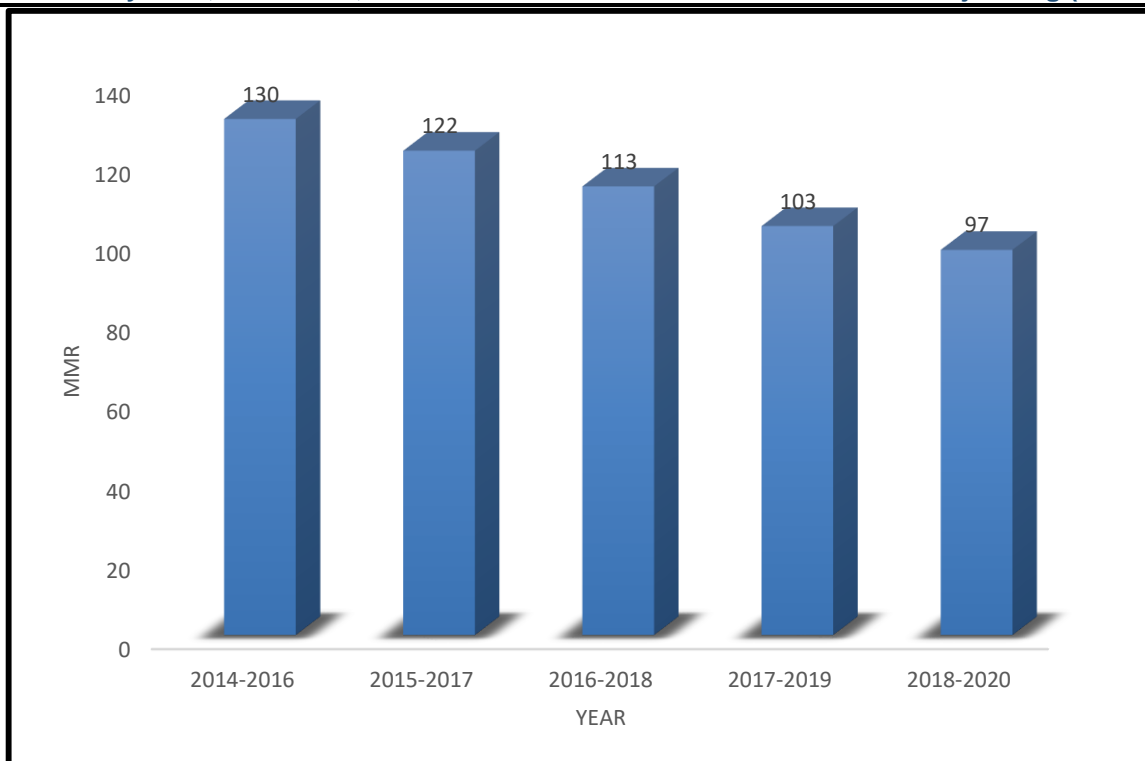| Year	MMR Per 100000 live Birth (Y)	% Change Y
2014-2016	130	-
2015-2017	122	-6.15
2016-2018	113	-7.37
2017-2019	103	-8.84
2018-2020	97	-5.82

Fig 1: MMR Per 100000 live Birth

Interpretation: In the year of 2019, MMR was 97 per 100000 live birth which is comparatively less than the previous years and the trend represent declination of MMR.

Table 2: Expected Maternal mortality ratio per 100000 live births and their % variation between the 2019-2030

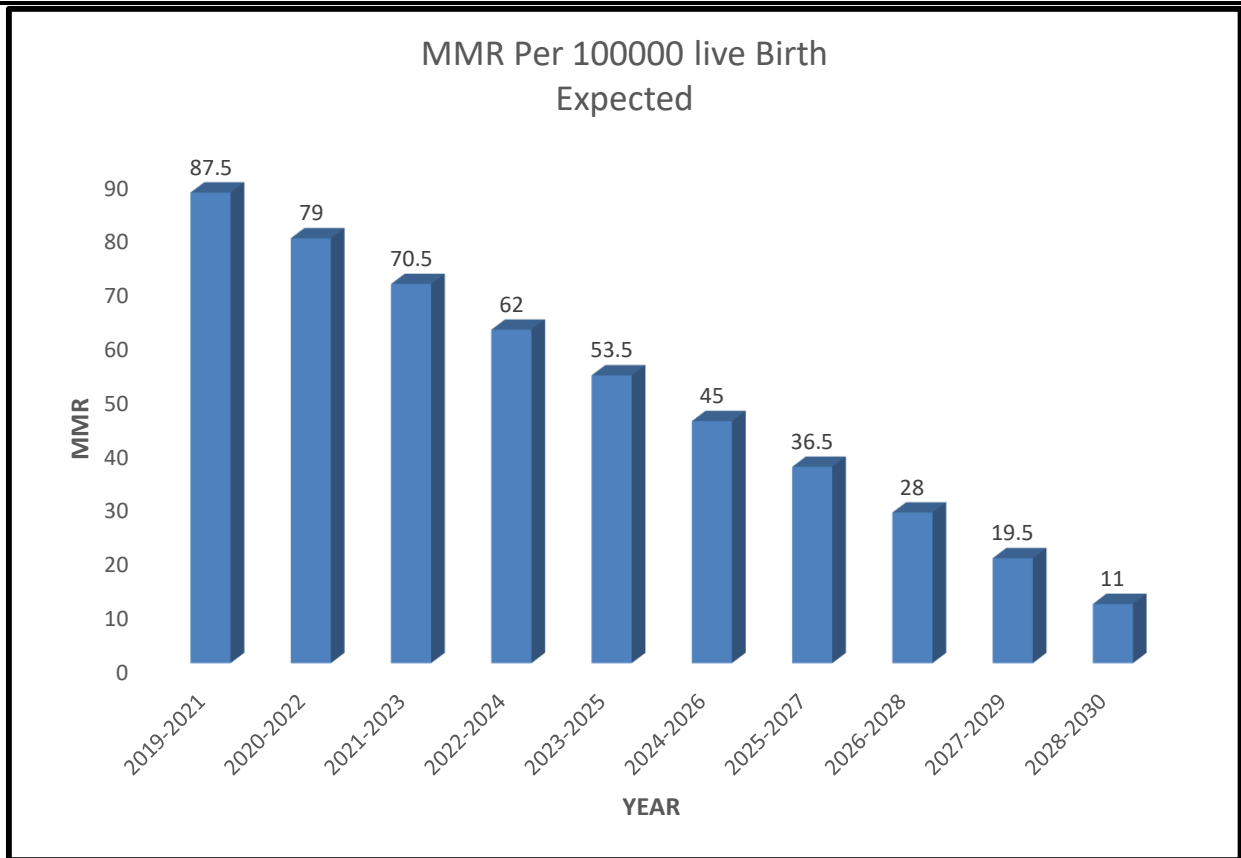| Year	Expected MMR Per 100000 live Birth (Y)	% Change Y
2019-2021	87.5	-9.79
2020-2022	79	-9.71
2021-2023	70.5	-10.75
2022-2024	62	-12.05
2023-2025	53.5	-13.70
2024-2026	45	-15.88
2025-2027	36.5	-18.88
2026-2028	28	-23.28
2027-2029	19.5	-30.35
2028-2030	11	-43.58

Fig 2: Expected MMR Per 100000 live Birth.

Interpretation: After performing the analysis researcher can say that the maternal mortality ratio will be 11 per lakh live birth in 2028 -2030 and are SDG target is 70 per 1,00,000 live birth.

VIII. Finding:

According to the above analysis and the available data researcher can say that India will be able to achieve the first target of SDG -3 (Indicator 1), which is 70 per lakh live birth by the end of 2023, while the set target. For achieving this goal has been by 2030 which is a good indicator for the society.

IX. Conclusion:

Looking towards the third goal of SDG which says about good health and well-being which is having 13 targets and indicators, out of which the first indicator is to reduce the maternal mortality rate by 70 per 1,00,000 live births by 2030 and many other indicators are in the row to be achieved like birth attended by skilled health professionals, under five maternal ratio, neonatal mortality rate and so on. This paper highlights the present scenario of the maternal mortality rate. At the same time, particular paper also puts light on the government initiatives in reducing maternal mortality rate and studying various strategies and schemes which include cash incentives, ASHA workers to promote the maternal health and to reduce MMR. After performing the analysis, the researcher is able to conclude that the goal whose achieving target was set by UN as 2030, can be achieved by 2023 itself, which is significantly a good sign. This is only the first indicator, but there are many other indicators which are to be achieved yet in order to achieve the entire goal 3.

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