Placement

In

A COMPARATIVE TREND ANALYSIS ON THE QUALITY OF MATERNAL HEATHCARE

Presented By

Dr. Sazida Begum

Under the Guidance of

G.S Preetha

Post Graduate Diploma in Hospital and Health Management

2020-2022

The certificate is awarded to

Dr. Sazida Begum

in recognition of having successfully completed his dissertation in the department of

Business Development

and has successfully completed his/her Project on

A COMPARATIVE TREND ANALYSIS ON THE QUALITY OF MATERNAL HEATHCARE

Date- 14/02/2022

Organization- **Affordplan**

She comes across as a committed, sincere & diligent person who has a strong drive & zeal for learning.

We wish him/her all the best for future endeavours.

The certificate is awarded to

Dr. Sazida Begum

in recognition of having successfully completed his dissertation in the department of

Business Development

and has successfully completed his/her Project on

A COMPARATIVE TREND ANALYSIS ON THE QUALITY OF MATERNAL HEATHCARE

Date- 14/02/2022

Organization- **Affordplan**

She comes across as a committed, sincere & diligent person who has a strong drive & zeal for learning.

We wish him/her all the best for future endeavours.

Training & Development

Manager-Human Resources

TO WHOMSOVER IT MAY CONCERN

This is to certify that Dr. Sazida Begum, student of PGDM (hospital and health management) from International institute of health management research, New Delhi has undergone internship training at AFFORDPLAN from 14/02/2022 to 14/5/2022
The candidate has successfully carried out the study designed to her during internship training and his/her approach to the study has been sincere, scientific and analytical.
The internship is fulfilment of the course requirements.
I wish her all the success in her future endeavours.

Dr Sumesh Kumar

Associate Dean, Academic and Student Affairs

IIHMR, NEW DELHI

Mentor,

IIHMR, New Delhi

T

Certificate of Approval

The following dissertation titled **"A study of the comparative trend analysis on the utilization of maternal healthcare services in 11 selected Indian states."** In Affordplan is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of PGDM (Hospital & Health Management) for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name	Signature
Dr. DHARMESH LAL	
VINAY	
ROHINI	

Certificate from Dissertation Advisory Committee

This is to certify that Mr./Ms./Dr. Your Name, a graduate student of the PGDM (Hospital & Health Management) has worked under our guidance and supervision. He/ She is submitting this dissertation titled "**A COMPARATIVE TREND ANALYSIS ON THE QUALITY OF MATERNAL HEATHCARE**" at "Affordplan" in partial fulfillment of the requirements for the award of the PGDM (Hospital & Health Management).

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

Institute Mentor Name,
Designation,
Organization

Organization Mentor Name
Designation, Business Head
Organization Affordplan

Certificate by Scholar

This is to certify that the dissertation titled "A comparative trend analysis on the quality of maternal health care and submitted by Dr. Sazida Begum Enrolment number PG/20/67 under the supervision of Dr G.S. Preetha for award of PGDM (Hospital and health management) of the institute carried out during the period from 14/02/2022 to 14/05/2022 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship titles in this or any other institute or other similar institution of higher learning

Signature

ACKNOWLEDGEMENT

It is an esteemed pleasure to present this research project by thanking each and everyone who helped me in this task. I would like to express my sincere gratitude towards my guide **Dr. GS PREETHA,** Dean of IIHMR, who helped me immensely throughout the tenure of my summer internship. She inspired me greatly to work in this project with his valuable guidance, support, interest, encouragement, involvement and advice.

I would like to **thank Aditya Sharma (CEO), Mr. Amit Agrawal (Business head-North), Mrs. Nisha Sharma (Senior Manager-HR) and Mrs. Varsha Rani (HR)** for allowing me to experience such great opportunities and for providing his support and guidance for my learning.

I would also like to express my special thanks to **Dr. Sutapa Neogi**, **Mrs. Divya Aggarwal, Mrs. Nikita Sabherwal** for supporting me throughout and which helped me to grow and learn about many interesting aspects.

Content:

List of Figures:

A COMPARATIVE TREND ANALYSIS ON THE QUALITY OF MATERNAL HEATHCARE

ABOUT AFFORDPLAN:

Affordplan is a platform that enables financial planning for healthcare access to a family. With payment benefits and carefully chosen rewards through preferred brands, the platform enriches a customer's experience throughout their healthcare journey with a healthcare provider of their choice.

Partnered with 150+ hospitals across the country and has touched over 5,00,000 lives, Affordplan is making medical care accessible to more and more families in India.

VISION:

At Affordplan, our mission is to enable healthcare affordability for millions of people through innovative financial solutions. We aim to bring accessible, affordable, and high-quality healthcare to the world. We believe that planning for medical expenses is no longer limited to taking an insurance cover or a medical loan; it's a systematic pursuit. Health-related problems are increasing rapidly and there is a growing gap between patients and affordable healthcare that Affordplan is dedicated to closing through financial technology.

Affordplan Swasth™ offers a full range of solutions to help patients save & pay for their treatment expenses in advance through flexible & convenient payments. A unique platform which powers complete healthcare journeys for patients through a prepaid card, digital wallet, IPD savings schedule, medical loans and micro-insurance, Swasth not only ensures affordability for the patients but also guarantees zero credit risk for medical institutions.

Affordplan hospitals create patient loyalty and optimise patient experience

Swasth helps partner hospitals offer medical services to more patients and manage patient treatment lifecycles with more value. With Swasth, partner hospitals are entitled to an advance cash flow that helps improve fiscal fitness while putting the patient at the centre.

Offer full spectrum of hospitals:

Offer full medical services to more patients including OPD, IPD and all ancillary servicesand drive patient engagement through exclusive offers and check-ups.

No Excessive Discounts, Patients Have Financial Flexibility

Offer patients the flexibility to choose financial options that suit their pocket and treatment expenses. Standardised offers and rewards remove the need for excessive discounting.

Secure Payments for Hospital

Promise of payments and the ease of transacting digitally make this a win-win for both you and your customer.

Powerful CRM And Reporting

Manage your loyalty program with ease and access personalized reporting with our merchant SaaS and app ecosystem.

Increase Patient Retention & Enhance Conversions

Increase affordability of a treatment for patients, enabling increased patient retention and improved revenue

Project Report:

Title of the study: A descriptive study on the comparative trend analysis on the quality of maternal healthcare.

Objectives:

1. To describe the scenario of quality care provided during pregnancy and child birth by comparing the NFHS 4 and NFHS 5 data.
2. To understand the health scenario in women of India with the available NFHS data.

Research Questions:

What is the scenario of quality healthcare services provided in pregnant Indian women?

How can the health scenario of Indian women be described with the available NFHS data?.

ABSTRACT:

India is in strong need to improve the coverage of quality care of pregnant women which includes institutional deliveries, antenatal coverage, tetanus toxoid vaccination, post-natal care within 2 weeks of delivery, full antenatal care (4 ANC checkups, tetanus toxoid and 100 tablets of iron folic acid supplements). The NHM offers institutional mechanism and strategic options of Janani Suraksha Yojana (JSY); PMJSY, LAKSHYA programs in order to reduce the burden of high mortality rate. Using the review of published literature and the available data sources, the study aims to describe the scenario of quality care provided during pregnancy and child birth over the last decade and the impact of programs on Indian maternal health initiated by national health mission. The aim also focusses to understand the health scenario of Indian women and the measures to bring out the positive changes in the maternal health status of the population comparing the rates with the available data along with the urban and rural differentials in the maternal healthcare. We have used data from Sample Registration System to assess the maternal mortality trends almost over a decade in all India. Data used from India's National Family Health Surveys conducted post implementation of National Health Mission initiatives between 2015-2016 and 2019-2020. A review is conducted in the findings of National Family Health Surveys, Government programs and policies aimed on improving the quality care of maternal health in India.

Keywords: maternal health, national health mission, quality care of maternal health, national family health surveys, institutional deliveries, antenatal care etc.

INTRODUCTION:

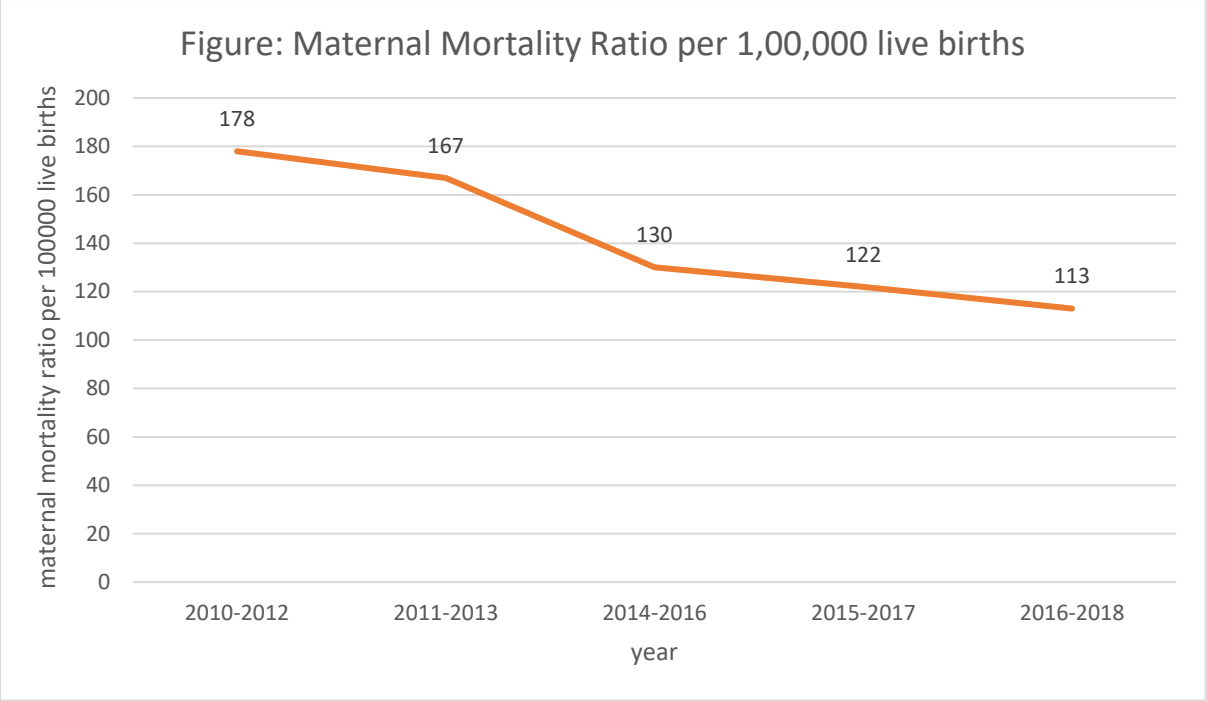
World Health Organization estimates in 2017 everyday 810 women dies approximately from a preventable cause of pregnancy and child birth. Maternal mortality rate has been globally by 38% from the year 2000-2017 which accounts for 342 to 211 deaths per 100,000 live

births resulting in average annual rate of 2.9 percent.[123] India in which MMR has declined to 113 by the year 2016-2018 against the global MMR of 100. As the target 3.1 of sustainable development goals, it aims to reduce MMR to 70 per 100000 live births by the year 2030, therefore, India is in need to move beyond the approaches based on hospital care to address this major health issue.

The majority of maternal deaths (over 70%) result from complications that require facility-based care, such as postpartum haemorrhage, hypertensive disorders, sepsis, and complications related to abortions [6]. Therefore, improving the quality of facility-based delivery care offers tremendous opportunities to reduce maternal and perinatal deaths

Hence, India still is contributing higher maternal mortality and has taken major initiatives under the national health mission in order to reduce the burden of maternal mortality. Keeping in mind, as the health standards have been ignored for a longer time in the Indian Public Health Standards.[4] In the context of reducing poverty and increasing equity maternal health care and to reduce the rate of maternal mortality and morbidity, it is an important measure for the development of the country.[5] The National Health Mission embarked from various schemes to bring down the maternal mortality to cover the entire essential services to ensure a healthier India.

In a study the author said that the quality indicators are mainly the measurement tools that could be used to monitor, evaluate and improve the health services of the patient outcome in order to improve the quality of the patient care and the organization. The improvement strategy on quality care services by the government of India has focused on access to healthcare services and increasing the number of births in the healthcare institutions as well as the number skilled birth attendants during child delivery.[6] So as to accelerate the decrease in the burden of mortality and morbidity there is an essential need to ensure patient safety by improving the quality of care.[7] However, pregnancy is a period of happiness, safe motherhood and childhood care is dependent upon the quality of care and attention provided to the pregnant women and the newborn. It has been observed that around half of the maternal deaths are caused during labor or delivery and during the initial days of post-partum care and key factors involved majorly is the type of personnel skilled or unskilled who attended the delivery and the type of healthcare facility where the delivery is done.[8] The disadvantaged area in India is generally seen in inadequate access to new health services, inadequacy of healthcare workers in the health centres and there is large requirement in the improvement of the healthcare personnel and quality care provision of healthcare services.[9]



Source: Sample Registration System

As also it is seen that there has been an accelerated decline in the maternal mortality and a progress towards maternal care since the last decade, therefore, it is important to focus on the continuum of care and a tendency that skilled care birth professionals before, after and during the child delivery can save lives of both women and the newborn.

CONCEPT OF QUALITY CARE:

Quality of care is a multi-dimensional approach. The quality of care at individual level can be limited in two criteria-first, is the healthcare services accessible i.e., do they get the quality care of health services which they need and when they need? Secondly, when the get the health services, do they get the appropriate and effective services by the personnel or the organization? Improving quality care can affect the health of the pregnant women the newborn child and would also help them seek maternal and child care in the future. A High-quality care should be safe, effective, timely, efficient, equitable and people-centered. Therefore, measuring quality of care should be the first step towards improving but can be challenging as the women experiences the complex healthcare system.[10] To improve the health of the population the central concern should be quality of care. Evidences suggests that Increasing number of health facilities is meaningless if quality of care is not maintained, therefore would not reduce the maternal and newborn deaths.[11]

ANTENATAL CARE (ANC):

Safe Motherhood Initiatives by the World Health Organization, Antenatal care is a preventive care during the period of pregnancy which is essential for protecting the health of the pregnant women and the development of the unborn child.[1213] ANC contributes to good

healthcare and provides links to the pregnant women and her family with the healthcare system, promoting healthy behavior and parenting skills. Inadequate care breaks the links of the continuum of care which is important for the quality care of the pregnant women and her unborn child.

Inadequate good quality antenatal care and access to antenatal healthcare services can result life threatening and pregnancy-related complications in millions of women in the developing countries.[14] Four Antenatal Care visits are recommended by the World Health Organization as an indicator of adequate quality care of the pregnant women and the developing child of which initial contact should be during the first trimester of pregnancy. Thus, ANC can reduce maternal mortality and morbidity increasing the chances to identify high-risk pregnancies.[15]

According to Anderson's Behavior model,

The Individual determinants of ANC are based on 3 basic factors:

1. Predisposing factors: Age, Level of education, Parity, pregnancy desire, region and Occupational Status.
2. The Enabling Resources: Health insurance, Distance to a facility and Availability of ANC services.
3. Health need-related Factors: Evaluated pregnancy-related illness and self-perceived health status.

Thus, in turn providing Quality of ANC Services particular in Interpersonal relations, technical management, information exchange, continuity and follow-up and appropriate constellation of services.

Literature Review:

1. Investigators in a study conducted at the beginning of the millennium and involving rural and urban women in Maharashtra and have listed safely and good quality of care as one of the motivating factors for choosing to give birth at home and in govt, hospital delivery room is not there. Toilet and water facilities was not there and so the women felt safe to give birth to the baby in their house.
2. A study on quality healthcare of mother have posited that, for outcomes to be considered as quality indicators like successful childbirth, acceptable good care of the patient, they must reflect or be responsive to, variations in the care assessed.

RESULTS:

Research Methodology:

Study design:

A descriptive study will be done by comparing and analysing the NFHS-4 AND NFHS-5 data by selecting different states from all the 4 zones in India. Following are the states from the 4 different zones selected -Andhra Pradesh, Kerala, Karnataka, Goa, Gujarat, Maharashtra, Jammu and Kashmir, Assam and Bihar.

Therefore, the study would be designed to assess the maternal mortality trends almost over a decade in pregnant women population of India.

Study tool:

The study tool used would be Microsoft excel with which the data of the National Family health survey would be analyzed and compared to describe the main objective of the study.

Methods of Data collection:

The primary data will be collected from the national family health survey-4 and national family health survey-5 by selecting different states from all the 4 zones in India. Following are the states from the 4 different zones selected -Andhra Pradesh, Kerala, Karnataka, Goa, Gujarat, Maharashtra, Jammu and Kashmir, Assam and Bihar and will be reviewed to understand the results of the study.

Data Analysis:

The data would be analyzed by using SPSS and Microsoft excel in which the data would be visualized, compared and analyzed. The comparable data would be described in the form of bar graphs and charts

ACCESS TO CARE:

MATERNAL HEALTH COVERAGE IN INDIAN STATES:

A. State-wise ANC care:

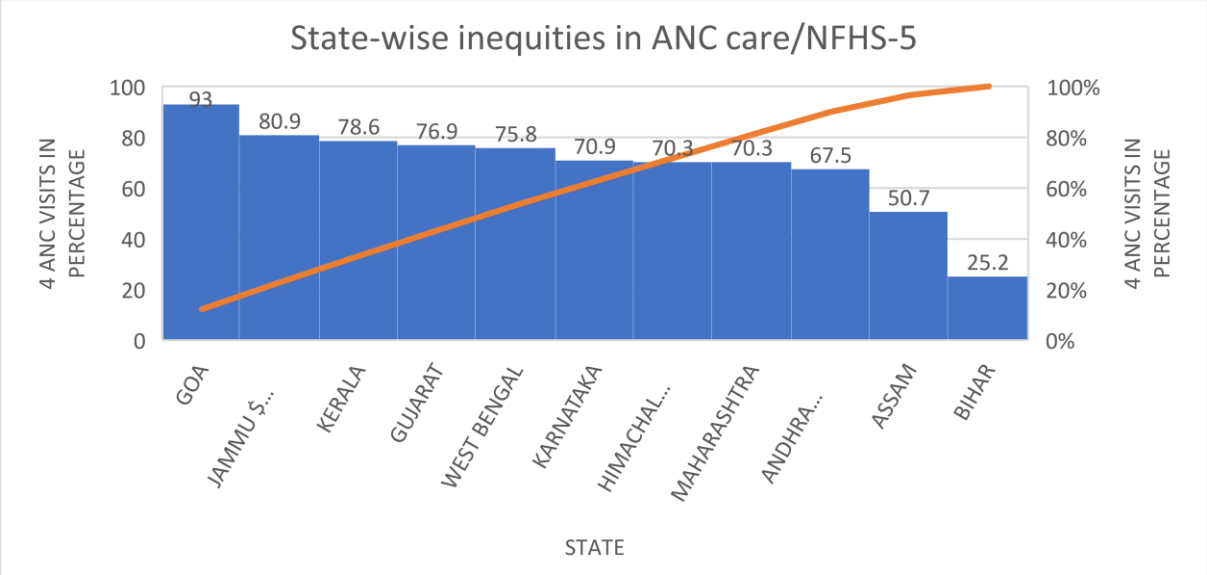


Fig 2: Goa shows 93% of the population covering ANC visits, of which Bihar shows only 25.2% ANC visits.

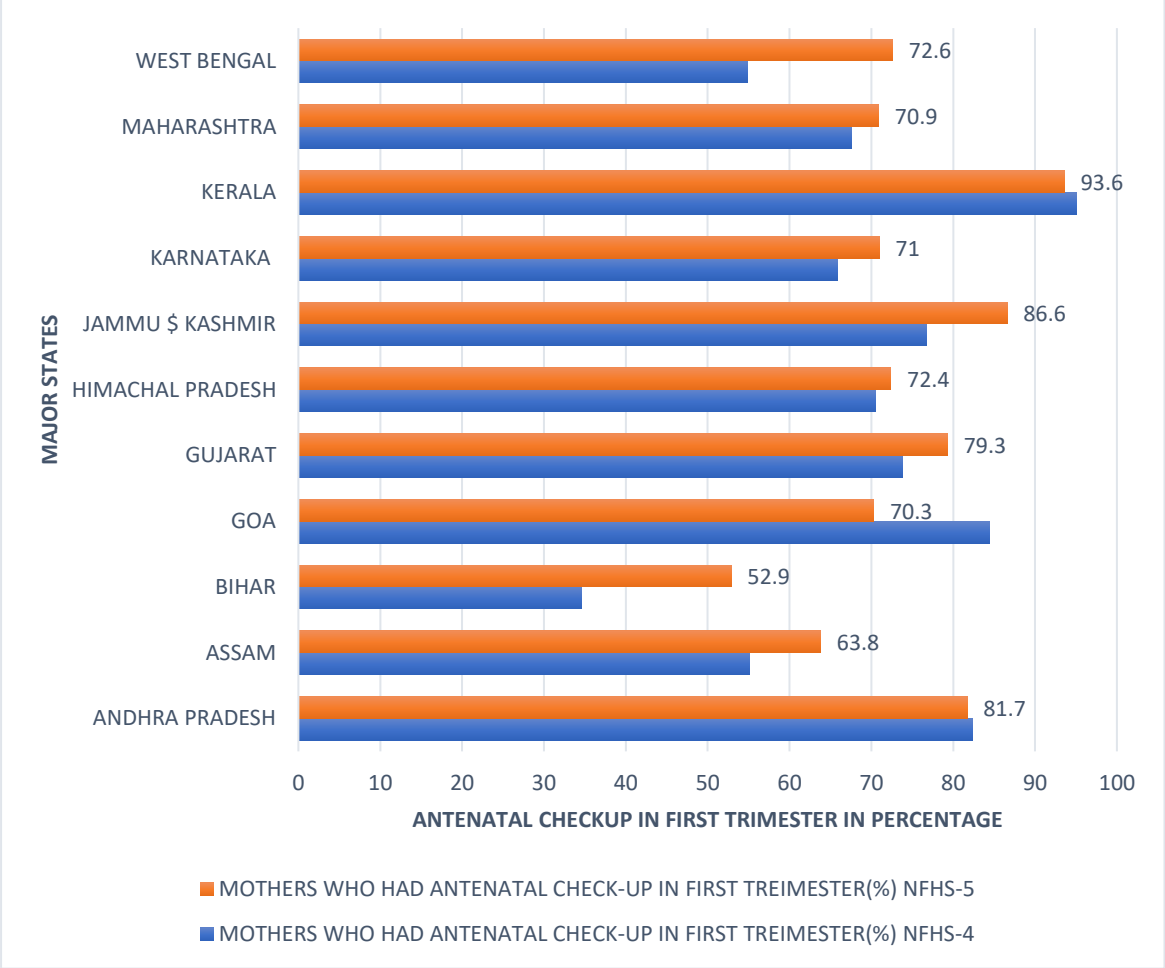


Fig3: Kerala followed by Jammu and Kashmir and Andhra Pradesh showed more than 80% mothers had antenatal check-up in first trimester

C. Mothers having at-least 4 antenatal visits:

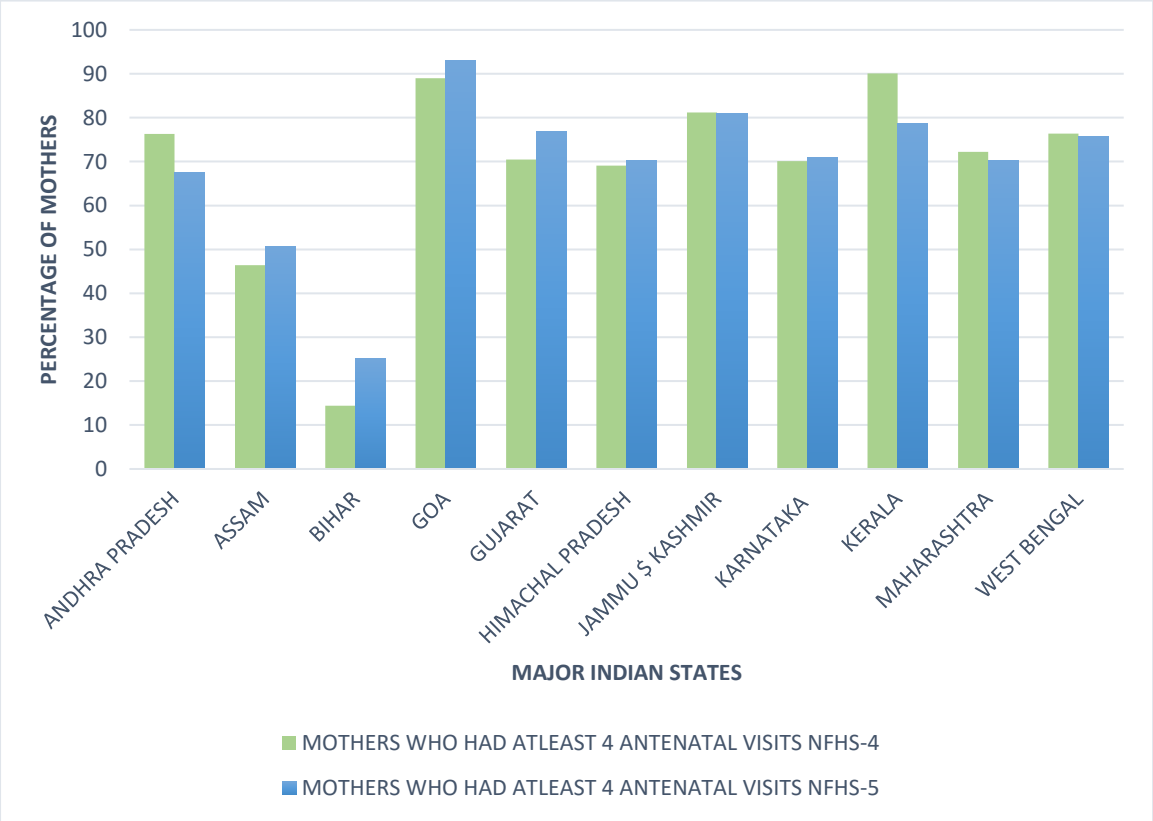


Fig 4: Goa shows around 92% mothers had at least 4 antenatal visits according to NFHS-5

D. Iron Folic acid consumed by pregnant women for 100 days or more :

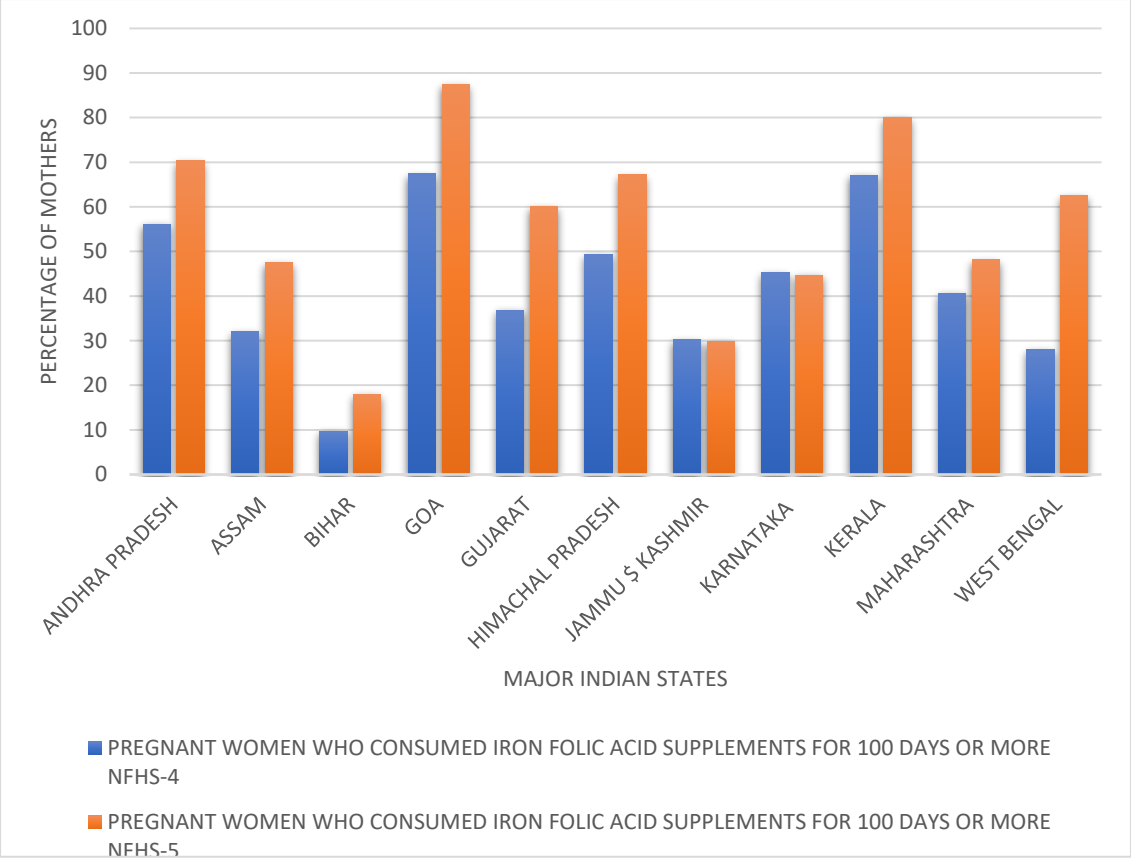


Fig 5: shows that all the selected states except for Jammu and Kashmir and Karnataka had showed decline in the consumption of iron folic acid supplements for 100 days or more by pregnant women by comparing the NFHS-4 and NFHS-5 data.

E. Tetanus Toxoid Vaccination to mothers:

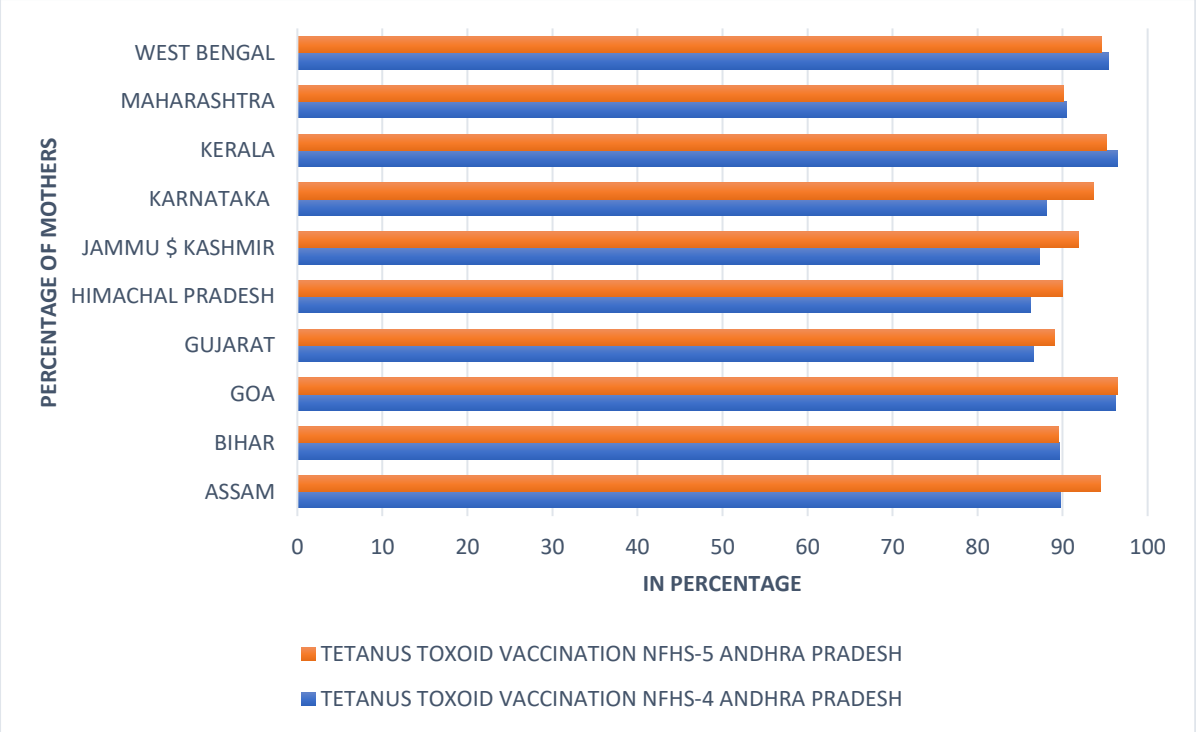


Fig 6: Kerala shows highest percentage of mothers getting Tetanus toxoid vaccination among all the selected states

F. Post-natal care to mothers who received care from doctors/nurses/ANM/midwives or other health professionals within 48 hours of delivery.

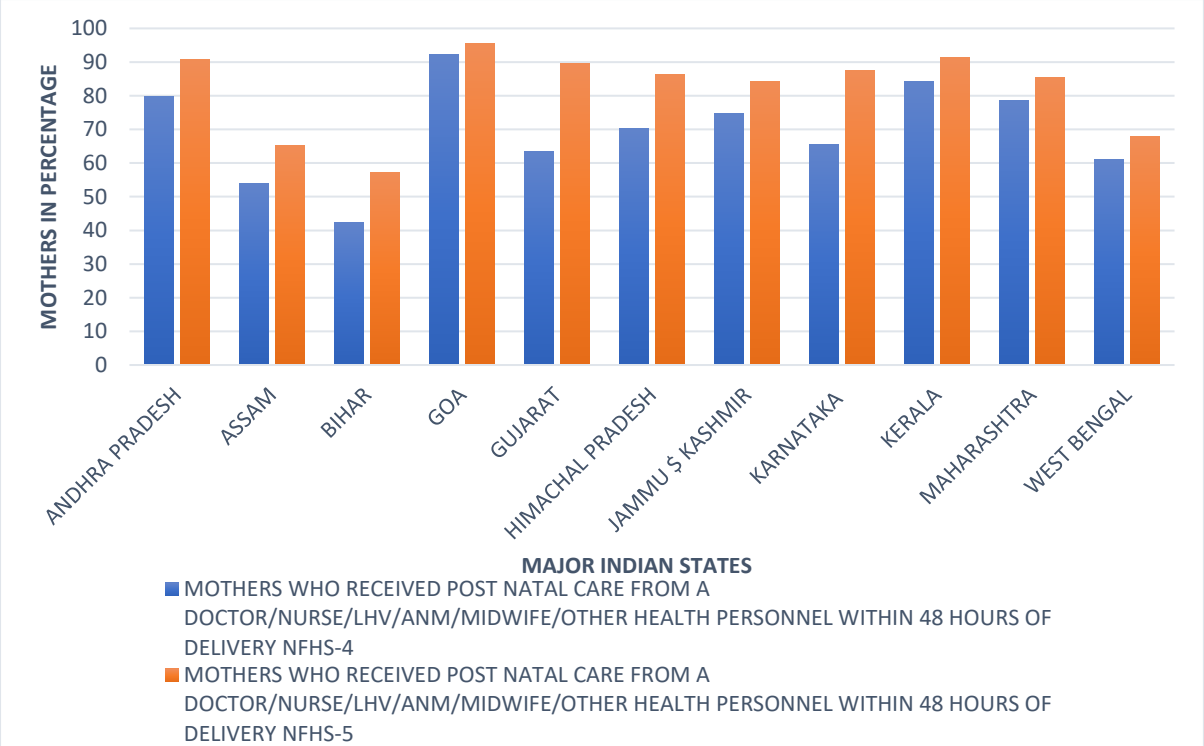


Figure : All the states showed increase in the post-natal care visits of the mothers from doctors/nurses/ANM/Midwife and other health personnel within 48 hours of delivery cpmapred to NFHS-4 data

G. State-wise inequities in Institutional Birth:

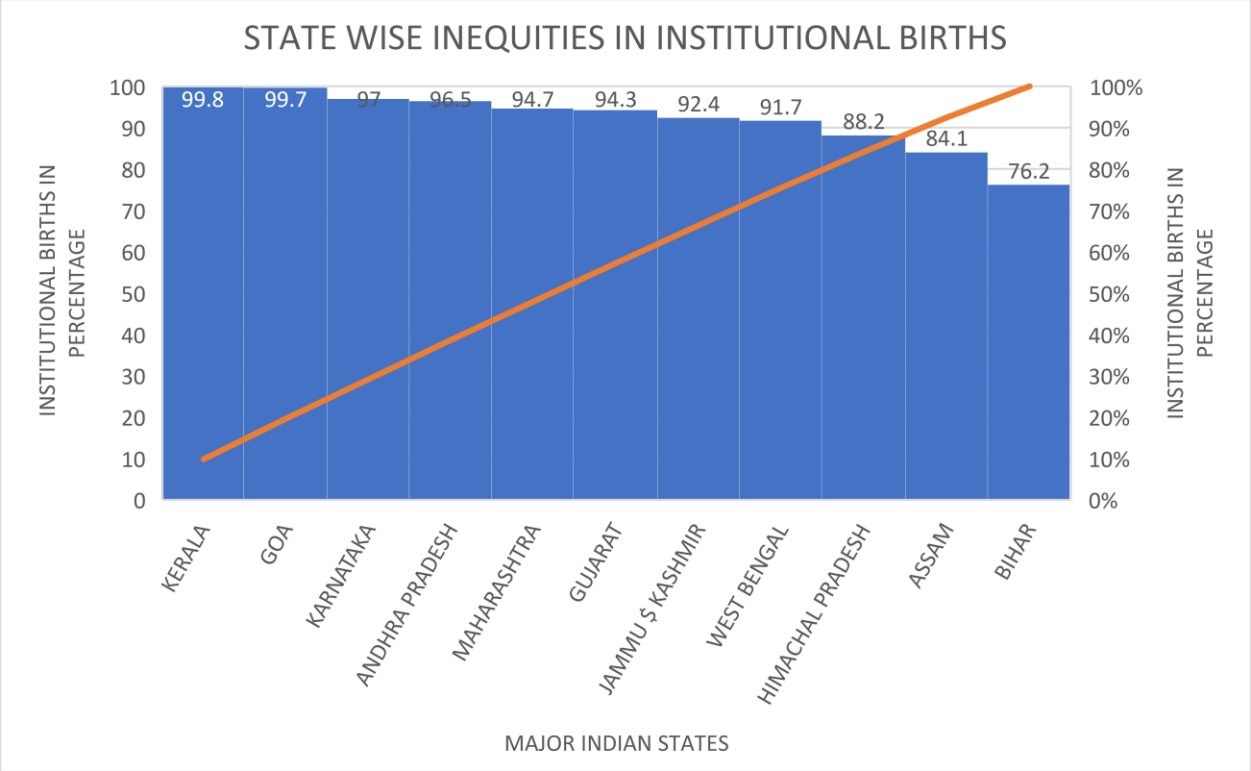


Figure 8: Kerala shows almost 99.8% of the mothers give institutional births

H. Comparision of institutional births from NFHS-4 to NFHS-5:

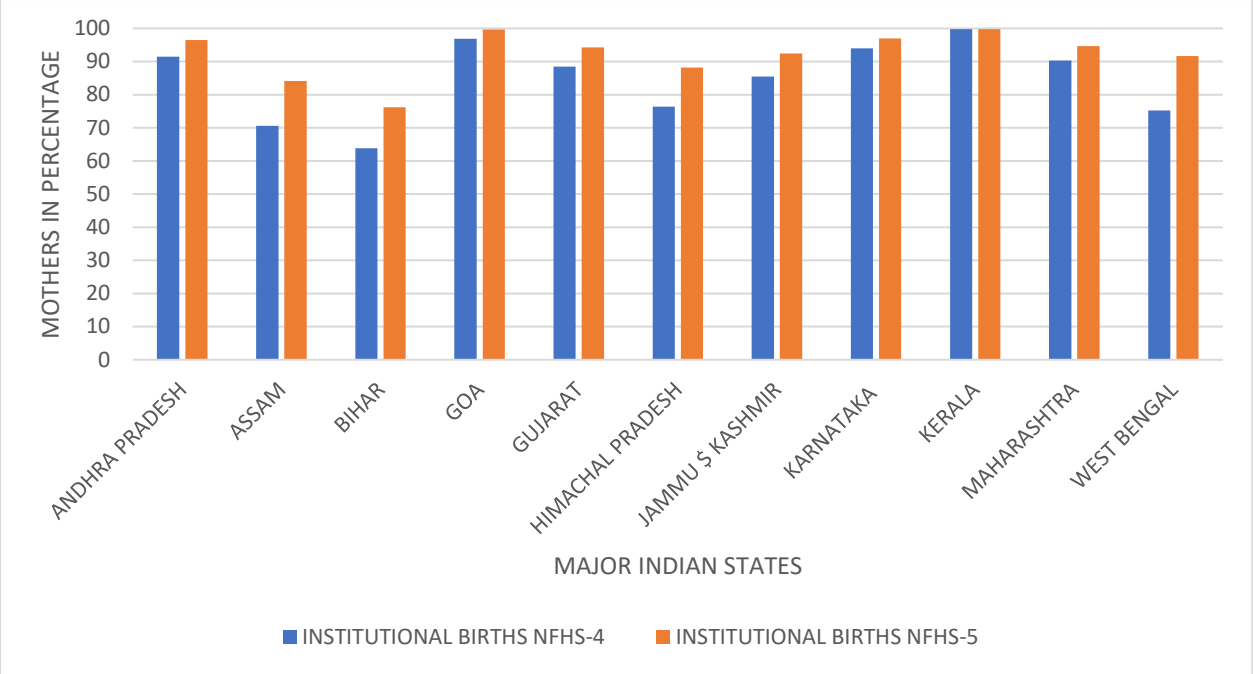


Figure.9 : All the states showed increase in institutional births compared to the NFHS-5 data

I. Home Births that are conducted by skilled professionals:

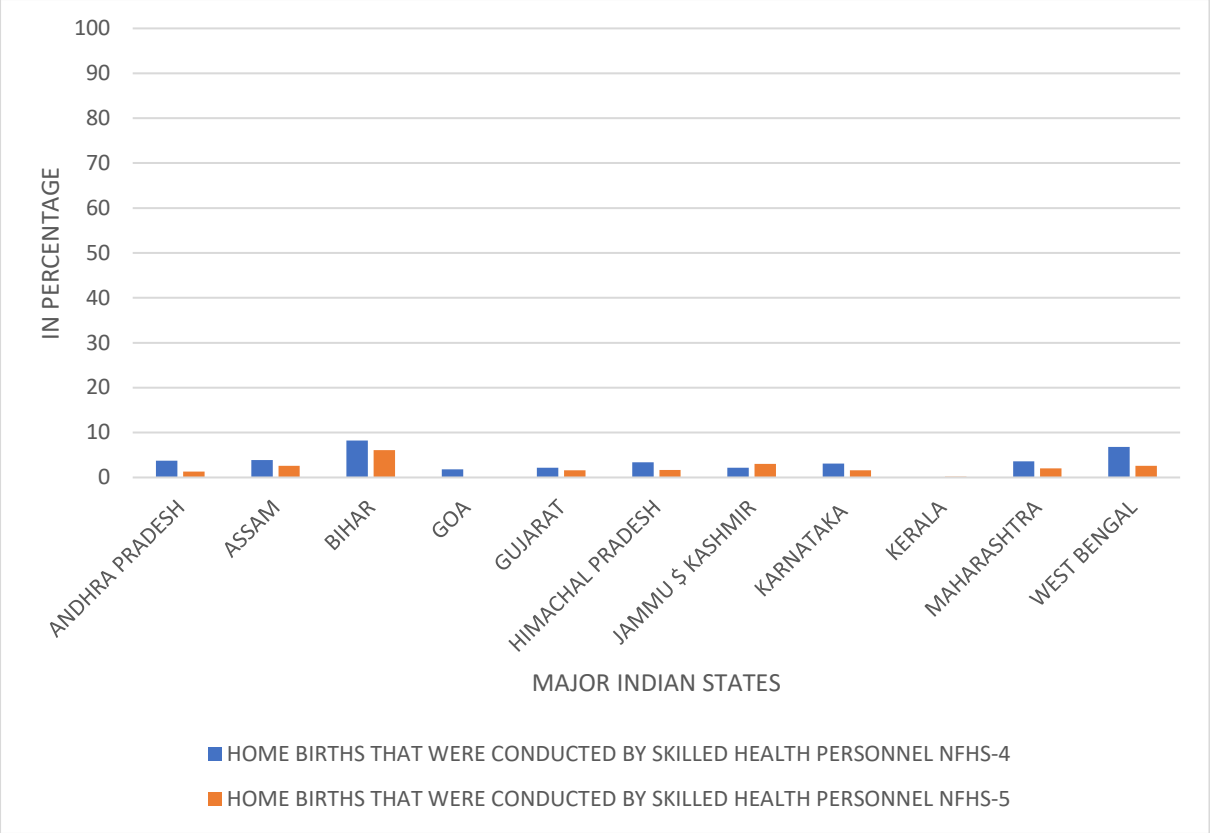


Figure 10: Bihar showed that highest percentage of women giving home-births conducted by skilled health personnel.

J. SAFE DELIVERY:

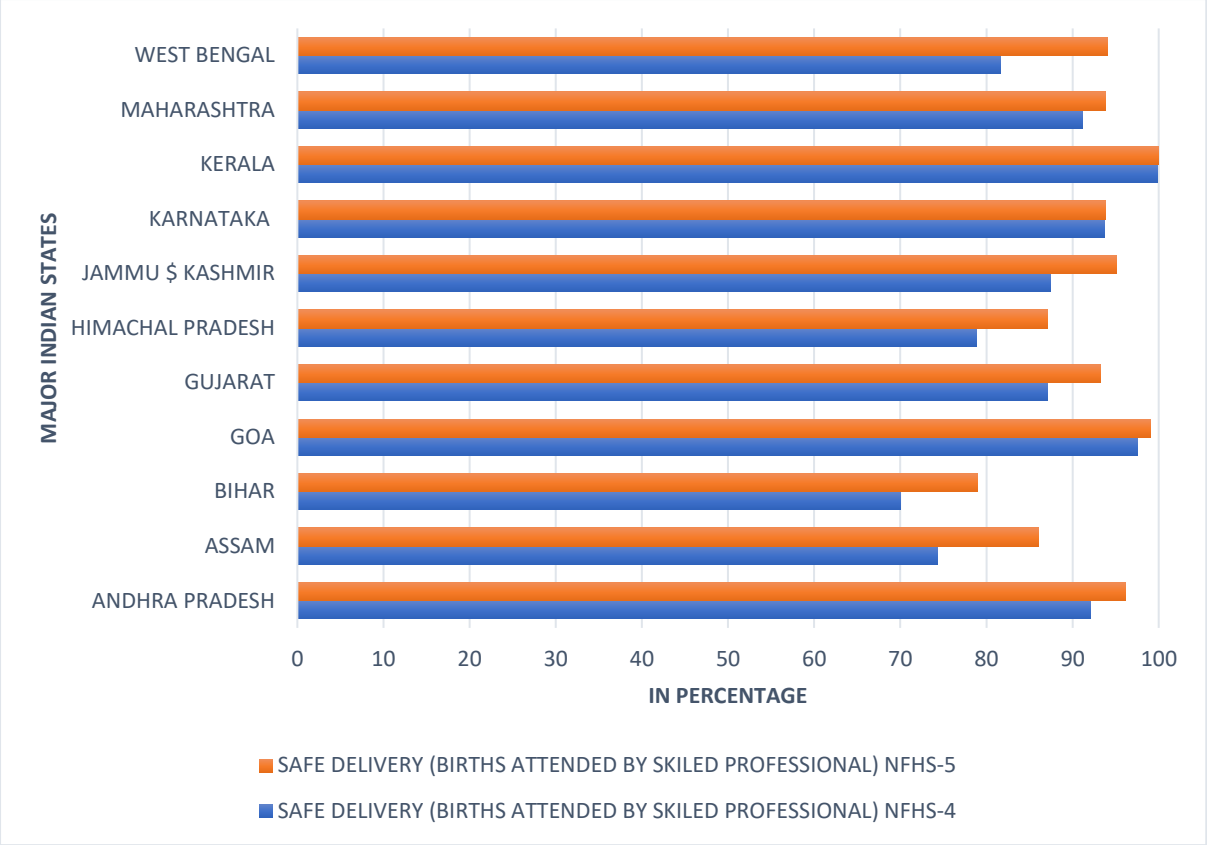


Figure 11: All the states showed increase in safe deliveries compared to the NFHS-5 data.

DISCUSSION:

This study reveals that interventions through the NRHM/NHM brought about remarkable decreases in both the MMR and the IMR.We observe that inequality in rates of institutional delivery has also declined considerably. Although there still exists disparity among the Indian states in the use of institutional delivery, the rural–urban gap has reduced appreciably in most states.All the leading risk factors for neonatal death include preterm birth, birth complications, and infections such as tetanus, sepsis and pneumonia.

The WHO recommends four or more ANC visits for effective ANC services, specific to low-income countries. The recommendation requires the first two ANC visits to take place in the first two trimesters and the last two visits in the last trimester. Each visit is required to focus on a given ANC service package, as outlined in the WHO guidelines. Overall, the main services include screening for complications, health education for healthy lifestyle, 2 tetanus toxoid (TT) injections and 90 iron/folic acid (IFA) tablets. Health sector reforms are important for reproductive health because deficiencies that characterize the financing and provision of reproductive health services are intimately linked to those that characterize health services in general and tend to be system-wide. If health sector reform works well, it should make basic preventive healthcare, including reproductive health services, widely available.

Of the more than 130 million births occurring each year, an estimated 303 000 result in the mother's death, 2.6 million in stillbirth, and another 2.7 million in a newborn death within the first 28 days of birth. The majority of these deaths occur in low-resource settings and most could be prevented.

In response to this unacceptable situation, the WHO Safe Childbirth Checklist has been developed to support the delivery of essential maternal and perinatal care practices. The Checklist addresses the major causes of maternal death (haemorrhage, infection, obstructed labour and hypertensive disorders), intrapartum-related stillbirths (inadequate intrapartum care), and neonatal deaths (birth asphyxia, infection and complications related to prematurity). It was developed following a rigorous methodology and tested for usability in ten countries across Africa and Asia.

An implementation guide for health facilities has been developed to help birth attendants and health-care leaders successfully launch and sustain use of the WHO Safe Childbirth Checklist.

To gain a better understanding of how to effectively implement the Checklist in different settings around the world, WHO established the Safe Childbirth Checklist Collaboration. The Collaboration invited members who signed up to it, to use the Checklist while exploring various factors of implementation.

A total of 34 groups joined the Collaboration between November 2012 and March 2015, representing 29 countries and over 230 sites. Each group shared their experiences and project outcomes with the Collaboration, providing invaluable insights into the factors that impede or improve successful implementation.

Through a structured review process, WHO collected feedback from the Collaboration projects on the acceptability and feasibility of adopting the Checklist, as well as lessons learnt from its implementation. The results of this evaluation are presented in the following Evaluation Report.

We are very grateful to all the Collaboration members who contributed to this important piece of work. Their experience was integral to WHO then developing an updated version of the Safe Childbirth Checklist and a guide to help health-care facilities successfully implement this tool – one that promises to improve the safety and quality of care around the time of birth.

All women should have access to skilled care during pregnancy and childbirth to ensure prevention, detection and management of complications. Assistance by properly trained health personnel working within an enabling environment is needed to eliminate preventable maternal and newborn deaths. A key strategy to ensure skilled care during childbirth is to that all births take place in health facilities in which obstetric complications can be treated when they arise. The minimum target for this indicator should be set by national or local governments, and many countries have made having 100% of deliveries in institutions their main strategy for reducing maternal mortality.

Three other issues of relevance for the creation of monitoring systems for MCH are worth highlighting because they are not clearly addressed:

1) the desirable integration of the indicators in a coordinated set which takes into account the different levels of responsibility within the health system.
2) the limited attention paid to the importance of the quality of data; and
3) the scarcity of indicators based on data reported by patients. We have shown, as indicated in other publications that the level of detail on the processes addressed for monitoring is often not suitable for routine information systems.

   Most valid indicators are intended for use at the micro level (service unit or facility) whereas other indicators intended for the system level ignore lower levels in the organization. Metrics may need to vary at different levels of the healthcare system; however, all sets should be aligned.

Limitations:

- Data was analysed based on comparative data state-wise from NFHS-4 and NFHS-5.
- The selection of states were limited to the NHFS-5 data.
- The selection of states which were prioritized are limited.
- The study was limited to secondary data.
- Data can be biased in favor of the person who gatherd it.
- A huge amount of secondary data was available from variety of resources, hence the study is limited.

CONCLUSION:

- Lack of quality of care is increasingly being recognized as a major contributing factor to maternal and neonatal mortality in India and other countries.
- Commonly used strategies to improve the quality-of-service delivery, including standards and guidelines, training, incentives, and monitoring are necessary but they are not the only strategies available to the health sector.
- The indicators identified and selected in our search may comprise a good starting point; however, it is likely that they should be supplemented by new indicators to cover the needs of a comprehensive monitoring system.
- The study indicates the specific aspects and levels of care and responsibility for which there is a likely need to make additional efforts in the construction and validation of quality indicators to monitor the continuum of maternal and newborn health.

REFERENCES

[1] Saturno-Hernández PJ, Martínez-Nicolás I, Moreno-Zegbe E, Fernández-Elorriaga M, Poblano-Verástegui O. Indicators for monitoring maternal and neonatal quality care: a systematic review. BMC Pregnancy Childbirth. 2019;19(1):25.

Tripathi S, Srivastava A, Memon P, Nair TS, Bhamare P, Singh D, et al. Quality of maternity care provided by private sector healthcare facilities in three states of India: a situational analysis. BMC Health Serv Res. 2019;19(1):971.

Sarin E, Kole SK, Patel R, Sooden A, Kharwal S, Singh R, et al. Evaluation of a quality improvement intervention for obstetric and neonatal care in selected public health facilities across six states of India. BMC Pregnancy Childbirth [Internet]. 2017;17(1). Available from: http://dx.doi.org/10.1186/s12884-017-1318-4

Austin A, Langer A, Salam RA, Lassi ZS, Das JK, Bhutta ZA. Approaches to improve the quality of maternal and newborn health care: an overview of the evidence. Reprod Health. 2014;11 Suppl 2(S2):S1.

1 Maternal mortality. Ir J Med Sci. 1966;42(S1):59–60.

2

2 Maternal mortality ratio (per 100 000 live births) [Internet]. Who.int. [cited 2021 Sep 26]. Available from: https://www.who.int/data/gho/indicator-metadata-registry/imr-details/26

3

11. Maternal mortality [Internet]. Unicef.org. 2019 [cited 2021 Sep 26]. Available from: https://data.unicef.org/topic/maternal-health/maternal-mortality/

4

3 Nair H, Panda R. Quality of maternal healthcare in India: Has the National Rural Health Mission made a difference? J Glob Health. 2011;1(1):79–86.

5

4 Kumar S. Challenges of maternal mortality reduction and opportunities under National Rural Health Mission--a critical appraisal. Indian J Public Health. 2005;49(3):163–7.

6

5 Saturno-Hernández PJ, Martínez-Nicolás I, Moreno-Zegbe E, Fernández-Elorriaga M, Poblano-Verástegui O. Indicators for monitoring maternal and neonatal quality care: a systematic review. BMC Pregnancy Childbirth. 2019;19(1):25.

7

Tripathi S, Srivastava A, Memon P, Nair TS, Bhamare P, Singh D, et al. Quality of maternity care provided by private sector healthcare facilities in three states of India: a situational analysis. BMC Health Serv Res. 2019;19(1):971.

8

7 Ghosh A, Ghosh R. Maternal health care in India: A reflection of 10 years of National Health Mission on the Indian maternal health scenario. Sex Reprod Healthc. 2020;25(100530):100530.

9

12. Arokiasamy P, Pradhan J. Maternal health care in India: access and demand determinants. Prim Health Care Res Dev. 2013;14(4):373–93.

10

18. Quality of maternal health care [Internet]. Mhtf.org. 2014 [cited 2021 Sep 27]. Available from: https://www.mhtf.org/topics/quality-of-maternal-health-care/

11

17. Biswas TK, Sujon H, Rahman MH, Perry HB, Chowdhury ME. Quality of maternal and newborn healthcare services in two public hospitals of Bangladesh: identifying gaps and provisions for improvement. BMC Pregnancy Childbirth. 2019;19(1):488.

13

13. Antenatal care [Internet]. Unicef.org. 2021 [cited 2021 Sep 26]. Available from: https://data.unicef.org/topic/maternal-health/antenatal-care/

14

14. Hijazi HH, Alyahya MS, Sindiani AM, Saqan RS, Okour AM. Determinants of antenatal care attendance among women residing in highly disadvantaged communities in northern Jordan: a cross-sectional study. Reprod Health [Internet]. 2018;15(1). Available from: http://dx.doi.org/10.1186/s12978-018-0542-3