Gap Analysis to improve Maternal Health Situation in Uttar Pradesh and Madhya Pradesh

Dissertation Submitted to

The IIHMR University, Jaipur

For the partial fulfillment for the award of the degree of

Master of Business Administration (MBA)

in

Hospital and Health Management

by

ANIRUDH SINGH

Under the Supervision and Guidance of

Dr. Piyusha Majumdar

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INTRODUCTION

Pregnancy and childbirth should be a time of joy. But safe childbirth and motherhood is the right of every pregnant woman and it depends on the care that a pregnant woman receives during pregnancy. Maternal Health refers to women's health from the stage of pregnancy, childbirth, and postnatal time. Maternal health care has been a worldwide concern for decades as a life of millions of women in the reproductive period group be capable to be save by providing maternal health care services.

WHO says, 99% of the maternal death throughout the world is taking place in developing countries. The risk of maternal mortality in developing countries could be 200 times more than in developed countries, which is due to some common problems in these developing countries like lack of comprehensive national health care services, which leads to pregnant women not being able to access prenatal care which prove to be fatal. Africa is the worst continent in terms of maternal health and south Asia not so far behind as well. Each day in 2017 about 810 women died due to pregnancy & delivery-related causes, but most of these deaths could have prevented. Between the years 2000 and 2017, the MMR dropped by 38% worldwide. The deaths occurred due to complications that developed during pregnancy. The major complications are severe bleeding (postpartum hemorrhage) infections (usually after delivery), high blood pressure at some stage in pregnancy (pre-eclampsia and eclampsia), complications from childbirth, and insecure abortion. MMR of India for the year 2016-2018 is 113/100,000 live births, conforming to Sample Registration System (SRS) report. The MMR for the year 2014-2016 was 130/100,000 live births which were 17 points higher as compared to 2016-2018 data. According to the SRS report, 2016-2018 the MMR of Rajasthan was 164/100,000 live births, as compared to 173/100,000 live births in Madhya Pradesh. While that of Uttar Pradesh is 197/100,000 live birth and that of Bihar is 149/100,000 live births. Due to the poor health status of these states were called BIMARU states in 1980. The MMR of India according to the same data was 113/100,000 live birth. The interstate data for MMR shows the values ranging from 215/100,000 live birth for Assam to 43/100,000 live birth for Kerala. India has focused on sustainable development goals: 3 which is to decrease the maternal mortality ratio to 70/100,000 live births by 2030. Due to the poor socio-economic status and poor health care system, with this foundation, an evaluation was done based on data from the state fact sheet of NFHS-3 & 4 for the state of Uttar Pradesh and Madhya Pradesh.

Literature Review

Title of the study Author's, year	Methodology	Objective's	Key learning's
"Utilization, equity and determinants of full antenatal care in India: analysis from the National Family Health Survey-4" (Gunjan Kumar, Tarun S Choudhary, Akanksha Srivastava, 2019)	190,898 women from India's NFHS 4. Multivariable logistic regression model used for examine ANC utilization	• To examine the utilization, equity and determinants of full antenatal Care in India.	• Full ANC utilization in India was inadequate and inequitable. • Half of the women did not receive the minimum recommended ANC visits • The positive association of full of ANC with ICDS utilization and child's father involvement may be leveraged for increasing the uptake of full ANC. • ANC are imperative for strengthening India's maternal health program.
"Assessment of Janani Suraksha Yojana (JSY)- in Jabalpur, Madhya Pradesh: knowledge, attitude and utilization pattern of	Study conducted in N.S.C.B Medical college, Jabalpur With 300 beneficiaries. Statistical analysis: Percentages.	• To assess the social profile, knowledge, attitude and utilization pattern of JSY beneficiaries.	• 67% of the respondent arranged their own/hired vehicle for transportation for delivery. • 17.33% were motivated by the

beneficiaries: a descriptive study" (Sanjeev K Gupta, Dinesh Kumar Pal, Rajesh Tiwari, 2011)			ANM/ASHA/DAI/AWW for institutional delivery. • Decision on expenditure depends on husband in one third cases. Husband decides the purpose for which money is to be used. • Arrangement of vehicle for transport is still a major issue
" Out-of-Pocket Health Expenditure and Source of Financing for Delivery, Postpartum, and Neonatal Health in Urban Slums of Bhubaneswar, Odisha, India" (Kirti Sundar Sahu, Bhavna Bharati, 2017)	Cross-sectional study was conducted among 240 recently delivered women from the slums of Bhubaneswar	• The study aimed to explore the OOPE, source of funding and experience of the catastrophic expenditure for healthcare related to delivery, postpartum, and neonatal morbidity.	• 29% of the households incurred OOPE, and other incurred from JSSK, JSY • JSSK, JSY and Mamta had benefitted the vast majority of population. • Near about half of the who did incur OOPE experienced catastrophic expenditure(CE) • Insurance facility for cesarean section delivery might reduce the excessive financial burden on households.
" Utilization of	A cross-sectional	• This study	• 83% of women had

Maternal health services and its determinants: a cross sectional study among women in rural Uttar Pradesh, India"(Ranjana Singh, Sutapa B. Neogi, Avishek Hazra, 2019)	sample taken from currently married women (15-49years) who delivered a baby 15 months prior to the survey was include. Information was collected from 2208 women spread over five districts of UP.	assesses the utilization of health care services during pregnancy, delivery and post-delivery among rural women in Uttar Pradesh and examines its determinants.	any ANC • 61% of women reported three or more ANC visits. • 68% of women delivered in a health facility. • 29% women stayed for at least 48 hours. • Contacts with health worker during pregnancy, marginalization, at least three ANC visits and institutional delivery were the strong determinant for the utilization of Postnatal care services (PNC) .
" Utilization of MCP card for enrichment of knowledge on antenatal care by mothers attending immunization clinic: a hospital based cross-sectional study" (D. jena, S. Sabat, R.M. Tripathy, D.K. Mahapatra,	Cross sectional study was conducted among 200 mothers, those attending immunization OPD of MKCG Medical college	• This study were to evaluate the perception among mother about antenatal care from MCP card and to associate selected variables of interest with their knowledge.	• 86% have read the MCP card and understood it.. • 10% have understood it pictorially. • 62% have understood it both literally and pictorially. • 81% said contacting health worker as an arrangement for emergency labour but only 35% said that

2017)			they would identify a hospital in advance. • MCP card is used for providing health education for counseling during ANC visits at village level in the Anganwadis.
"Public health interventions to improve maternal nutrition during pregnancy: a nationally representative study of iron and folic acid consumption and food supplements in India."(Prashant Kumar Singh, Ritam Dubey, Lucky Singh, 2020)	Cross-sectional survey conducted among 190898 ever-married women aged 15-49 years who were interviewed as part of the National Family Health Survey	• This study examines the socioeconomic, programmatic and contextual factors associated with the consumption of iron and folic acid (IFA) tablet/syrup for at least 100 d (IFA100) and receiving supplementary food(SF) by pregnant women in India.	• Less than one-third of women were found to be consuming IFA100 tablet and over half received SF during their last pregnancy. • The consumption of IFA100 was likely to improve with women's education, household wealth, early and more prenatal visits, and in a community with high pregnancy registration. • Higher parity, early and more prenatal visits, contact with community health worker during pregnancy, belonging to a poor household

			and living in an aggregated poor community and rural area positively determine whether a woman might receive SF during pregnancy.

Rationale:-

- In both the states taken from BIMARU state, in 1980 four states of India are coined a symbol BIMARU(Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh), means sick because they have high fertility rate, high MMR, high IMR, high population growth, and low literacy rate.
- For the study purpose Madhya Pradesh and Uttar Pradesh have been selected because both the state are now improving in the maternal health indicators but still far behind the national average.
- In both the state GDP also goes high as compare to the past decade, socio-economic indicators like gender balance, education, and population growth, the disparity between the poor and rich states have reduced.

Research Question: - What is the maternal health situation of Uttar Pradesh and Madhya Pradesh according to NFHS-3 & NFHS-4?

Objective:-

- To assess the high priority districts to improve the maternal health situation
- To suggest recommendations to improve the maternal health situation.

Methodology:-

- **Study design-** Descriptive
- **Study Setting-** Uttar Pradesh and Madhya Pradesh
- **Sample Size-** Data of NFHS-3 & NFHS-4 for Uttar Pradesh and Madhya Pradesh has been analyzed
- **Data collection Method -** Secondary data
- **Data collection Tool –** Data was abstract from NFHS fact sheets of Uttar Pradesh and Madhya Pradesh.

- The National Family Health Survey (NFHS-4) 2015-16, the fourth in the NFHS series, provides information on population, health, and nutrition for India and each state and union territory. For the first time, NFHS provides district-level estimates for many important indicators. All four NFHS surveys have been conducted under the stewardship of the Ministry of Health and Family Welfare (MoHFW), Government of India.
- Data was collected for the survey using the Computer-Assisted Personal Interviewing (CAPI) in 19 different languages by making four survey questionnaires for households, women, men, and biomarkers.
- The NFHS-4 sample was designed to provide estimates of all key indicators at the national and state levels, as well as estimates for most key indicators at the district level (for all 640 districts in India, as of the 2011 Census). The total sample size of approximately 572,000 households for India was based on the size needed to produce reliable indicator estimates for each district and for urban and rural areas in districts in which the urban population accounted for 30-70

percent of the total district population. The rural sample was selected through a two-stage sample design with villages as the Primary Sampling Units (PSUs) at the first stage (selected with probability proportional to size), followed by a random selection of 22 households in each PSU at the second stage. In urban areas, there was also a two-stage sample design with Census Enumeration Blocks (CEB) selected at the first stage and a random selection of 22 households in each CEB at the second stage. At the second stage in both urban and rural areas, households were selected after conducting a complete mapping and household listing operation in the selected first-stage units.

- Uttar Pradesh, information was collected from 76,233 households, 97,661 women age 15-49 (including 15,387 women interviewed in PSUs in the state module), and 13,835 mean ages 15-54.
- Madhya Pradesh, information was collected from 52,042 households, 62,803 women age 15-49 (including 9, 994 women interviewed in PSUs in the state module), and 10,268 mean ages 15-54.

The facts and statistics were contrasted to one another (NFHS-3 & 4) for different maternal health markers in both the state. Key indicators are:-

- JSY and cash-based use
- Ante-natal Care administration
- Mother and Child Protection card
- Post-natal consideration
- Gifted birth participation
- Conveyance administration

The NFHS fact sheets (NFHS-3 & NFHS-4) of both the state are to be compared for different maternal wellbeing indicators.

Result

The progress has been observed from NFHS-3 to NFHS-4 however, the progress is very dismal compared with the progress of other similar Indian states. Relatively MP has shown better progress compared to Uttar Pradesh. Poor performance is being observed in all the three levels of maternal health; pregnancy {Ante-Natal Care (ANC), Tetanus toxoid (TT) and Iron and Folic Acid (IFA)}, childbirth (Institutional delivery by Skilled Birth Attendant (SBA), Caesarean Section (CS) and postpartum care (hospital stay and Janani Suraksha Yojana (JSY).

Table 1 shows the distribution of women receiving financial assistance under JSY incurring OOPE. According to NFHS-4 Madhya Pradesh performed well in the terms of Janani Suraksha Yojana (JSY) benefit to the pregnant women than Uttar Pradesh. Out-of-pocket expenditures in Uttar Pradesh slightly higher than in Madhya Pradesh. NFHS-4 records confirmed that on average Uttar Pradesh has Rs. 1956 and Madhya Pradesh has Rs. 1481 are OOPE for each delivery in a public health service

Table 1- Percentage distribution of women getting financial support under JSY and incurring OOPE.	
State	**NFHS-4**
Percentage of Mother's who received financial support under JSY for births delivered in an institution	
Uttar Pradesh	48.7
Madhya Pradesh	61.1
Average out of pocket expenditure (OOPE) for each delivery in public health facility (Rs)	
Uttar Pradesh	1,956
Madhya Pradesh	1,481

Table 2 shows the percentage of registered pregnancies for which mothers received MCP cards. It is an important tool for monitoring the status of maternal health. NFHS-4 data shows that Madhya Pradesh performed better than Uttar Pradesh in provide Mother-child protection cards to pregnant women about 12.4 percent.

Table 2- Percentage of registered pregnancies for which mother received MCP	
State	**NFHS-4**
Uttar Pradesh	79.8
Madhya Pradesh	92.2

Table 3 shows that the percentage of those women who received ANC services. NFHS-3 record shows that in Uttar Pradesh the percentage of those women who have receiving ANC examination in their first trimester has improved 79 percent from NFHS-3 to NFHS-4, on other hand in Madhya Pradesh it has increased by 35 percent if compared NFHS-3 & 4. Those women who had at least 4 antenatal care visits has to improve by more than two times from NFHS-3 to 4, whereas in Madhya Pradesh visits had improved by 60 percent from NFHS-3 to 4. Those who have received full antenatal care services in Uttar Pradesh had to increase by more than double from NFHS-3 to 4, whereas that visits had improved two and half times in Madhya Pradesh from NFHS-3 to 4.

Table 3- Percentage of those women who receiving ANC		
State	**NFHS-3**	**NFHS-4**
Women who received ANC in the first trimester		
Uttar Pradesh	25.7	45.9
Madhya Pradesh	39.3	53
Women who had at least four ANC visits		
Uttar Pradesh	11.1	26.4
Madhya Pradesh	22.3	35.7
Women who received full ANC		
Uttar Pradesh	2.7	5.9
Madhya Pradesh	4.7	11.4

Table 4 shows the percentage of women who are immunized against neonatal tetanus and anemia. Uttar Pradesh showed that 34 percent and Madhya Pradesh showed that 27 percent improved in women immunized against neonatal tetanus if compared NFHS-3 to 4. Also, the percentage of mothers taken iron-folic acid tablets for 100 days had two times extra in Uttar Pradesh from NFHS-3 to NFHS-4; similarly, Madhya Pradesh had three times more than NFHS-3 to 4.

Table 4- The Percentage of women who protected against neonatal tetanus & anemia		
State	**NFHS-3**	**NFHS-4**
Percentage of those women whose last birth was protected against neonatal tetanus		
Uttar Pradesh	64.5	86.5
Madhya Pradesh	70.7	89.8
Mothers who consumed iron folic acid tablets for minimum 100 days or more while they were pregnant (%)		
Uttar Pradesh	6	12.9
Madhya Pradesh	7.1	23.5

Table 5 shows the percentage of those women who taken post-natal care from health workers two days after delivery. Uttar Pradesh had an increase by four times those women who received postnatal care from any health workers in two days after delivery in NFHS-4 as compare to NFHS-3, whereas in Madhya Pradesh it improved by more than twice from NFHS-3 to 4. Both the states show progress in the planning of postnatal reflection from a health skilled from NFHS-3 to 4, but more than half of the women till now far away from the postnatal care after delivery.

Table 5- Percentage of women who received post-natal care from any health workers in two days of delivery		
State	**NFHS-3**	**NFHS-4**
Uttar Pradesh	12.3	54
Madhya Pradesh	24.9	54.9

Table 6 represent the percent of newborn receiving care by skilled healthcare. According to the NFHS data, it has been observed that newborns at home receiving care after delivery at health centre within 24 hours of birth are very low percent, both in Uttar Pradesh and Madhya Pradesh. The reflection is specified by a healthcare skilled in two days of delivery.

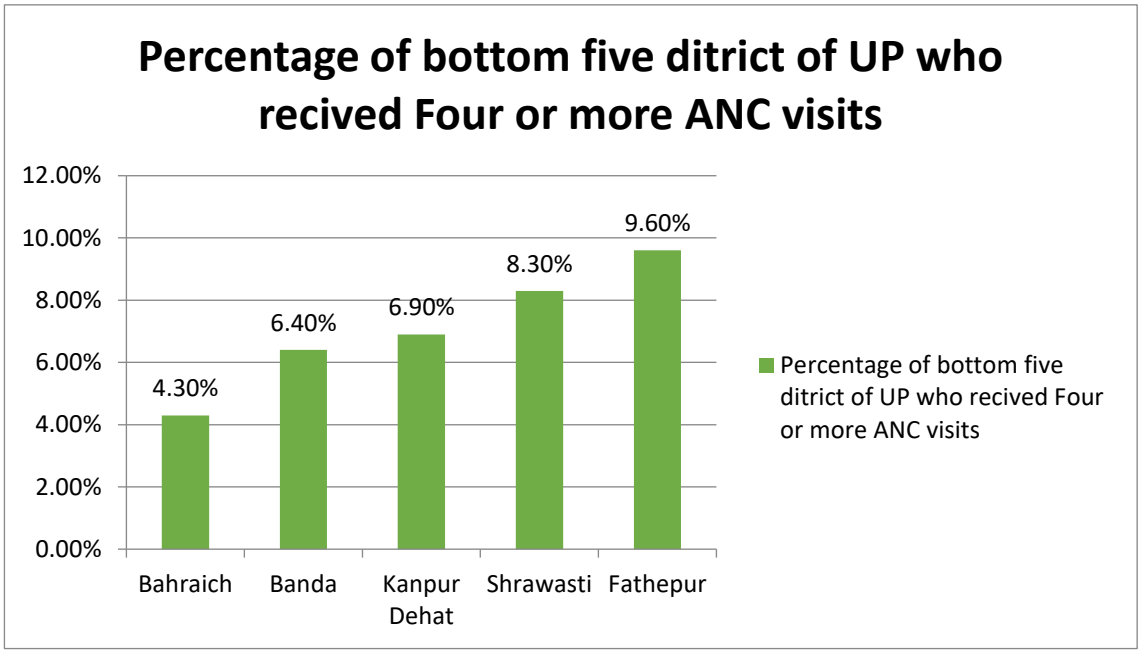
Table 6- Percent of newborn receiving care at health center and by skilled health care workers.		
State	**NFHS-3**	**NFHS-4**
Children born at home who were taken to a health service for examination within 24 hours after birth (%)		
Uttar Pradesh	0.1	0.8
Madhya Pradesh	0.2	2.5
Children who received a health examination after birth from health workers in 2 days of birth (%)		
Uttar Pradesh	**N/A**	24.4
Madhya Pradesh	**N/A**	17.5

Table 7 shows the percentage of delivery care. According to NFHS data, the percentage of institutional delivery in both Uttar Pradesh and Madhya Pradesh has shown improvement was a three-time increase from NFHS-3 to NFHS-4, the main reason being the successful implementation of JSY. If we talk about institutional deliveries in a public facility, Uttar Pradesh showed tremendous improvement, institutional deliveries in the public facility were seven times increase, while Madhya Pradesh was four times increase from NFHS-3 to NFHS-4. Madhya Pradesh was 25 percent ahead of Uttar Pradesh. The percent of home deliveries be quite low in both states in NFHS-4, it's undoubtedly due to the acceptance of institutional deliveries by a majority of the people of both states Uttar Pradesh and Madhya Pradesh. The percent of birth assist by health workers showed enhance in both states, that was more than double from NFHS-3 to 4. Generally, the performance showed that home childbirths are done by the skilled birth attendant in both States. However, the boost in the Caesarean section delivery in both Uttar Pradesh and Madhya Pradesh was very least. According to NFHS data caesarean section delivery are increased in private institutions, while compared that in public wellbeing institution it decline from NFHS-3 to 4 in both states.

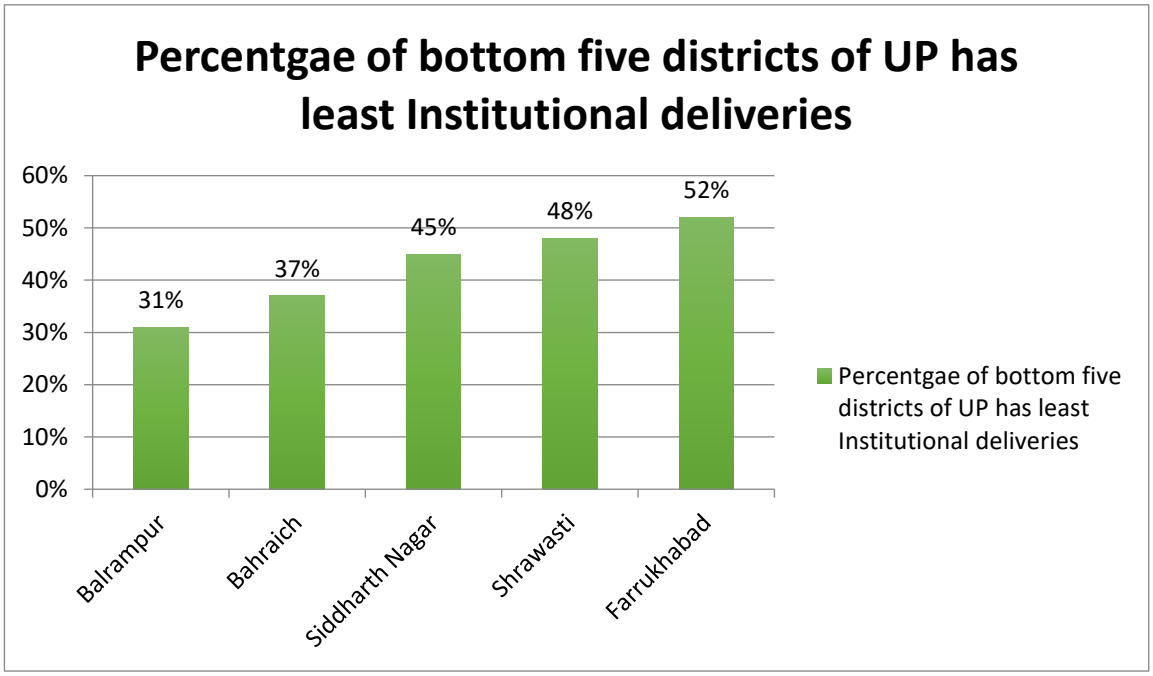
Table 7- Percentage of Delivery Care		
State	**NFHS-3**	**NFHS-4**
Percentage of institutional delivery		
Uttar Pradesh	20.6	67.8
Madhya Pradesh	26.2	80.8
Percentage of institutional births in public facilities		
Uttar Pradesh	6.6	44.5
Madhya Pradesh	18.4	69.4
Percentage of Home delivery conducted by experienced health personnel		
Uttar Pradesh	6.8	4.1
Madhya Pradesh	6.6	2.3
Percentage of births assist by health personnel		
Uttar Pradesh	27.2	70.4
Madhya Pradesh	32.7	78.0
Births delivered by caesarean section		
Uttar Pradesh	4.4	9.4
Madhya Pradesh	3.5	8.6
Births in a private health institution delivered through caesarean section		
Uttar Pradesh	26	31.3
Madhya Pradesh	28.8	40.8
Births in a public health institution delivered through caesarean section		
Uttar Pradesh	11.1	4.7
Madhya Pradesh	6.8	5.8

Discussion

The improvement showed in the maternal wellbeing indicator in the state of Uttar Pradesh and Madhya Pradesh not so far been attain as predictable. Uttar Pradesh still needs more progress in look at maternal health conditions. On the other hand, Madhya Pradesh shows continuing outcome if compared to Uttar Pradesh. Progress shown in the discussed maternal health indicator is considered essential for the growth of maternal health situation in several states. ANC performs a major responsibility in the running of safe maternity. A routine and proper Antenatal Care can be guided to early intervention in case of any problem during pregnancy. Minimum 4 ANC routine examinations are compulsory at the divergent stage of pregnancy. Too many interventions in India used for anaemia are being applied at a different phase of pregnancy. Tetanus vaccination and iron-folic acid (IFA) tablets/syrup are providing generally for the safeguarding and health of the pregnancy.



According to NFHS-4 data shows that the Pregnant women who received four or more ANC visits by district, Uttar Pradesh, Bahraich district lies in the bottom they have only (4.3%) ANC visits and Banda district is the second one from the bottom have (6.4%) ANC visits. The percentage of women who received MCP Card in Bahraich district only (51%) lie in the bottom among 75 districts in UP.



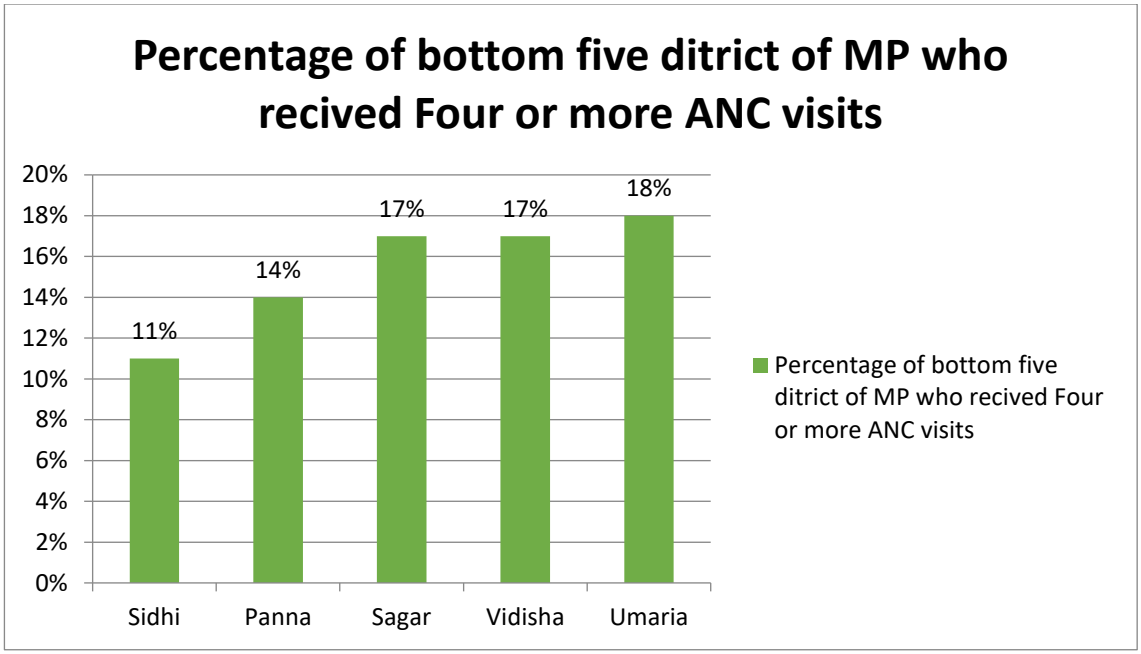
If we talk about institutional deliveries by district, Uttar Pradesh, Balrampur district with (31%) secure the lowest position and Bahraich district is the second one from the bottom. Percentage of those women with PNC within 2 days after birth again Bahraich district has the lowest percentage (21.6%). The maternal health condition is very bad in the districts Bahraich, Balrampur, Banda.

Bahraich, Balrampur, Banda, Kanpur Dehat, Shrawasti, Fathepur, Siddharth Nagar, and Farrukhabad are High Priority District (HPD) of Uttar Pradesh.

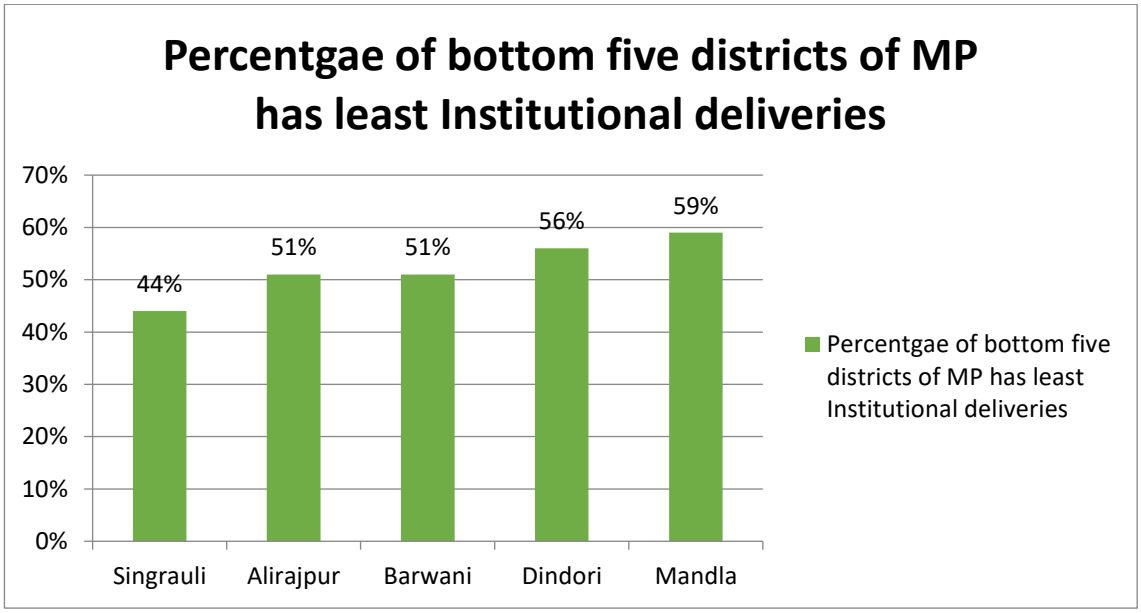
Sidhi, Panna, Sagar, Vidisha, Umaria, Singrauli, Alirajpur, Baewani, Dindori, and Mandla are High Priority District (HPD) of Madhya Pradesh.

They are selected as High Priority Districts according to the relative ranking of districts has been done within a State and bottom 25% of the district be selected. They are performing very low in maternal health (Percentage of mothers who received four or more ANC visits, Percentage of Institutional Deliveries).

To improve the maternal health situation in HPD we should put some interventions like; antenatal care package, tracking of high risk pregnancies, strengthening of delivery points in terms of infrastructure, manpower, equipment, supplies, implementation of JSSK and JSY.



Most of the districts of Madhya Pradesh has better Maternal Health situation in comparison to Districts of Uttar Pradesh. The pregnant women who have received ANC visits, Sidhi district has the lowest percentage (11%) among 51 districts of MP. Only 59.3% of women from the district Alirajpur received an MCP card which is the lowest if compared to other districts of Madhya Pradesh.



The percentage of institutional deliveries in Singrauli district has very low so they kept in the bottom with (44%) and Alirajpur is the second last district from the bottom. I see

the condition of PNC, Sidhi district has only (26.9%). Except for some districts of Madhya Pradesh they have good maternal health situations compared to Uttar Pradesh.

The present-day NFHS-4 facts show a disappointing condition of maternal health indicator is a problem for both the state, Uttar Pradesh and Madhya Pradesh. Uttar Pradesh has a comparatively poor presentation concerning compulsory 4 ANC examinations while contrast to Madhya Pradesh. Parallel investigation for Uttar Pradesh shows that there is lesser use of maternal healthcare services such as antenatal care checkups on regular time intervals and health center visits.

Numbers of factors in both states that affect the use of maternal wellbeing services are mother religious conviction, education level, income, age at when they get married, and wealth giving out of the family. A study on the DLHS statistics of the EAG state illustrates that the district-wise deviation indicates that not only the existence of health services, and also sufficiency and ease of access of quality services are essential in encourage is not satisfactory to promote services consumption. Several studies also recommend that besides ease of access to healthcare services, variables like demographic and socio-economic features also essential for maternal wellbeing services consumption.

Institutional childbirth when compared to home childbirth is more flourishing without or with the least maternal complication. But the factors which affect most are lack of wealth, lack of information, and stigma related, childbirth at home are still common in the country, particularly in a remote region. Uttar Pradesh and Madhya Pradesh come underneath the class of Empowered Action Group (EAG) state where the system of referrals is not well grown. The NFHS-4 figure shows a better performance of both states concerning institutional childbirth as compared with NFHS-3. Home childbirth is still being done without any help or with minimal help from skilled birth attendants, or other health workers. Despite so much training of health care specialized under Integrated Management of neonatal and babyhood illness and neonatal and skilfulness birth assistant, the performance at the ground level is poor, so affect the health of pregnant women in rural areas, resultant in enlarged mortality and morbidity of mothers.

Neonatal care is also essential for both maternal health and the continued existence of the baby. The initial 28 days after birth is the critical phase for the survival of the

neonate. Thus institutional and similar experts are important for the suitable health of the baby. With this respect, the condition of Uttar Pradesh and Madhya Pradesh showed an improved achievement in infant care in the first two days of birth.

Caesarean Section delivery takes place more in a private hospital because generates more revenue compared to normal deliveries and also shows an unnecessary gap to the standard set by the support of WHO has said in the manner of NFHS-3 & 4 data. Both the state Caesarean Section is a general trend. The relatively high percentage of Caesarean Section delivery in private hospitals indicates the tendency of the hospital toward Caesarean Section deliveries, the main motive for a profitable reason. The additional option is that the lower percentage of CS delivery in a public health facility is due to a lack of resources, Doctors, lack of skilled workforce. Therefore, the government should take imperative steps must be carried out to increase the number of human resources with the intention of much need to facilitate caesarean section deliveries can be structured as for every requirement.

Conclusion

The maternal health condition not satisfactory in Uttar Pradesh, and Madhya Pradesh shows that there is a necessity to indulge supplementary in the actions associated with maternal health. A big contract of improvement is desired concerning the maternal health facility to attain the maternal health objective. We have to make a plan that plays a critical role in civilizing the maternal health services are health structure escalation, strong political determination, and public recruitment. The common age of wedding in Uttar Pradesh and Madhya Pradesh is lesser than the permissible age of wedding in the country, moreover, this is an important issue of alarm as observe in the maternal health facility. Early marriage can affect both mother and baby wellbeing and they can direct the untimely childbirth which will continuously outcome in maternal and infant complications. Community awareness plays an important role in improving the health status of both the state besides another effort.

Recommendations

The Maternal Health situation in Madhya Pradesh is in a good state if compare to the Maternal Health situation in Uttar Pradesh is not good it can be improved by appropriate use of resources, the first government has to identify where the problem why we don't achieve the set target is. We have to find the problem working on the ground level taking feedback to Primary health workers and then try to solve the problem. One of the important subjects during policy-making advice of the primary health workers also taken because they know where is the main problem they help a lot. I believed if we try this we can achieve our goal and target in given time and give good health services to every needy person those have required. ANC has an important role in maternal health, both the state has to focus on them, especially in Primary Health canters, Sub canters in remote areas. Besides promoting institutional delivery, the delivery by Skilled Birth Attendants has to be increased in hard-to-reach areas mostly in tribal areas for minimization of the mortality and morbidity of pregnant women. Both the states should make the policy that supports women for growing the learning and literacy levels of poor, rural women may improve their capability to make intelligent decisions about suitable reproductive care. Health enlightening campaigns focus on women, husbands, and key family members may increase women's access to precious maternity services.

The poor performance of both these states in all these indicators requires a multipronged approach strong political will, health system strengthening, community mobilization, and awareness.

To improve the maternal health situation in HPD we should put some interventions like; antenatal care package, tracking of high risk pregnancies, strengthening of delivery points in terms of infrastructure, manpower, equipment, supplies, implementation of JSSK and JSY.

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