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Full Length Research Paper

Status of Women Health in Uttar Pradesh: A Trend Analysis

Sunil Kumar Tripathi¹ and Dr. Rekha Gupta²¹-Assistant Professor, Department of Economics Govt. Tilak P.G. College, Katni, M.P. -483501, India.²-Assistant Professor, Department of Economics, University of Allahabad, Prayagraj-211002, India.

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Corresponding Author:

Sunil Kumar Tripathi

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ABSTRACT

Women health is very crucial for wellbeing of human society. It is one of the necessary components for development of a country. We can never imagine a country's rapid growth without considering its population health. About half of the population of India is still facing many challenges to access the health facilities. Sex Ratio and Maternal Mortality Rate consider as two important indicators for measuring women health in general and maternal health in particular. The present work has used these two indicators to capture women health status in U.P as well as India as whole. The paper is with objective to find out the status of women health by analyzing the trend analysis of sex ratio and maternal mortality rate (MMR) since last two decades – especially for twenty first century – in India and U.P. From the data analysis we found that sex ratio holds irregular trend at national level but it shows regular increasing trend for urban area of India. The one more interesting fact which is figured out from the analysis is; sex ratio in rural areas of India is always greater than that of urban area. Sex ratio shows regular increasing trend for U.P. as a whole while irregular trend for urban and rural U.P. The data analysis indicates consistent declining trend of MMR since last two decades. MMR in U.P. shows almost consistent declining trend and MMR in U.P. is always higher than that of India. MMR in U.P. is highest among BIMARU states. Average rate of reduction of MMR for U.P. is also lowest among BIMARU states.

Introduction

According to WHO (World Health Organization), "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1946). The definition does not limit to health only the presence of diseases or infirmity but extends to complete health. It also includes social health in the definition of health. WHO incorporated health as a fundamental right of human beings and asserted in its constitution, "The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition" (WHO, 1946). To maintain the health status in a country, is not only the responsibility of the government but also is the responsibility of individuals. It is also said in the constitution of WHO, "The health of all people is fundamental to the attainment of peace and security and is dependent on the fullest co-operation of individuals and States" (WHO, 1946).

India, being a developing country, is not having the good quality of health infrastructure. Since independence and so far, India is lacking of health infrastructure front. Focus of government on health sector is primary objective but is not sufficient to fulfill the requirement of the country (Tripathi, 2021). The total government expenditure on health was only 1% of the GDP (Gross Domestic Product) of the country. But it has increased to 2.3% of the GDP in fiscal year 2021-22.¹ This is the significant change in attitude of government towards health sector. Due to COVID, last year can be considered as the specific year for the health purpose so; the budget allocation on health facilities for year 2021-22 can be exceptional. But the experience of the needs of health infrastructure during last year can stop government to roll back their decision and not to shrink budget allocation in normal years on health facilities. If we consider the access of health facilities among the population there are traces of less accessible health facilities among women than men in India. Due to many cultural and social obstacles, Indian women are not having

¹According to union budget statement 2021-22, Government of India has proposed to spend Rs2.23 lakh crore on health facilities which is 137% more than last year budget allocation on health facilities.

economic resources and are asset less (Swaminathan, Lahoti & Suchitra, 2012). They have less autonomy and freedom; they have less autonomy to move outside the home, they do not have decision making power in their families (Sarap, Das, & Nagla, 2013). Along with these hindrances, patriarchal society and son preference attitudes and also different kind of discriminations prevailing in our societies deprived women to access the health facilities. All these factors make women more susceptible to diseases and poor health than men (Shivakumar & Sen, 2001).

Uttar Pradesh is the most populous state of India. Its population is almost 20 crores in which around 10.5 crore are male and rest of the population about 9.50 crores are female (Census, 2011). But the State occupies 4th position in India after Rajasthan, Madhya Pradesh, and Maharashtra as per geographical area holding. This indicates that a very huge population is living in the not much sufficient area. Uttar Pradesh considered as economically backward i.e., one of the BIMARU state of the country and also Uttar Pradesh is suffering from lack of adequate health infrastructure and skilled health personnel. Uttar Pradesh is the most populated state of India where socio-economic condition is very poor and lower than that of Indian average and many other southern states of India. The condition of women and status of health facility accessibility among women in Uttar Pradesh consider as crucial. Social and traditional beliefs also made the women's position poor in their families as well as in the society (Sarap, Das, & Nagla, 2013).

Data Source and Methodology

The present work is an attempt to explore the status of women health in Uttar Pradesh with help of two important variable of women health i.e., Sex Ratio and Maternal Mortality Rate and also tries to explore the position of Uttar Pradesh among the other BIMARU states in the perspective of women health.

To fulfill the objective of the present paper the secondary data has been used. Secondary data has been collected from various sources like various rounds of NFHS (National Family Health Survey), different rounds of NSSO (National Sample Survey Office), RBI bulletins, Reports of RBI, MMR bulletins, Sample Registration System (SRS), Census of India, 2011. The collected data has been organized to find the trend using appropriate tools and techniques. Data of sex ratio is collected for the period of 1998-99 to 2019-21 and data for MMR is collected for the period 1997-98 to 2016-18. Trend analysis has been used for the representation of data and appropriate analysis.

Women health is very important for every country. There are a number of indicators to capture and to find out the status of women health in any economy but, due to some limitation and to fulfill the objective of the paper, we are considering only two important indicators which represent status of women health in an economy or state – Sex Ratio and Maternal Mortality Ratio (Edstrom, 2009). These two indicators have been used to capture the status of women's health in Uttar Pradesh.

Status of Women's Health in Uttar Pradesh

India is the only country where women are assumed as devi (Goddess). Our Vedic scriptures and hymns glorify the dignity of women. It can be seen in the sloka "*yatra naryastu puujyante, ramante tatra devatah*" means where women are honored, their deities are pleased. It tells us about the respect and place of the women in ancient societies. But after the regime of Vedas, status of women began to deteriorate. In medieval period, women's status was very poor. In modern India, many laws and constitutional provisions like '*law against sati pratha*', '*Widow Remarriage Act*', Right to Equality, Right to Education etc. are made in order to improve the women's situation in society. After making many laws and provisions, women's status in society has improved too much but it is still below the benchmark. We moved a mile so far but still have to move miles.

Women's health is very crucial for society as well as the country. It must be studied broadly. But, due to availability of data constraint, present paper concerns only for sex ratio and Maternal Mortality Ratio (MMR) to capture women's health in Uttar Pradesh and the position of Uttar Pradesh among other BIMARU states.

Sex Ratio

Indian women are treated differently due to the domination of patriarchal thinking and a number of socio - economic and cultural beliefs in Indian society. This patriarchal attitude can be easily traced with indicators like sex ratio², which is 940 females over 1000 males as per census 2011 (Tripathi, 2021). Sex ratio is one of the best indicators to capture women's health situation in a country. It also represents the attitudes of societies towards girl child. Low sex ratio represents negative health condition for women and adverse attitude of the societies towards girl child. Sex ratio of Uttar Pradesh has given in Fig 1 below. It shows the trend of sex ratio in Uttar Pradesh (U.P.) since the last two decades. The above chart indicates that the sex ratio in U.P. has increased over the period of time. According to NFHS-2, the sex ratio in U.P. was 944 in 1998-99 which has increased to 987 in 2005-06. It shows the huge increase in sex ratio in terms of points. Sex ratio has increased by 43 only in ten years. It can consider significant improvement in women's health as sex ratio in U.P. Further Sex Ratio has increased to 995 in 2015-16 and it has reached very close to no difference between number of male and female in U.P. The sex ratio in U.P. has been 1017 in 2020-21, which shows surplus women in U.P. It means there are more women in U.P. than men. It is very good sign for U.P. and its societies. We can also draw from the above chart, that the sex ratio in urban U.P. has irregular trend. Sex ratio for urban U.P. was 931 in 1998-99 which was further declined to 906 in 2005-06. Since 2005-06, it began to increase and shows regular positive trend so far.

²Sex ratio can be easily defined as the number of female populations per one thousand male population. Sex ratio = (No. of females/ No. of males) *1000.

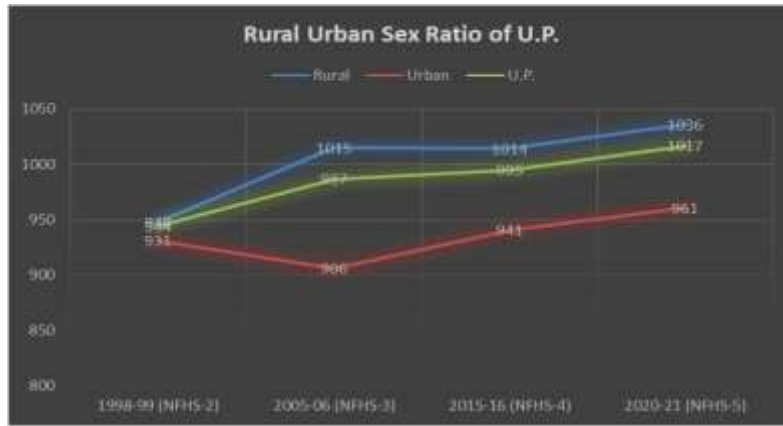


Fig 1: Sex Ratio of U.P. Source: Different round of NHFS

It has increased to 941 in 2015-16 from 906 in 2005-06 which has increased to 961 in 2020-21. It is clear from the chart that sex ratio in urban U.P. has always been below the state level. The urban U.P. sex ratio was very close to state level only in 1998-99 when sex ratio in urban U.P. was 931 and that of state was 944. The gap in sex ratio between urban U.P. and state was maximum i.e., 81 in NFHS-3 (2005-06). It is highly noticeable that sex ratio of U.P. showed positive increasing trend during NFHS 2 and NFHS 3 but sex ratio for urban U.P. showed negative declining trend during the same time period. After 2005-06, sex ratio in urban U.P. showed rapid growth and resulted in decreasing gap in urban areas from state level. The analysis shows the changing attitude of people in urban areas towards girl child. The chart discloses a very interesting fact regarding sex ratio in rural areas of U.P. It is clear from the data trend that sex ratio in rural area is always greater than that of state and urban areas of U.P. In NFHS-2 sex ratio in rural U.P. was 948 that was slightly greater than that of state level -944- and urban U.P. (931). And since then, rural areas always showed women surplus over men. It means after NFHS-2 there were more girls/ women than boys/men in rural U.P. The data trend of sex ratio in rural areas showed irregular trend in four rounds of NFHS. But the sex ratio was more than 1000 in three NFHS rounds i.e., NFHS-3, NFHS-4 & NFHS-5. Sex ratio in rural area was 1015 in NFHS-3 which reduced to 1014 in NFHS-4. Further it has increased to 1036 in recent round of NFHS-5. Sex ratio in rural areas of U.P. is a hope for those female fetuses that are not given birth and murdered in womb. Surplus women trend can help to change the attitude of the society towards girl child. In Indian cities, relatively liberal abortion rules and improved sonography have been misused to eliminate female fetuses (Kumar & Reddy, 2013).

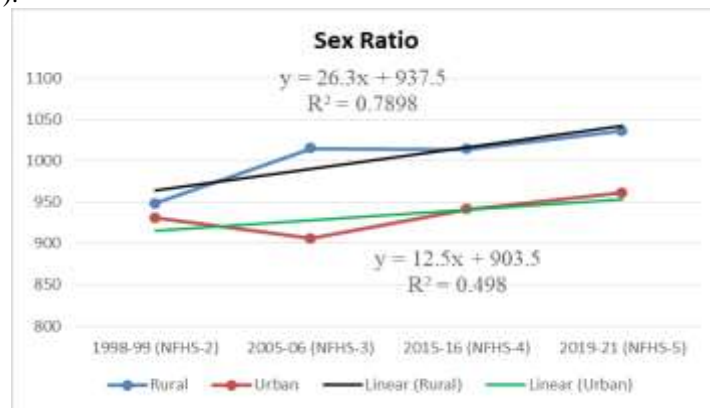


Fig. -2: Trend in Sex Ratio in Rural and Urban U.P. Source: self-created chart by scholar

When we see the figure-2 thoroughly, we can analyze that sex ratio in rural areas has always greater than that of urban area of U.P. in each round survey of NFHS. Chart-2 shows the fluctuating trend in data of sex ratio for both urban and rural areas of Uttar Pradesh. The figure-2 shows that sex ratio in rural and urban U.P. has increased over the time during the study period. The trend value of sex ratio shows increasing trends at magnitude of 26.3 and 12.5 for rural and urban U.P. respectively during the study period. Availability of Different techniques for embryo testing and sex selective abortion in cities is one of the most important factors for low sex ratio in urban areas in India (Lonavath, 2014). The Indian government has implemented regulations to prevent female foeticide arising because of these new technologies. Government of India enacted The Pre-Conception and Pre-Natal Diagnostic Techniques Act (PC & PNDT), 1994 which prohibits sex selection, before or after conception and regulates diagnostic techniques to prevent misuse of sex determination techniques. But mostly it has observed that these laws are often implemented very poorly. For instance, in Maharashtra officials failed to complete 55% of inspections of sonography centres in 2014-2015, the Comptroller and Auditor General (CAG) found, as India Spend reported in June 2015. In Gujarat, the shortfall in inspections of sonography centre was only 73% (Mehta, 2017). According to the CAG reported by India Spend in October 2016; The Uttar Pradesh government has left unspent about half of the funds which were allocated to curb female feticide (Saldanha, 2016). None of the diagnostic centres followed all mandatory rules of preserving image records or backups taken during the ultrasonography of pregnant women, the CAG audit found. In 68% of cases, women did not even hold the necessary referral slips from their doctors (Amarnath, 2017).

The figure-3 shows the deviation in sex ratio of Uttar Pradesh from national average with the help of different rounds of NFHS. After seeing the chart thoroughly, it can be analyzed that sex ratio in the state is almost lower than that of national average. The difference in sex ratio between U.P and national average is not much high. In second round of NFHS, difference in sex ratio between U.P and India as a whole was only 5. The national level is higher than that of state level. In third round of NFHS, the difference has increased to 13 from 5 and national level was more than that of state level. In the fourth round of NFHS, the difference has reduced to -4. In the fourth round of NFHS, the state level is greater than that of national level. This shows the improved situation in sex ratio in state. But in the latest round of NFHS (NFHS-5), the difference has increased to 03. In the recent round, national level is higher than that of state level. The trend study of sex ratio depicts the poor health situation and adverse attitude towards girl child in both state as well as nation. NFHS-5 shows some positive symptoms toward sex ratio and attitudinal change and improved awareness in the state and country both. It can be assumed the result of effort and support by governments, different NGOs like Care India, The SEWA (Self Employed Women’s Association) etc. which are working in the field of women health & empowerment and the most important citizens of India, who has been more responsible for the society and country too. The increasing level of education and literacy rate among women is also a crucial factor for increasing sex ratio in India and state too (Jasim, 2017).

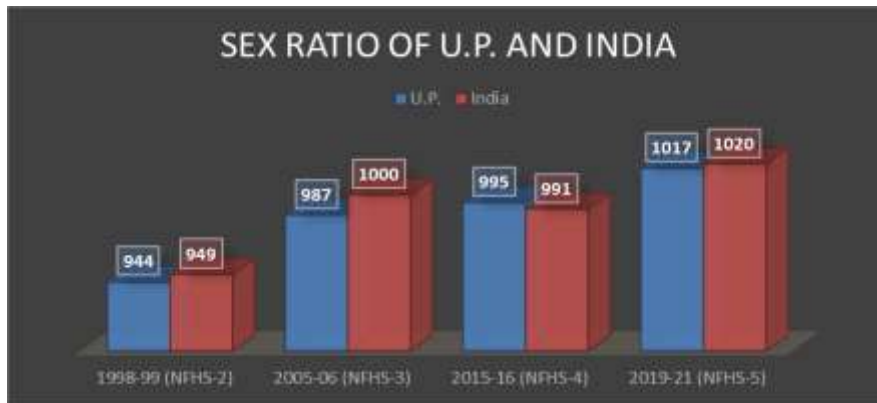


Fig-3: Sex Ratio of U.P. and the Country Whole. Source: Different round of NFHS

Maternal Mortality Ratio (MMR)

Maternal Health constitutes so many factors and also affected by many factors. The Maternal Mortality Ratio (MMR) depicts the number of maternal deaths relative to the number of live births and is usually reported as the number of maternal deaths per 100,000 live births (ASH, 2011).

As per World Health Organization, “**Maternal death** is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes”. The target 3.1 of Sustainable Development Goals (SDG) set by United Nations aims at reducing the global maternal mortality ratio to less than 70 per 100,000 live births. This is one of the best indicators of women health. To find out the status of women health in U.P., MMR can be a good indicator. This shows the access, availability, and consumption of health facilities among women.

The figure 3, replicate the trend of MMR in Uttar Pradesh

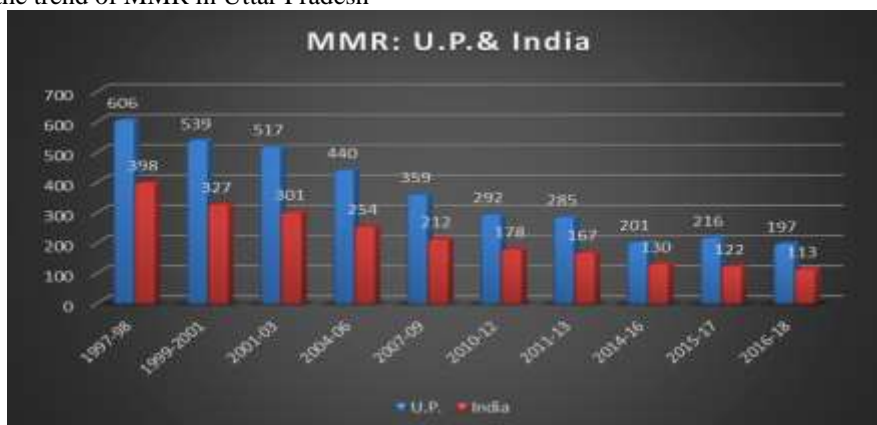


Fig. 4: MMR in U.P. and India. Source: MMR Bulletin (Sample Registration System)

The above figure shows the MMR of U.P. and India in the different years. MMR of U.P. was 606 for the year 1997-98 which was almost 1.5 times that of national average. MMR in U.P shows consistent declining trend since 1997-98 to 2014-16. It has reduced to 539 in 1999-2001 from 606 in the year 1997-98. This declining trend in MMR has continued further to 517 in year 2001-03, 440 in year 2004-06, 359 in year 2007-09, 292 in year 2010-12, 285 in year 2011-13, and 201 in year 2014-16. In year 2015-17, MMR has increased to 216 from 201. Only this is the period when MMR showed increasing trend. But again, MMR has declined to 197 in year 2016-18. When we go through the chart, we can see that MMR for U.P. almost showed strong negative trend since 1997-98 (except 2015-17). The higher MMR in U.P. shows the poor health infrastructure and some bottleneck in receiving

medical care properly. When we compare MMR in U.P. with national average, we can easily analyze that U.P. shows higher MMR than that of India for each and every year. Such trend shows adverse status of women's health in U.P. compare to India. When we see the chart thoroughly, we found that MMR in U.P. has been reduced by about 300% during 1997-98 to 2016-18 (almost 20 years). This shows the significant improvement in women's health as an indicator of MMR in U.P. There can be trace a number of factors behind this huge reduction in MMR in U.P. Most of the maternal deaths could have been prevented if timely medical care was available (Gupta et.al.). According to NFHS-5, the institutional birth has increased to 83.4% in 2020-21 from 67.8% in 2015-16. The increase in institutional delivery can be considered as one of the factors reducing MMR in U.P. Mothers who had an antenatal check-up in the first trimester (%) has increased to 62.5% in 2020-21 from 45.9% in 2015-16. Antenatal check-ups reduce the complexity of birth and pregnancy. Mothers who had at least 4 antenatal care visits are 42.4% which is less than that of national average (58.1%) but NFHS -5 shows proper and significant improvement since 2015-16 (26.4%). According to NFHS -5, mothers who received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery has increased to 72% in 2020-21 from 54% in 2015-16. Such trends can be reason for improved MMR in U.P. during the study period.

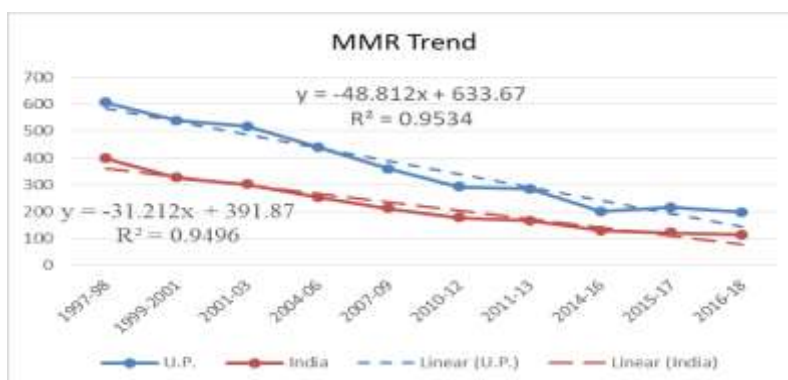


Fig 5: Trend of MMR in U.P. and India. *Source: self-created chart by scholar*

The above figure shows the fluctuating trend of MMR in U.P. and India. In spite of the MMR has decreased over the period between years 1997-98 to 2016-18. The trend value of MMR for the study period shows declining trend at the magnitude of -48.812 and -31.212 for Uttar Pradesh and India respectively. The above chart shows that although, MMR of U.P. has always been higher than that of India for the study period, but MMR in U.P. has declined more rapidly than that of India. Declining trend in MMR in India can also be explained by some facts taken from India factsheet of NFHS-5. The declining trend in MMR shows the improving health situation and awareness among people in India. According to NFHS-5, it is clear that institution delivery percentage has increased to 88.6% in 2019-21 from 78.9% in 2015-16. Institutional birth reduces the probability of maternal death due to safe child birth. Now a days, Government of India is focusing on improving health facilities and reducing MMR. It can be figured out from NFHS -5, mothers who had an antenatal check-up in the first trimester (%) has increased to 70% in 2019-21 from 58.6% in 2015-16 in India. The data shows the huge improvement in maternal care. Further, it can be seen in NFHS-5 that mothers who had at least 4 antenatal care visits (%) was increased to 58.1% from 51.2% in 2015-16. It shows that more than half of the pregnant mothers had received 4 antenatal-care in 2019-21 in India. Such data also indicate the huge improvement in health facilities as well as masses of the populations' attitude towards maternal care. Since maternal death can also be happen due to improper care after child birth. To reduce such types of death, postnatal care is very important for mothers (N. Gupta, 2006).

According to NFHS -5, mothers who received postnatal care from a doctors/ nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery (%) has increased to 78% in 2019-21 from 62.4% in 2015-16. Such data indicates significant improvement in maternal care in India. Prenatal and postnatal care is very crucial for pregnant women. It reduces severity of pregnancy problems facing by pregnant women. As a result, MMR declines significantly (Pandit, 1992). According to NFHS-4, mothers who had full antenatal care³ (%) were increased to 21% in 2015-16 from 11.6% in 2005-06. Though the data shows the significant improvement in full antenatal care of women in India, yet it is insufficient to fulfill the need of the country. The data shows that only one out of the five pregnant women have full antenatal care which is very low for the country like India. To reduce the MMR in India, it is necessary to improve the percentage of mothers who had taking full antenatal care and also postnatal care (Pandit, 1992).

Position of U.P. among BIMARU States in Terms of Women's Health

Term BIMARU is an acronym formed from the first letters of the names of the Indian states; Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh. In BIMARU, 'BI' stands for Bihar, 'MA' stands for Madhya Pradesh, 'R' stands for Rajasthan and 'U' stands for Uttar Pradesh. Term BIMARU comes from Hindi word 'Bimar' which means sick. BIMARU states are demographically sick. They have poor socio-economic condition. These states are home of almost 40% of the total population of India and are contributing the most to India's population explosion. It was coined by Ashish Bose in the mid-1980s (Bimaru States, 2019). They are identified as the most backward states of India where socio-economic conditions are almost same. This term was used to refer to the poor economic conditions within these states. They have high TFR (Total Fertility Rate). Such identification of states is still

³ Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days.

relevant to analyze the socio-economic improvement among states. Therefore now, we are trying to analyze the women’s health status in Uttar Pradesh among other BIMARU states. These states show almost same socio-economic condition. So, it would be interesting to see the position of Uttar Pradesh among BIMARU states in terms of women’s health. The following table replicates the Status of women’s Health as an indicator of Sex Ratio in U.P. among other BIMARU states:

Table 1: Sex Ratio in BIMARU States

Year/States	Bihar	M.P.	Rajasthan	U.P.	India
1998-99 (NFHS-2)	953	941	937	944	949
2005-06 (NFHS-3)	1083	961	957	987	1000
2015-16 (NFHS-4)	1062	948	973	995	991
2019-21 (NFHS-5)	1090	970	1009	1017	1020

Source: Different Round of NFHS

In the sequence to the study of women’s health status in Uttar Pradesh; the status of women’s health in U.P. among BIMARU states can give more insight on how much U.P. has improved comparison to other states which holds the same socio-economic and demographic characteristics during the study period. In BIMARU states, only Bihar is the state where sex ratio is better than that of U.P. in each round of NFHS. U.P. shows regular increasing trend in sex ratio in all four rounds of NFHS while each other BIMARU state are showing irregular trend in sex ratio in above mentioned four rounds of NFHS. Such trends can analyze as U.P. is showing better women health status among BIMARU states. When the sex ratio of BIMARU states other than U.P. has decreased in NFHS-3 from NFHS-2, in the same time the sex ratio in U.P. shows increasing trend. This can consider as the better sex ratio in U.P. compared to other BIMARU states. M.P. and Rajasthan show lower sex ratio than that of U.P. which reflects lesser women’s health situation in M.P. and Rajasthan than that of U.P. and Bihar. In NFHS 2, BIMARU states had almost same sex ratio ranging 937-953. But it is point to highlight that in NFHS-5, U.P. and Bihar show very high sex ratio comparing to rest of the two states. Rajasthan did not show rapid and significant improvement in sex ratio till fourth round of NFHS. But it increases suddenly in NFHS-5 and cross the 1000 benchmark point. When we analyze percentage change in sex ratio among BIMARU states, we found that only Bihar holds better position in sex ratio than that of U.P. except NFHS 4. We can easily trace the fact that percentage change in sex ratio of U.P. among BIMARU states was positive in each round of NFHS. The table also shows positive change in health status of women in U.P which can analyze as one of the best BIMARU states performing well in terms of women health especially in terms of sex ratio.

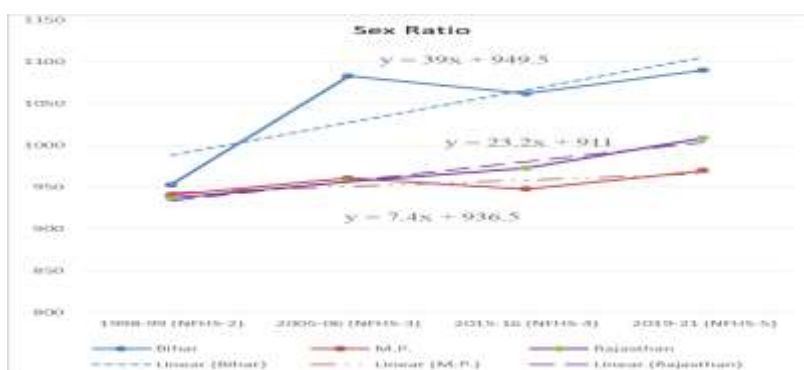


Fig-5a: Sex Ratio Trend in BIMARU states except U.P. Source: self-created chart by scholar

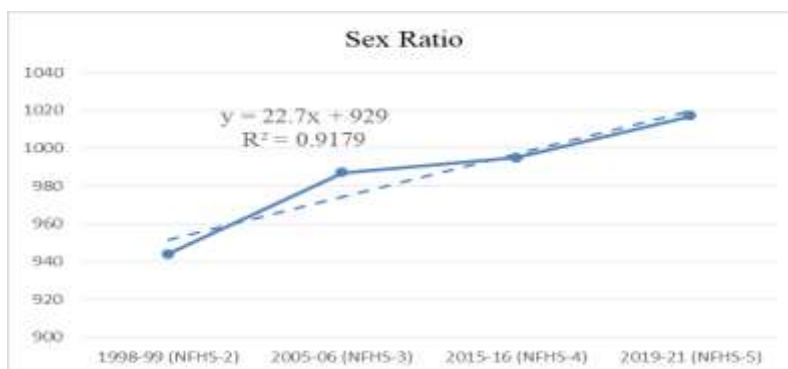


Fig-5b: Sex ratio trend in U.P. Source: self-created chart by scholar

The figures 5a & 5b show the fluctuating but increasing trend in sex ratio over the period of 1998-99 to 2019-21. Charts shows that sex ratio of U.P., M.P., Bihar and Rajasthan, is increasing at the magnitude of 22.7, 7.4, 39 and 23.2 respectively. Bihar shows the best improving trend and M.P. shows the most declining trend in sex ratio among BIMARU states

MMR of U.P. among BIMARU states

To know the status of women’s health among BIMARU states, another indicator is MMR. The following table replicates the Status of women’s Health as an indicator of MMR in U.P. among other BIMARU states:

Table 2: MMR in BIMARU States

Year/States	Bihar	M.P.	Rajasthan	U.P.	India
1997-98	531	441	508	606	398
1999-2001	400	407	501	539	327
2001-03	371	379	441	517	301
2004-06	312	335	388	440	254
2007-09	261	269	318	359	212
2010-12	219	230	255	292	178
2011-13	208	221	244	285	167
2014-16	165	173	199	201	130
2015-17	165	188	186	216	122
2016-18	149	173	164	197	113

Source: MMR Bulletin (Sample Registration System)

After analyzing the table thoroughly, we found that MMR of U.P. was very high (608) in year 1997-98. It was highest among BIMARU states. The table also indicates that MMR of U.P. is highest among all other BIMARU states in each year mentioned in the table. MMR of Rajasthan was also very high holding the second highest among BIMARU states till 2014-16. But after that the MMR has declined rapidly. Bihar is the best performing state in respect of MMR among the group (BIMARU) except year 1997-98. Though MMR of each state in the group has declined over the time, but it was lowest in Bihar (149) for year 2016-18. After comparing the group with national level, it can be obtained that women health of each state in the group is lower than that of national level in terms of MMR. It means women’s health status in these states is lower than that of national level. Status of women health in perspective of MMR of U.P. is lowest in the group. When we consider the improvement in women health among the states (in percentage), we find that the average rate of reduction in MMR over the year – average rate of improvement – in U.P is 6.75% which is lowest among the group states. Improvement rate in the other states of BIMARU group is higher than that of U.P. Average improvement rate of Rajasthan, Bihar and M.P., is 10.4%, 11.5%, and 8.5% respectively. Thus, we can say that women’s health status of U.P. in terms of MMR is poorest in BIMARU states. After going through the table, we found that none of the states of BIMARU group shows better health situation compared to national level. It also signifies the name of the group. Average rate of reduction in MMR is 11.58% at national level which is greater than that of BIMARU states. Thus, it can be said that U.P. is not only having lower position in the group for MMR but also showing less improvement in terms of absolute number among the states over the period. The reason for this may be the inappropriate health facility, inadequate health infrastructure and lack of medical access and use in the state.

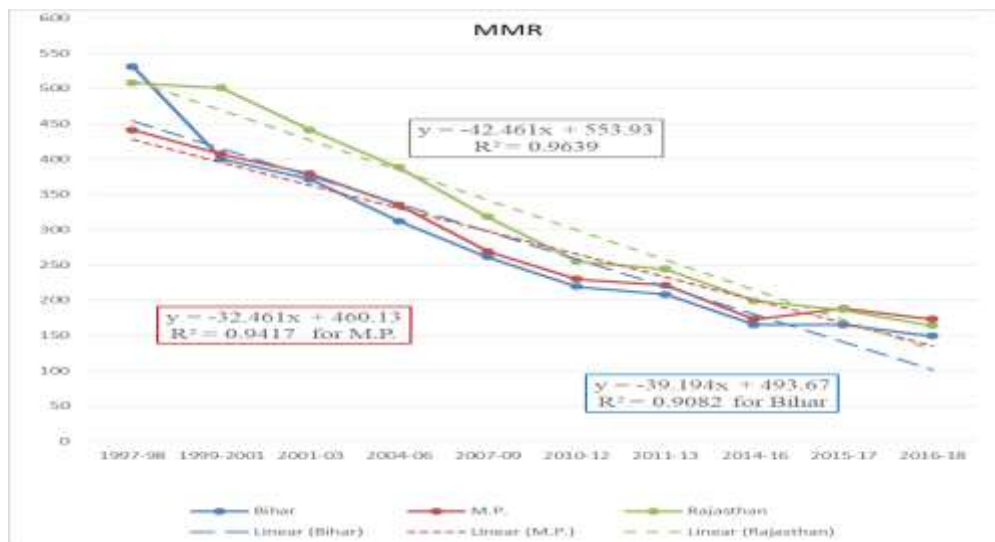


Fig-6: MMR trend in BIMARU. Source: self-created chart by scholar

The figure-4 & 6 show the declining but fluctuating trend in MMR in BIMARU states of India. The above charts show that MMR is reduced over the period of time. The trend value of MMR in Rajasthan, M.P. & Bihar for study period shows declining trend at the magnitude of -42.461, -32.461 and -39.194 respectively. From chart-4, we can analyze that MMR for study period is declined at magnitude of -48.812. The above discussion indicates that MMR in U.P. is declining more rapidly than that of other BIMARU states.

Conclusion and Policy Recommendation

Women's health is very essential to family, society and country as a whole. Sex ratio and Maternal Mortality Ratio are considered as good indicators for capturing women's health status in a society and country too. The present study mainly emphasis on the fact that sex ratio in India has no particular trend. But sex ratio in urban India has definite increasing trend. For the state under the study, sex ratio has no definite pattern for rural and urban U.P. but it has consistent increasing trend for whole state. MMR trend in India and U.P. is a major concern issue for us. High MMR is still reflecting poor health facility and inefficient health infrastructure in India and U.P. both. The trend analysis reflects that Sex Ratio has increased in India general and Uttar Pradesh in particular. In the same manner MMR has declined considerable. Such trends indicate that health status of women has significantly improved in Uttar Pradesh as well India as a whole but still there is a mile to go to achieve status of women health at benchmark point. To improve health status of women in U.P. and India, some suggestions has given below:

- For improving sex ratio, literacy rate must me increased in both rural and urban areas. For doing so, government should give some incentives like free education for girl child till higher level of education. And also, should provide some monetary benefits to parents having only girl children.
- Government should try to change the attitude of the urban society towards girl children so that urban sex ratio can be improved significantly.
- Access to health facility, availability of health facilities and availability of job opportunities for female must be easy.
- Each and every person should bear their responsibilities about health awareness and accessibility among women.

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