# Spatio-Temporal Analysis of Women's Health Status in Rajasthan

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### **ABSTRACT**

Health status is a multidimensional phenomenon that is very difficult to display with accuracy. The health conditions of any social group are closely interconnected with one's position. So, health condition varies from region to region depending on the development. Rajasthan has become the first state in the country to implement the Right to Health and Universal Health Insurance. Along with this, a free checkup and free medicine scheme are already operational in the state. Although Rajasthan is making a lot of efforts in the matter of women's health, the problem of marriage before the legal age of women and anaemia is the biggest threat to women's health. There is still a need for improvement in the matter of women's health by the state government. Today, in the 21st century, the age of marriage is increasing in Indian society. At that time, 25.4% of the women of Rajasthan got married before the legal age of 18 years, which had a bad effect on the health of women. The purpose of the presented research paper is to analyse the condition and direction of women's health in Rajasthan at present. Apart from this, the achievements and successes achieved by Rajasthan in the above field in the last two decades have to be studied. The secondary data used for this research paper was collected from the National Family Health Survey.

Keywords: Women's Health, NFHS, Early Marriage, Health Facilities, Anaemia.

## Introduction

Rajasthan has certainly been a leading state in terms of women's health. Rajasthan has the highest performance in comparison to the national average in the National Family Health Survey 5 data that reflects women's health. There has been a lot of progress this time as compared to the previous survey in every measurement of women's health welfare. The state performs considerably better than the national average in terms of institutional births, methods of menstrual protection, and access to health insurance, with nearly 95% of deliveries being institutional, 84% of women using hygienic methods of menstrual protection, and 88% of households having a member covered under health insurance. Although the rural-urban gap is not shown in the health survey, but certainly the Rajasthan government is certainly fully committed and dedicated towards strengthening the infrastructure of rural health services.

"This progress has been driven by the state government's focus on improving healthcare with efforts such as the Chief Minister's Free Medicines Scheme 4 and the Chief Minister's Free Diagnosis Scheme 5 – both launched in 2011 – playing a major role in providing more accessible and affordable healthcare in the state. The state's performance on women's health is also associated with its total fertility rate decreasing from 2.4 in 2015-16 to 2.0 in 2019-21." (Insights from NFHS-5 for Rajasthan Women and Children 2022)

## **Objectives and Methodology**

Women's health can be examined in terms of multiple indicators, which vary by geography and socioeconomic standing and culture. To adequately improve the health of women in India, multiple dimensions of well-being must be analysed. Health is an important factor that contributes to human well-being and economic growth.

Gender is one of the main social determinants of health, which includes social, economic, and political factors that play a major role in the health outcomes of women. Therefore, the high level of gender inequality in India negatively impacts the health of women.

The main objective of this paper is to assess the health status of women in Rajasthan at the district level, and an attempt has been made to show the improvements being made in them. Several indicators have been taken to show the health status, such as marriage under the age of 18, used family planning method, antenatal care visits, consumed iron and folic acid, institutional birth, post-natal care, below normal BMI, and anaemia. The study was based on secondary data. Data collected from the National Family Health Survey 4 and 5. Diagrams are used for showing differences and trends.

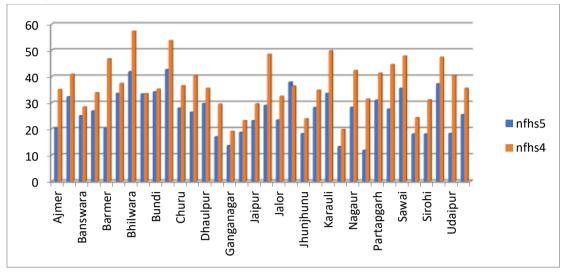
Table: Health and Nutrition Status of Women in Rajasthan

Distt. /State																
Disti./State	Women aged 20- 24 years married before age 18 years (%) -		Used Family Planning Method		Mothers who had at least 4 antenatal care visits (%)		Mothers who consumed iron folic acid for 180 days or more		Mothers who received postnatal care		Institutional births (%)		Body Mass Index (BMI) is below normal		All women aged 15-49 years who are anaemic	
	nfhs5	nfhs4	nfhs5	nfhs4	nfhs5	nfhs4	nfhs5	nfhs4	nfhs5	nfhs4	nfhs5	nfhs4	nfhs5	nfhs4	nfhs5	nfhs4
Rajasthan	25.4	35.4	72.3	59.7	55.3	38.5	14.4	6.0	85.3	63.7	94.9	84.0	19.6	27.0	54.4	46.8
Ajmer	20.2	35.0	60.6	68.7	52.8	51.4	20.7	1.6	82.3	70.4	95.1	87.2	14.7	24.7	52.7	53.4
Alwar	32.2	40.8	54.6	59.8	30.0	21.8	7.0	7.3	72.9	50.7	91.3	81.9	24.3	25.4	53.2	40.2
Banswara	25.0	28.3	70.4	54.9	69.9	43.4	6.8	0.6	94.0	60.8	97.7	93.1	23.3	33.3	52.8	76.3
Baran	26.8	33.7	78.9	65.4	79.3	46.2	11.2	2.0	92.4	68.3	97.3	97.0	20.5	30.7	60.1	66.3
Barmer	20.2	46.7	77.9	46.2	64.9	16.2	24.0	4.5	83.3	41.3	93.3	60.3	19.7	26.7	49.4	42.7
Bharatpur	33.5	37.3	61.2	44.6	33.2	17.2	3.9	2.1	75.9	44.3	92.1	79.4	23.5	25.1	60.8	41.6
Bhilwara	41.8	57.2	71.1	57.0	64.7	41.9	11.9	12.0	95.7	73.2	95.0	81.8	16.3	24.3	50.4	56.0
Bikaner	33.3	33.4	79.5	71.4	50.5	38.2	11.6	2.8	81.2	64.2	90.0	73.4	17.8	23.7	58.9	43.0
Bundi	34.1	35.1	75.8	57.7	74.0	38.2	8.7	4.5	85.2	62.6	95.3	92.4	29.6	33.5	55.9	63.7
Chittaurgarh	42.6	53.6	66.9	47.3	75.0	22.7	13.7	9.4	91.2	55.0	96.8	85.6	20.2	28.7	45.1	60.3
Churu	27.9	36.4	76.7	52.4	45.0	18.3	12.9	6.8	73.9	61.1	87.8	80.6	20.3	26.8	52.9	34.1
Dausa	26.3	40.1	80.0	54.8	53.6	28.4	4.9	7.4	89.7	74.8	98.2	89.6	22.7	29.6	60.3	27.1
Dhaulpur	29.6	35.4	67.9	53.7	42.4	30.7	4.7	2.5	79.4	56.5	94.4	85.4	21.5	29.8	68.5	46.5
Dungarpur	16.9	29.4	70.7	64.2	50.6	45.9	6.7	2.9	92.6	70.8	94.1	86.4	26.8	38.1	72.6	73.2
Ganganagar	13.6	19.0	81.1	71.1	58.7	52.1	23.6	9.2	85.9	68.6	97.7	88.8	14.3	21.0	59.0	34.8
Hanumangarh	18.6	23.1	80.2	70.6	53.1	24.7	20.8	4.4	83.4	60.9	94.9	84.2	19.3	23.0	60.3	33.9
Jaipur	23.1	29.5	76.9	66.7	53.5	58.7	8.9	13.4	89.4	74.1	97.3	93.9	16.6	22.7	54.1	27.1
Jaisalmer	28.9	48.4	83.0	53.5	47.6	18.4	13.1	5.1	80.1	43.8	90.0	49.8	16.3	25.8	44.4	33.6
Jalor	23.3	32.4	54.2	59.0	71.2	31.0	15.2	8.6	87.6	66.0	95.5	83.9	19.7	31.2	59.9	58.7
Jhalawar	37.8	36.3	74.4	68.2	72.3	36.5	9.1	8.3	89.7	74.1	98.3	93.9	19.8	28.7	51.5	58.8
Jhunjhunu	18.1	23.8	77.8	63.7	49.2	45.4	16.5	6.9	84.6	71.7	97.1	96.9	20.0	19.3	55.4	38.3
Jodhpur	28.1	34.7	78.9	61.2	56.7	40.2	24.4	2.8	81.6	59.4	90.0	72.7	16.9	20.8	43.4	44.3
Karauli	33.5	49.8	72.7	56.0	42.0	29.3	2.2	3.8	89.4	56.0.	97.6	88.3	23.0	32.2	61.5	38.1
Kota	13.2	19.7	72.2	71.3	81.3	58.7	11.9	11.2	88.8	74.5	97.9	92.1	15.5	26.4	51.8	59.6
Nagaur	28.2	42.2	83.4	54.7	46.2	42.2	19.0	2.4	80.8	67.1	97.0	87.0	18.9	25.2	45.3	38.2
Pali	11.8	31.3	57.8	57.1	45.0	47.9	20.0	5.5	96.4	52.5	98.8	83.1	16.3	32.6	58.8	49.0
Partapgarh	30.9	41.2	72.0	63.6	52.9	30.7	2.7	12.4	94.0	69.7	96.4	89.5	24.1	35.0	53.1	63.3
Rajasamand	27.5	44.5	56.6	61.2	60.7	39.2	23.9	1.8	82.6	72.8	95.1	84.7	18.1	28.6	58.4	62.0
Sawai	35.4	47.7	58.4	50.4	47.3	33.8	5.8	3.1	75.2	59.0	97.4	87.4	25.8	30.0	57.5	30.5
Sikar	18.0	24.2	75.2	59.8	50.4	49.1	25.8	6.3	83.5	73.6	95.8	92.0	21.4	23.2	44.0	32.8
Sirohi	18.0	31.0	67.9	47.5	69.5	31.7	21.4	6.8	91.1	74.6	95.7	84.2	17.7	34.2	64.0	59.8
Tonk	37.2	47.3	69.1	66.0	66.2	49.5	11.6	4.6	97.8	97.8	97.4	93.4	23.8	32.7	58.8	62.5
Udaipur	18.2	40.4	75.5	51.2	62.3	45.9	17.4	6.9	100.0	90.0	96.1	73.7	17.5	37.7	60.5	69.7

## Married before Age 18 Years

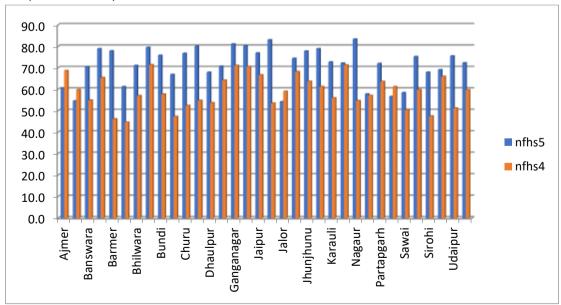
According to NFHS 5, conducted on women aged 20 to 24, found that 25.4% of women were married before the age of 18 years. However, according to the survey 4, the situation has improved a lot. According to NFHS 4, 35.4 percent of women were married at an early age. In terms of early marriage age, the situation in rural areas is much more severe than in urban areas. In Rajasthan, 28.3 percent of girls in rural areas and 15.1 percent of girls in urban areas are married at an early age table revealed that at the district level, it lies between 11.8 percent in Pali district to 42.6 percent in Chittaurgarh. Out of 33 districts, only nine districts having this data have below 20 percent. Early marriage is a barrier to education and job opportunities. School dropout, lower-level education, failure to develop intellectual capacity, lack of career opportunity, economic dependence and poverty were related to underage marriage. It is a punishable offence. As the effort made by the state government of Rajasthan in the last five years, almost all the district

and state levels the percentage of early-age marriages has declined. It is a very positive sign for women's health status. As per NFHS 4, 35.4 percent of female were married before the age of 18 years and district level, it percent.



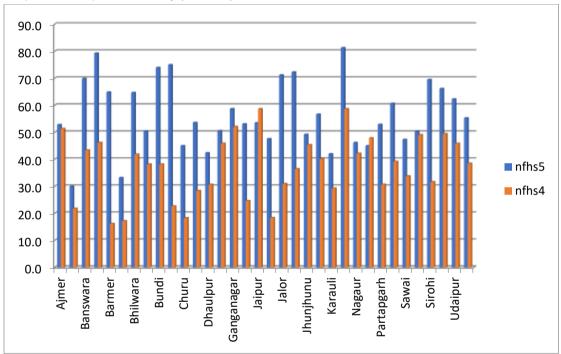
## **Family Planning Method**

Family planning methods can significantly impact on women's health, offering benefits like preventing unwanted pregnancies and reducing the risk associated with childbirth and certain cancers. "Approximately half a million women in developing countries die each year as a result of complications during pregnancy. International data suggest that maternal mortality is decreasing in regions where the use of family planning is increasing" (Westhoff C., 1993). NFHS was conducted on currently married women aged 15-49 years, in Rajasthan 72.3 percent of married women acknowledge that they use a family planning method. In the last survey, it was only 59.7 percent. This is a significantly improvement in the field of women's health. The difference between rural (71.7%) and urban area (74.2%) is very small. As per NFHS 5, at the district level, it lies between 54.2 percent in Jalaur to 83.4 percent in Nagaur district. Almost all the districts show better performance in using the family planning method. As per NFHS 4, it lies between 44.6 percent to 71.4 percent.



#### **Antenatal Care Visits**

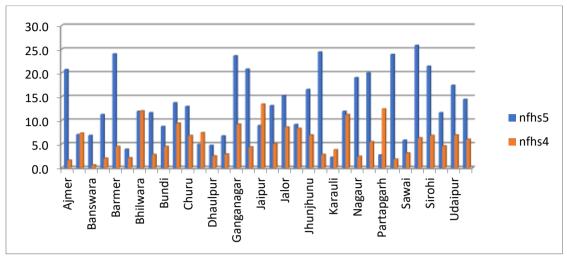
Antenatal care is the health care a pregnant woman receives to ensure both her and her baby's well-being during the pregnancy. It involves regular check-ups, screenings, and tests to identify and address potential health problems, promote healthy behaviours and prepare for childbirth. Regular antenatal care can help prevent complications, improve maternal and foetal health outcomes, and reduce the risk of premature birth and low birth weight. 55.3 percent of women in Rajasthan get proper medical facilities at least 4 times during pregnancy, although in the NFHS 4 this figure was only 38.5 percent, which shows that women in Rajasthan are becoming conscious about their health. At the district level, it lies between 30 percent to 81.3 percent. Kota has the maximum number of women availing the antenatal care facility, while Alwar has the least. There are nine districts where a smaller number (i.e. less than 50 percent) of women availing antenatal care, Alwer, Bharatpur, Dhaulpur, Jaisalmer, Jhunjhunu, Karauli, Nagaur, Pali and Sawai. The state as a whole and almost all districts have made significant progress in this facility as compared to the previous survey (NFHS, 4).



## **Consumed Iron and Folic Acid**

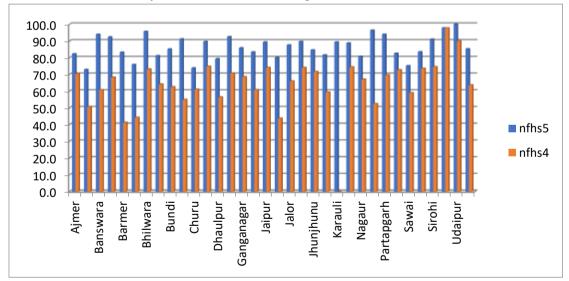
Consumed Iron Folic Acid Taking a healthy diet during pregnancy not only keeps the mother's health good, but also helps in the development of the child. Some Nutrients play a special role during pregnancy. These include folic acid, iron, zinc, calcium, vitamin C and protein, etc. All these nutrients play an important role in our body and help in the better development of the baby. Folic acid, also known as folate and vitamin B, this nutrient helps to reduce neural tube defects and reduce any abnormalities in the baby's brain and spinal cord. Our body uses iron to make haemoglobin. Proteins present in red blood cells carry oxygen to the tissues. A pregnant woman needs more iron than a normal woman.

In Rajasthan, only 14.4 percent of women consumed iron and folic acid for at least 180 days during pregnancy. This figure is very low because both of these nutrients are extremely important during pregnancy. At the district level, 2.2 percent to 25.8 percent of pregnant women consumed these nutrients. This figure is extremely low. Iron folic acid deficiency during pregnancy can lead to several complications, including neural tube defects like spina bifida and anencephaly, as well as increased risks of preterm birth and low birth weight. Although the situation has improved as compared to the last previous survey, but still the situation is still quite worrisome, and there is a lot of need for improvement. In the previous survey (NFHS 4), only 6 percent of women consumed iron folic acid for at least 180 days during pregnancy. At the district level, this figure lies between 0.6 percent to 12.4 percent.



### **Institution Birth**

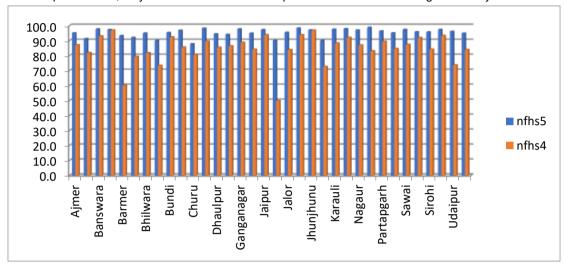
Institutional birth, or giving birth in a healthcare facility like a hospital, under the supervision of trained health professionals, is a crucial strategy for reducing maternal and neonatal mortality. It also signifies on availability of amenities to handle the situation and save lives. Institutional birth is increased in all the districts of Rajasthan as compared to the previous survey (NFHS, 2015-16). There is only one district named Churu (87.8 percent) where there are less than 90 percent institutional births. Excluding this district other almost all districts have above 90 percent institutional birth. Maternal mortality has decreased due to the increase in institutional births. Increased institutional birth is the result of awareness among women and various schemes run by the state as well as central governments.



### **Postnatal Care**

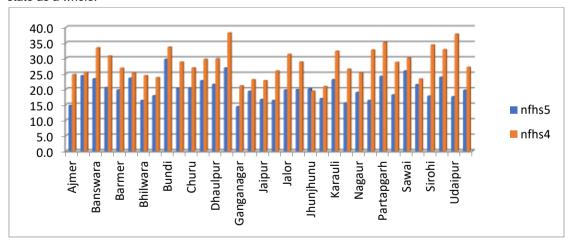
The postnatal period can be defined as the first 6-8 weeks after birth. Postnatal care should be a continuation of the case the women has received through her pregnancy, labour and birth and take into account the woman's individual need and preferences post-natal care is crucial for both the mother's and baby wellbeing ensuring a smooth recovery and healthy transition to parenthood, including monitoring for complication, promoting breast feeding and providing emotional support. In the case of receiving post-natal care, the conditions in Rajasthan are much better. Around 85.3 percent of females received these facilities, which is very necessary for women's health. At the district level, the difference was found to be between

72.9 percent to 96.6 percent. In the hierarchy of this figure, the Alwer district stands bottom and Udaipur stands top position in Rajasthan. All districts and the state as a whole have performed much better than the previous survey. As per the previous survey, it ranges from 41.3 percent to 85.7 percent at the district level. As per NFHS 5, only 5 districts have below 80 percent of females receiving this facility.



## ВМІ

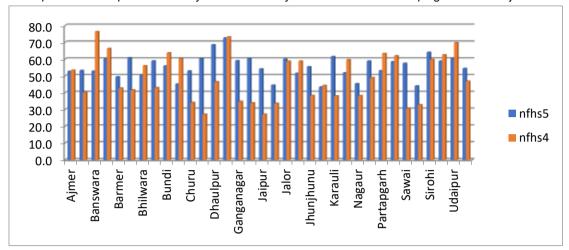
BMI, formally called the outlet index, is a measure for indicating nutritional status in adults. It is a measure of body fat based on height and weight. BMI normally ranges between 18.5 to 24.9. BMI are developed as a risk indicator of disease. 19.6 percent of women in Rajasthan have BMI less than normal. They have a lower energy level, which is definitely due to a lack of proper nutrients. At the district level, below normal BMI was found among women in the age group of 15-49 years, lowest in Ajmer district (14.2 percent) and highest in Dungarpur district (26.8 percent). Out of 33 districts, 16 districts have 20 percent or more than 20 percent women have low BMI. But improvement takes place in all the districts and the state as a whole.



### Women Suffering from Anaemia

"Anaemia refers to the decrease in the oxygen-carrying capacity of the blood in the human body, mainly due to a drop in the number of red blood cells or a decrease in the amount of haemoglobin in the blood" (Kumari Lalita, 2023). 54.4 percent of women in the age group of 15 to 49 years in Rajasthan suffer from anaemia. This problem is more common in rural women (55.7%) than in urban areas (49.4%). The percentage of women suffering from anaemia at the district level ranged from 43.4 percent to 72.6 percent. Jodhpur has the least number of women, while Dungarpur has the highest number of women suffering from

anaemia. Almost all health indicators show progressive movement in Rajasthan, but in the case of anaemia, the picture is almost opposite, almost all the district and state levels as well showing increasing trends. It means the number of women affected by anaemia increased in Rajasthan in the present survey in comparison to the previous survey. It is shown very bad condition of developing state like Rajasthan.



### Conclusion

It is always said that health is the greatest wealth. Without good health, life is nothing. According to an old saying that a healthy soul resides in a healthy body. Due to the patriarchal society system, women are not able to develop their personality fully, their responsibilities towards the house and a lack of resources affect women's health.

Although women are benefiting from the various schemes being run by the state government of Rajasthan. As a result of these schemes, all the health indicators taken in this research paper have improved significantly. There has been improvement in all health indicators, but the number of women suffering from anaemia has increased significantly. That is, the woman does not use proper nutrients in her food. Despite various efforts made by the government, there is a lack of awareness among women regarding their health. She takes care of the whole family, but somewhere she neglects herself.

## References

- Rajeshwari (2012). Determinants of Women's Health and Nutrition in Rural Haryana: A Socio-Spatial Analysis. Transactions of the Institute of Indian Geographers.
- 2. Sunil Kumar, M Kamalapur and Somanath Reddy (2013). Women Health in India: An Analysis. International Research Journal of Social Sciences Vol. 2(10), 11-15.
- 3. Westhoff C, Rosenfield A. (1993) The impact of family planning on women's health. Curr Opin Obstet Gynecol. Vol.5(6)
- 4. Health Dossier 2021: Reflections on Key Health Indicators Rajasthan
- 5. Insights from NFHS-5 for Rajasthan: Women and Children
- 6. Lalita Kumari (2023) Analysis of the Women and Child Health in Rajasthan. International Journal of Creative Research Thoughts (IJCRT) Volume 11, Issue 6.
- 7. Sharad D.Iyengar, Kirti Iyengar, and Vikram Gupta. "Maternal health: a case study of Rajasthan." Journal of health, population, and nutrition 27.2 (2009): 271.
- 8. Pinki (2022), Spatial Pattern of Heath Status of Women in Haryana, International Journal of Advanced Research in Commerce, Management & Social Science (IJARCMSS) Volume 05, No. 02(II), April-June, 2022, pp 41-46
- 9. International Institute for Population Sciences (IIPS) and ICF, National Family Health Survey (NFHS-5), India, 2019-21: Rajasthan.

