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SPATIO-TEMPORAL ANALYSIS OF HEALTH STATUS OF MARRIED WOMEN: A CASE OF INDIA



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ABSTRACT:

From time immemorial it has been said that health is wealth. The saying is as relevant today as it was earlier. Though the health conditions have improved over time and space since significant differentials lies in the health status within and between different regions by sex, age and residence (rural and urban).on the one hand increase in the level of development and technology brought new advents in the field of medicines; on the other hand it has increased the availability of health infrastructure and professionals. As a result sex ratio and life expectancy rates have increased and maternal mortality rates, infant mortality rate, undernourishment and malnourishment have declined. However such change is not uniform

over space in general and by sex in particular. Males enjoyed comparatively better health status in comparison to females. Reason being females has to undergo biological process of giving birth to child which makes her health not only more deplorable rather the chances of her death during pregnancy and childbirth also increase. Social taboos, discriminatory behaviour towards women and low educational levels and economic status of women further contributes to their poor health status.

KEYWORDS

Spatio-Temporal Analysis, Health Status, Married Women.

INTRODUCTION:

Health status of women has been studied by various scholars in different ages of women, like reproductive health, mental health, mortality, migration and other health care problems.

Kington (1997) reveal relationship between general status and reproductive history of women. Wickrama and Lorenz (2002), Hanretta (2007) pointed out that woman's social status makes direct contribution to female's health, main focus was on changes in fertility and levels of fertility. Khan and Begum (2007) have mapped the patterns and differentials of anti natal care practices, and recommended the efficiency of accessibility quality and cost of anti natal care service. Landy et al (2008) examined socio economically disadvantaged women's post partum health in first four weeks after post partum. Vacchar and Sharma (2010) assess the consequence of domestic violence on mental health of women in reproductive age group in West Delhi.

Dwivedi (2007) has shown association between migration from rural to urban areas and deteriorating health status of women. Kumar and Nair (2007) analyzed factors associated with role of women's autonomy in treatment seeking behaviour and morbidity. Basu and Sidh (2008) examined the relationship between work status and health status of women in Northern and Southern states, with issues of reproductive health and nutritional status. Shirley (2009) has mapped patterns of sickness and mortality, and found that health disparities exist even in countries with universal access to health care. Kumar and Khan (2010) analyzed relationship between health status and variations in levels of culture, regions and development.

Williamson (2002) has analyzed racial or ethnic disparities in health status of women because of factors as access to medical care, geographical location, migration, acculturation, racism and exposure to stress and resources. Bourne et al (2009) examined the health status of women in Jamaica in rural, peri-urban and urban areas, with six predictors of social standing, marital status, health insurance, and psychological conditions and concluded that health status of rural women is the lowest amongst all. Kumar (2009) discusses the health status of tribal women in relation to sex ratio, age at marriage, fertility, mortality, life expectancy, sexually transmitted diseases, and genetic disorders. Kiranmai et al (2012) examined health practices in slum areas of Vishakhapatnam using their living conditions, nutrition, health effects and health care.

Anandhi (2007) concluded that apart from socio-cultural factors such as child care difficulties, marital conflict, son preference and belief in astrology; work induced abortion is an emerging socio cultural phenomena. Roy and Gupta (2008) brought out the problems faced by women engaged in papad-making industry where personal hygienic measures were far from satisfactory and to improve health status of these women recommended health care visits, free medicines and health education. Reddy (2009) studied women's education, autonomy and fertility behaviour in Andhra Pradesh and has observed how women's education, at least, up to secondary level plays a significant role in initiating fertility transition and autonomy.

2. DATA SOURCES AND METHODOLOGY

By the nature of study data is collected for individual states of India. For the state level study data sources are secondary. For Health Status, Total Fertility Rate (TFR), 2005-06, Couple protection Rate, 2005-06. Institutional Births, 2005-06, Women age 20-24 married by age 18 years, 2005-06

Data on above mentioned indicators is collected from National Family and Health Survey-3, 2005-06. The data gathered of above mentioned indicators is analysed by calculating composite index

for each dimension from selected indicators within dimension with the help of development index; and then composite index is again calculated by combining both dimensions selected for study.

3. STUDY AREA

The study is conducted for India at state level, so data is collected from individual states. Data is analysed for 29 states including NCT Delhi, because it has population more than many smaller states of India.

4. REGIONAL PATTERNS

Total fertility rate is a significant indicator of women's health, which in term is influenced by a woman's reproductive activities. If the total fertility rate is higher than the number of children per women is also higher. It means that total fertility rate has an inverse relationship with female's health status; high TFR indicates towards low health status of women and vice versa.

While documenting the existence of sex bias, the present research paper is based on to find out the regional differences in health status of married women in India and its different regions viewing the Vindhya –Narmada divide in India as a great divide between the masculinism of the middle-east through to north-west India, and the feminism of south India to south-east Asia, the major objective is to examine regional inequalities in health status of married women in India and factors contributed to perpetuation of inequalities.

According to NFHS in India TFR is recorded 2.68 per woman in 2005-06. Bihar recorded the highest fertility rate i.e. 4 children per woman. In contrast A.P and Goa recorded the lowest fertility rate i.e. 1.79. The gap of 2.21 children per woman emerged between these two extremes.

Table 1.1 different types of rates

States/India	Total Fertility Rate 2005-06	Couple Protection Rate 2005-06	Institutional Births 2005-06	Women married by age 18 years 2005-06
Andhra Pradesh	1.79	67.7	68.6	54.7
Arunachal Pradesh	3.03	43.2	30.8	40.6
Assam	2.42	56.5	22.7	38
Bihar	4	34.1	22	60.3
Chhatisgarh	2.62	53.2	15.7	51.8
Goa	1.79	48.2	92.6	11.7
Gujarat	2.42	66.6	54.6	33.5
Haryana	2.69	63.4	39.4	39.8
H.P	1.94	72.6	45.3	12.3
J&K	2.28	52.6	54.3	14
Jharkhand	3.31	35.7	19.2	61.2
Karnataka	2.08	63.6	66.9	41.2
Kerala	1.93	68.6	99.5	15.4
M.P	3.12	55.9	29.7	53
Maharashtra	2.11	66.9	66.1	38.8
Manipur	2.83	48.7	49.3	12.7
Meghalaya	3.8	24.3	29.7	24.5
Mizoram	2.86	59.9	64.6	20.6
Nagaland	3.74	29.7	12.2	21.1
Orissa	2.37	50.7	38.7	36.3

Punjab	1.99	63.3	52.5	19.4
Rajasthan	3.21	47.2	32.2	57.1
Sikkim	2.02	57.6	49	30.1
Tamilnadu	1.8	61.4	90.4	21.5
Tripura	2.22	44.9	48.9	41
Uttarpradesh	3.32	43.6	22	53
Uttaranchal	2.55	59.3	36	22.6
West Bengal	2.27	71.2	43.1	53.3
Delhi	2.13	66.9	60.7	21.2
INDIA	2.68	56.3	40.7	44.5

On the whole, A.P, Goa, Tamilnadu, Kerala, H.P, Punjab and Sikkim have total fertility rate which is below replacement level i.e. 2.1. on the other side of scale, Tripura, West Bengal, J&K, Orissa, Assam, Gujarat, Uttaranchal, Chhattisgarh, Haryana, Manipur, Mizoram, Arunachal Pradesh, M.P, Rajasthan, Jharkhand, U.P, Nagaland, Meghalaya, and Bihar have TFR above replacement level.

The states having TFR lower than National average include Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamilnadu, A.P, Chhattisgarh, and Orissa. On the other hand states of Rajasthan, M.P, U.P, Jharkhand and Bihar have TFR above national average in Eastern and North-Eastern India, four states namely, West Bengal, Sikkim, Assam and Tripura recorded TFR less than national average. In North India all states recorded TFR above national average, but Haryana is an exception of TFR below national average.

5. COUPLE PROTECTION RATE

This included the data on any family planning measures either traditional or modern used by married women. This indicator is selected for the assessment of variations in the health of women in Indian states. CPR impacts up on their reproductive health, which decrease abortions, miscarriages and TFR.

India's CPR (56.3 per cent) is low when it is compared with developed countries such as UK(84 per cent), USA (76 per cent), but higher than developing countries such as Nepal (39 per cent), and Pakistan (28 per cent). (World economic forum: The global Gender Gap Report, 2007).

During 2005-06 with CPR 72.6 per cent Himachal Pradesh is on the Top and Meghalaya at the bottom with 24.3 per cent. The gap between these two extremes is very wide which indicates that in state which has highest CPR married women recorded 3 times more than the state which has lowest CPR. 15 states have recorded CPR above national average and other 14 have below national average. When data of states of North India and South India is compared, it is found that south India has high couple protection rate as compared to North India and Central India.

CPR is recorded high i.e. more than 65 per cent in Gujarat (66.6 per cent), Maharashtra (66.9 per cent), A.P (67.7 per cent, Kerala (68.6 per cent). In Peninsular India all states recorded CPR above national average with exception of Goa and Orissa. From North India other than Himachal Pradesh Delhi (66.9 per cent) has also recorded CPR high. In North India only J&K (52.6 per cent) has CPR below National average. All the states of North-East except West Bengal show a different picture in respect of CPR i.e. Manipur 48.7 per cent, Tripura 44.9 per cent, Arunachal Pradesh 43.2 per cent, Nagaland 29.7 per cent and Meghalaya 24.3 per cent. Central India formed a continuous belt in which all the states have recorded CPR below national average. Rajasthan (47.2 per cent), M.P (55.9 per cent), U.P (43.6 per cent).

5.1 Institutional Births

Another indicator selected for the assessment of women's health status is institutional births. This is an essential indicator of assessment of reproductive health, because reproductive health is influenced by the facilities provided to women at the time of her delivery. The facilities can only be provided in maternity homes, health centres and hospitals. Institutional births represent the percentage of births which have been given in above stated institutions to total births.

In India, during 2005-06 only 40.7 per cent births are recorded as institutional births which clearly indicate that 60 per cent births have been taken place by unsafe deliveries and didn't receive any hospital facility. The highest percentage of Institutional births has been recorded in Kerala i.e. 99.5 per cent and on the other end of the scale it is lowest in Nagaland which is 12.2 per cent. This wide gap of 87.3 per cent points towards a wide disparity between Indian states.

In Peninsular India only Orissa (38.7 per cent) is an exception in which percentage of institutional births has recorded below national average. All other states Kerala, Goa (92.6 per cent), TamilNadu (90.4 per cent), A.P (68.6 per cent), Karnataka (66.9 per cent), and Gujarat have recorded percentage of institutional births more than national average.

In North-India only NCT Delhi has an exception of high institutional births more than 60 per cent. Other three states J&K(54.3 per cent), H.P(45.3 per cent), and Punjab has recorded institutional births more than national average and Haryana and Uttaranchal below national average.

Central India forms a continuous belt of low percentage of institutional births below national average and at the same time these all are in the category of low percentage of institutional births.

In Eastern and North-Eastern India only Mizoram is an exception of high percentage of institutional births i.e. more than 60 per cent. All other states such as Arunachal Pradesh (30.8 per cent), Assam (22.7 per cent), Meghalaya (29.7 per cent), and Nagaland 12.2 per cent.

5.2 Women in 20-24 age group married by 18 years

Women's age at marriage is an important indicator for assessment of their health status. Because if her age at marriage is low than her reproductive period will be long, and the chances to give birth to number of children will increase in absence of knowledge about family planning methods. If she will give birth to more number of children then she will definitely loss her health, in the absence of access to health care facilities which are necessary to provide her.

At the same time female age at marriage also has an impact on her education and economic status. If woman's age at marriage is low then she will not be able to complete her school education. In this way if she will not be able to get a good piece of education then she will not be able to get a dignified job, this indicator shows the recent situation of women who got married before the legal age of women i.e. 18 years.

In India mean age of marriage of girls is very low; it is even lower than many other under developed nations such as Saudi Arabia and Pakistan. In India on an average 44.5 per cent of women were married by 18 years which reflects that around 5 out of 10 women in the age group of 20-24 years were got married by 18 years. Its percentage is highest in Jharkhand (61.2 per cent and lowest in Goa 11.7 per cent.

In North India all states J&K 14 per cent, H.P 12.3 per cent; Punjab 19.4 per cent, Uttaranchal 22.6 per cent, and Delhi 21.2 per cent have recorded percentage of women married by 18 years less than 25 per cent. This indicates women enjoy better status in this respect. In Eastern and North Eastern India only

West Bengal (53.3 per cent) has recorded very high percentage. In other states it is not only low but even below national average. In Central India all states such as Rajasthan, U.P, M.P, Jharkhand, and Bihar have recorded more than 50 per cent.

6. COMPOSITE INDEX OF HEALTH STATUS OF WOMEN IN INDIA

From the composite index it is clearly depicted that the health status of the women in Southern and North-Eastern India is better than all other states. (Table: 3.3). Kerala, Goa and Tamilnadu in the South, Mizoram, Sikkim, Manipur in the north-East and Delhi and Himachal Pradesh in the North-West women enjoy higher health status in the country (more than 0.70).

Table 1.2 different types of rates and composite index

States	Total Fertility Rate	Couple Protection Rate	Institutional Births	Women age 20-24 married by age 18 years	Composite Index
Kerala	0.94	0.92	1.00	0.93	0.94
Goa	1.00	0.49	0.92	1.00	0.85
Tamil nadu	1.00	0.77	0.90	0.80	0.86
Mizoram	0.52	0.74	0.60	0.82	0.67
Sikkim	0.90	0.69	0.42	0.63	0.66
Manipur	0.53	0.51	0.42	0.98	0.61
H.P	0.93	1.00	0.38	0.99	0.83
Delhi	0.85	0.88	0.56	0.81	0.78
Maharashtra	0.86	0.88	0.62	0.45	0.70
J&K	0.78	0.59	0.48	0.95	0.7
Karnataka	0.87	0.81	0.63	0.40	0.68
A.P	1.00	0.90	0.65	0.13	0.67
West Bengal	0.78	0.97	0.35	0.16	0.57
Tripura	0.81	0.43	0.42	0.41	0.52
Uttaranchal	0.66	0.72	0.27	0.78	0.61
Punjab	0.91	0.81	0.46	0.84	0.76
Gujarat	0.71	0.88	0.49	0.56	0.66
Assam	0.71	0.67	0.12	0.47	0.49
Orissa	0.74	0.55	0.30	0.50	0.52
Arunachal Pradesh	0.44	0.39	0.21	0.42	0.37
Nagaland	0.12	0.11	0.00	0.81	0.26
Chhattisgarh	0.62	0.60	0.04	0.19	0.36
Meghalaya	0.09	0.00	0.20	0.74	0.26
Haryana	0.59	0.81	0.31	0.43	0.54
M.P	0.40	0.65	0.20	0.17	0.36
Jharkhand	0.31	0.24	0.08	0.00	0.16
Rajasthan	0.36	0.47	0.23	0.08	0.29
U.P	0.31	0.40	0.11	0.17	0.25
Bihar	0.00	0.20	0.11	0.02	0.08
INDIA	0.60	0.66	0.33	0.34	0.48

All the BIMARU states Haryana and Meghalaya are the states with the poorest health status of women (less than 0.45). Rest of the states in the country recorded moderate health status of women (0.45-0.70). Therefore it can be said that in the northeast, south and North West the health status of women is better than the central Indian states.

7. CONCLUSION

Significant spatial variations have been witnessed in health status of women in all selected indicators. Status of women finds broad correspondence with income levels of the state. Majority of the states of North and Peninsular India recorded both high per capital income and high status of women, such as Kerala, Tamilnadu, Karnataka, A.P, Goa, J&K, H.P, and Punjab. Also the states incurring higher expenditure on women development recorded higher status of women. Areas such as Bihar, West Bengal, Orissa, Eastern U.P which remained under feudalism ; status of women has been recorded low, against this, status is high in areas which remained under Raiyatwari system during the British Period. States in South India fall in this category.

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