

Demographic and Health Status of Rural India: Ground Level Analysis

Abstract

The present paper is based on primary data which has been taken from questionnaire / schedule based survey of two villages (Newada & Karadhana) one of "higher caste strata" and the other of "lower caste strata" in Varanasi district of Eastern Uttar Pradesh. In this paper we had tried to extract some dimensions of health especially of women by any ailment, number of visit of health workers, purpose of visit of health workers and Places of Visit during Illness, difficulties faced in the government health facilities. The paper also highlighted state specific demographic features and health status.

Keywords: Gender Inequality, Health Issues, Informal Workers, Population

Introduction

Health is an integral part of the overall human development of a country. Understanding the health system in India is important for multiple reasons. Good health outcomes are strongly related to improved aggregate economic outcomes. Health and economic growth have a mutually reinforcing relationship with better health leading to higher income and increased labour force participation. Increase in income, in turn, leads to improved health outcomes. India is undergoing a rapid demographic and epidemiologic transition. This necessitates having a strong health system that can address the challenges of the future. From a capability point of view health outcomes are indicative of the overall well-being of the society and improved health outcomes are important goals in themselves (Agnihotri, 2012).

Health, nutrition, housing and sanitation have a major impact on the capacity of labour to reproduce itself at the minimum level required to successfully complete a day of productive activity. Among poor communities, the reproductive sphere has possibly the most critical impact on labour's productive potential (Hill, 2010).

The main aim of this paper is to understanding the health status in the states. These aspects have been analysed in three sections. The data for this paper have been taken from DLHS-2 and DLHS-3. In the first section we discussed the 'Distribution of Population by Age'. The objective of the section is to know the male-female participation in the population. The section deeply reflects the sex ratio of the various age groups. Section 2 dispensed with the 'Mean age at marriage and the percentage of marriages below legally prescribed minimum age at marriage for each state and India' in the year 2007-08. In the section 3 present 'The percentage distribution of birth to ever married women' aged 15-49 years by birth order for each state. For easy understanding the analysis we have incorporated the graphs of concern data of the above aspect on health issues in the India and Indian states.

Objective of the Study

The main objectives of the present paper are to extract some dimensions of health in the rural areas viz. visit of health workers, purpose of visit of health workers and Places of Visit during Illness, difficulties faced in the government health facilities etc.

Data methodology

The present study is based on primary data which has been taken from questionnaire / schedule based survey of two villages (Newada & Karadhana) one of "higher caste strata" and the other of "lower caste strata" in Varanasi district of Eastern Uttar Pradesh. For the analytical purpose we have presented the two types of observations. Our questionnaire has been formulated in three major parts. The first part of questionnaire is represented the information about household, second part reflects the socio, economic and demographic features of the

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household's people. In third part of our questionnaire we have taken the information about one informal women worker from the same household on the availability at the time of survey.

Section 1: State specific Analysis

Distribution of Population by Age

This section assigns with the percentage distribution of the household population by age, residence and sex in 'Uttar Pradesh' in the year 2007-08. The data concerning this is presented in the table 1.

Based on the data, graphs 1(A) to 1(D) are drawn in support of analysis.

It is apparent that, the percentage distribution of population in 'Uttar Pradesh' shows two prominent age-slabs, where population seems to have concentration. First, from the age group 5-9 to 15-19 and second, from 20-24 to 30-34.

Table 1 : Percent distribution of the household population by age, residence and sex, Uttar Pradesh, 2007-08

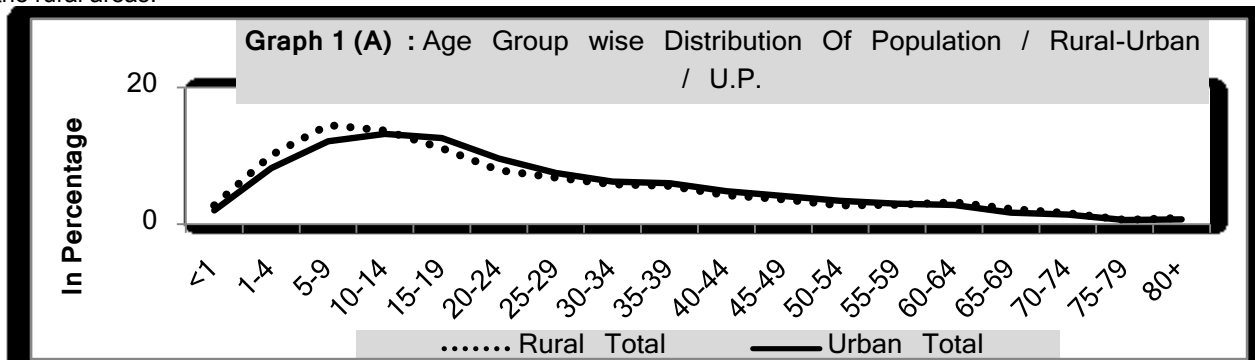
Table 1 : Percent distribution of the household population by age, residence and sex, Uttar Pradesh, 2007-08

Age	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<1	2.8	2.6	2.7	2.0	2.0	2.0	2.6	2.5	2.5
1-4	10.2	9.9	10.1	8.2	8.2	8.2	9.9	9.6	9.7
5-9	14.9	14.1	14.5	12.3	11.9	12.1	14.4	13.7	14.1
10-14	14.0	13.4	13.7	13.2	13.2	13.2	13.9	13.3	13.6
15-19	11.3	11.0	11.1	12.8	12.4	12.6	11.6	11.2	11.4
20-24	7.2	8.6	7.9	9.5	9.7	9.6	7.6	8.8	8.2
25-29	6.2	7.4	6.8	7.3	7.7	7.5	6.4	7.4	6.9
30-34	5.2	6.3	5.8	5.8	6.5	6.2	5.4	6.4	5.9
35-39	5.7	5.5	5.6	5.9	6.1	6.0	5.8	5.6	5.7
40-44	4.2	4.1	4.2	4.9	4.8	4.8	4.3	4.3	4.3
45-49	3.9	3.2	3.6	4.4	3.9	4.1	4.0	3.3	3.7
50-54	2.7	2.6	2.7	3.5	3.4	3.4	2.9	2.7	2.8
55-59	2.4	3.2	2.8	2.8	3.3	3.0	2.5	3.2	2.9
60-64	3.3	3.2	3.2	2.8	2.7	2.8	3.2	3.1	3.2
65-69	2.4	2.0	2.2	1.8	1.7	1.7	2.3	1.9	2.1
70-74	1.8	1.4	1.6	1.4	1.3	1.4	1.7	1.4	1.6
75-79	0.7	0.6	0.6	0.6	0.5	0.6	0.7	0.6	0.6
80+	1.0	0.8	0.9	0.7	0.8	0.7	0.9	0.8	0.9
Below 15 in UP	41.9	40.0	41.0	35.7	35.3	35.5	40.8	39.1	39.9
Below 15 in India	34.8	33.8	34.4	29.9	28.3	28.8	33.1	20.5	32.6
Sex ratio	-	-	969	-	-	939	-	-	963

Source: Ministry of Health and Family Welfare, Government of India, DLHS-3 (Uttar Pradesh) 2007-08. pp39.

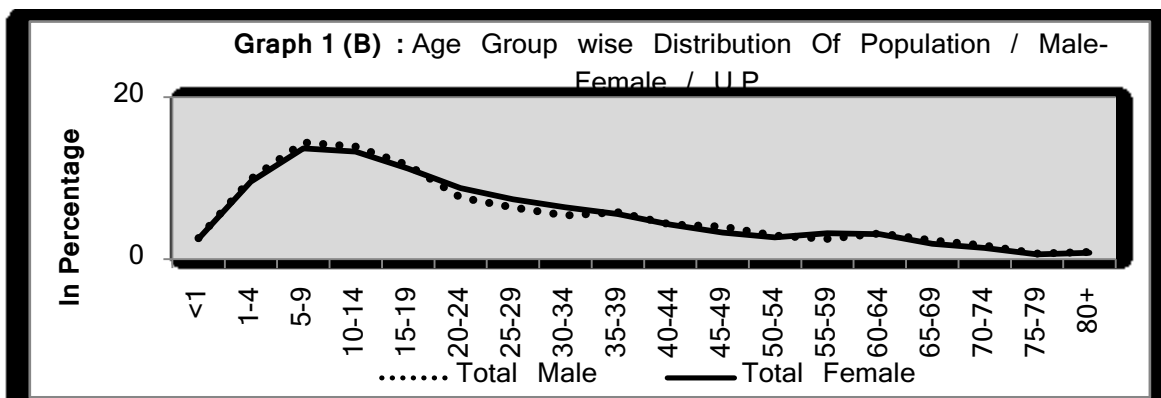
Note: Table is based on the de facto population, i.e. persons who stayed in the household the night before the interview (including both usual residents and visitors).

The rural-urban distribution of population of 'Uttar Pradesh' is depicted over the graph 1(A). It is apparent that over the above mentioned two concentrations of age groups, rural population was higher than the urban over the age group from 5-9 to 15-19. However, it got reversed in the age group from 20-24 to 30-34, with rural population getting lower than the urban. We are quiet tempted (though as rough expectation) to mention than such fall in rural population in the age group from 20-24 to 30-34 may possibly (if not ostensible) due to factors like mobility of this age group either for higher education, for employment or even marriage of female etc. In any case, it surely indicates that 'push factor' is working in the rural areas.



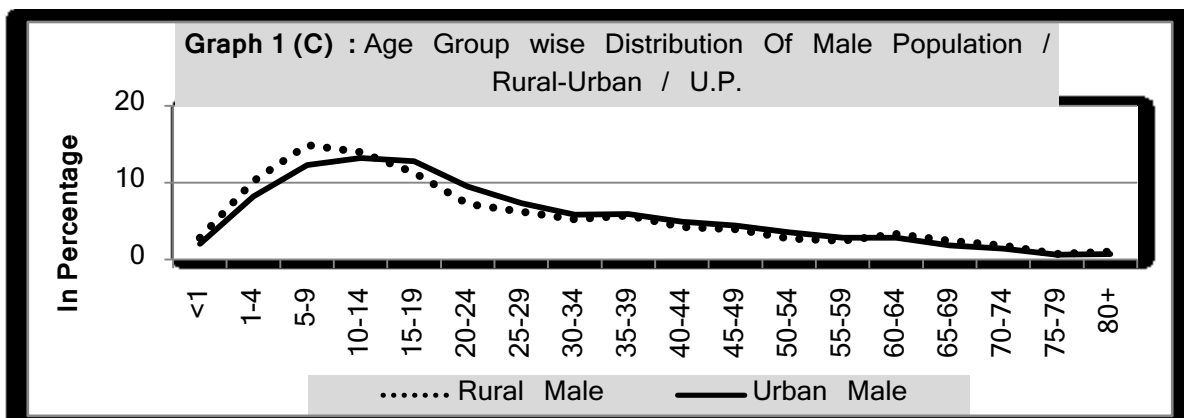
The male-female distribution of population of 'Uttar Pradesh' is portrayed over the graph 1(B).

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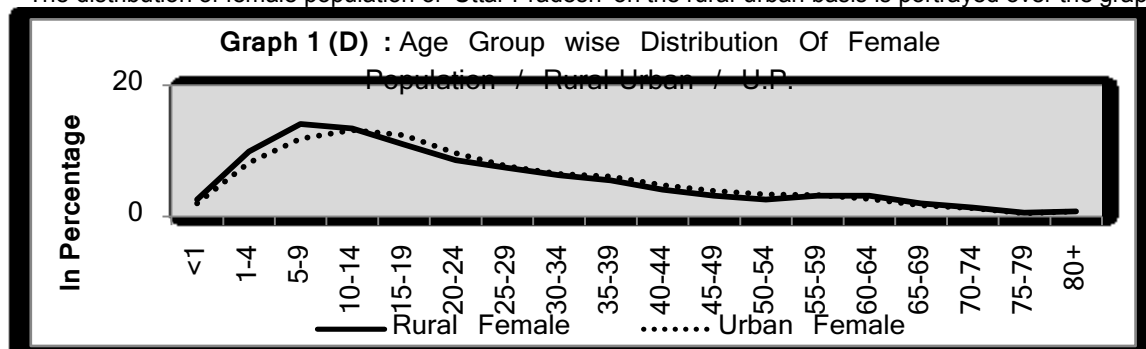
It is professed that over the two concentrations of age groups, male population was higher than the female over the age group from 5-9 to 15-19. However, it got reversed in the age group from 20-24 to 30-34, with male population getting lower than the female. Such fall in male population in the age group from 20-24 to 30-34 further point towards the possibility of mobility of male within this age group either for higher education, for employment. Whatever the case may be, it once again is a symptom of consequence of the 'push factor' in the rural areas.

The distribution of male population of 'Uttar Pradesh' on the rural-urban basis is portrayed over the graph 1(C).



It is acknowledged that over the two concentrations of age groups, rural male population was higher than the urban male over the age group from 5-9 to 15-19. However, it got transposed in the age group from 20-24 to 30-34, with rural male population getting lower than the urban male. Such fall in rural male population in the age group from 20-24 to 30-34 further point towards the possibility of mobility of rural male within this age group either for higher education, for employment. In any case, it once more we get the indication of the 'push factor' that operates in the rural areas.

The distribution of female population of 'Uttar Pradesh' on the rural-urban basis is portrayed over the graph 1(D).



It is conceded that, over the two concentrations of age groups, rural female population was higher than the urban female over the age group from 5-9 to 15-19. However, it got swapped in the age group from 20-24 to 30-34, with rural female population getting lower than the urban female. Such fall in rural female population in

the age group from 20-24 to 30-34 further point towards the possibility of female marriage.

Beside the above graphical interpretations, linear trends are also incorporated and the following are the results:

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Trend Results (Of Table 1) / Population Distribution / UP

Total Urban = - 0.52 x + 11.08 R ² = 0.56	Total Rural = - 0.62 x + 11.46 R ² = 0.60
Total Male = - 0.61 x + 11.38 R ² = 0.58	Total Female = - 0.61 x + 11.38 R ² = 0.60
Urban Male = - 0.58 x + 11.08 R ² = 0.56	Rural Male = - 0.62 x + 11.42 R ² = 0.58
Urban Female = - 0.58 x + 11.08 R ² = 0.56	Rural Female = - 0.62 x + 11.46 R ² = 0.61

If not anything else, at least two occurrences which can be gathered are:

1. Distribution of total rural population is going down faster than total urban population.
2. Distribution of both rural male and female population is declining faster than urban male and female population.

Incidence of the above two results is a foregone conclusion to support our proposition that, the fall in rural population may possibly be due to factors like mobility of persons either for higher education, for employment or even marriage of female etc. In any case, it surely indicates that 'push factor' is working in the rural areas.

Mean Age at Marriage

This section dispensed with the mean age at marriage and the percentage of marriages below legally prescribed minimum age at marriage for each state and India in the year 2007-08. The data concerning this is presented in the table 2. Major evidences as exposed from the table 2 and the graph 2(A) reveals that out of 28 states, 10 states are marked with above the 'All India' average of Women married before the Legal Age (Age 18). The rest of 18 states are below the 'All India' average in this respect. The top five states that are blotted with above the 'All India' average of Women married before the legal age are 'Bihar', 'Rajasthan', 'Jharkhand', 'Uttar Pradesh' and 'Madhya Pradesh'.

Table -2: Mean age at marriage and percentage of marriages below legally prescribed minimum age at marriage for each state and India, 2007-08

States	Mean age at marriage		Percentage of marriages below legal age at marriage		Currently married women aged 20-24 who were married before age 18
	Men	Women	Men (<21 years)	Women (<18 years)	
Andhra Pradesh	23.8	19.0	19.5	28.6	51.9
Arunachal Pradesh	25.4	21.7	14.5	8.2	26.2
Assam	26.9	20.8	11.0	20.8	40.0
Bihar	21.6	17.6	42.8	45.9	68.2
Chhattisgarh	22.8	18.9	29.1	21.3	45.2
Delhi	24.8	21.6	12.1	6.0	24.2
Goa	29.6	25.1	2.7	3.0	19.1
Gujarat	22.3	19.6	34.5	18.7	35.4
Haryana	22.7	19.7	27.4	15.9	28.0
Himachal Pradesh	26.0	21.9	6.0	1.6	9.1
Jammu & Kashmir	26.0	22.2	9.9	7.2	24.6
Jharkhand	22.9	18.3	32.3	35.9	55.7
Karnataka	26.1	19.8	11.1	22.4	50.2
Kerala	28.3	22.1	1.2	6.8	15.5
Madhya Pradesh	21.8	18.5	40.5	29.0	53.8
Maharashtra	24.4	19.3	12.4	17.6	40.4
Manipur	27.3	23.6	8.6	6.3	24.7
Meghalaya	24.1	21.1	27.7	15.0	34.3
Mizoram	24.6	21.7	20.9	9.9	23.7
Orissa	25.3	20.5	13.4	19.1	37.5
Punjab	24.2	21.3	15.5	5.8	15.5
Rajasthan	20.7	17.7	48.0	39.9	57.6
Sikkim	24.9	21.5	21.1	16.0	30.6
Tamil Nadu	26.7	21.3	4.8	9.1	24.0
Tripura	25.7	20.2	16.5	21.1	43.6
Uttar Pradesh	21.6	18.4	43.3	32.9	54.9
Uttarakhand	25.0	20.6	9.1	5.7	19.7
West Bengal	24.7	18.5	21.7	41.3	54.7
India	24.0	19.8	23.4	22.1	42.9

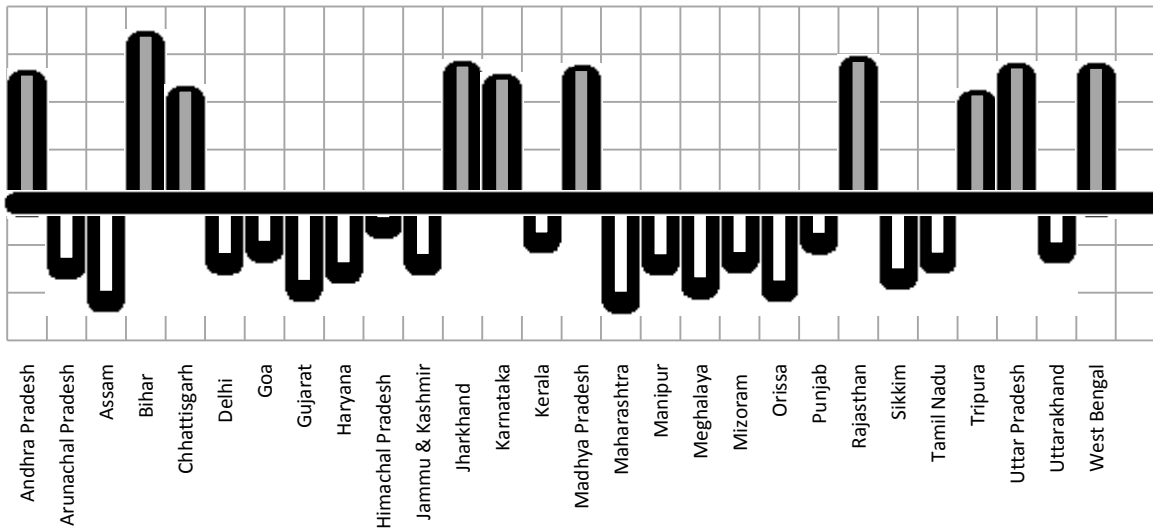
Reference period: January 1, 2004 to survey date.

Source: DLHS-3, 2007-08, pp- 17.

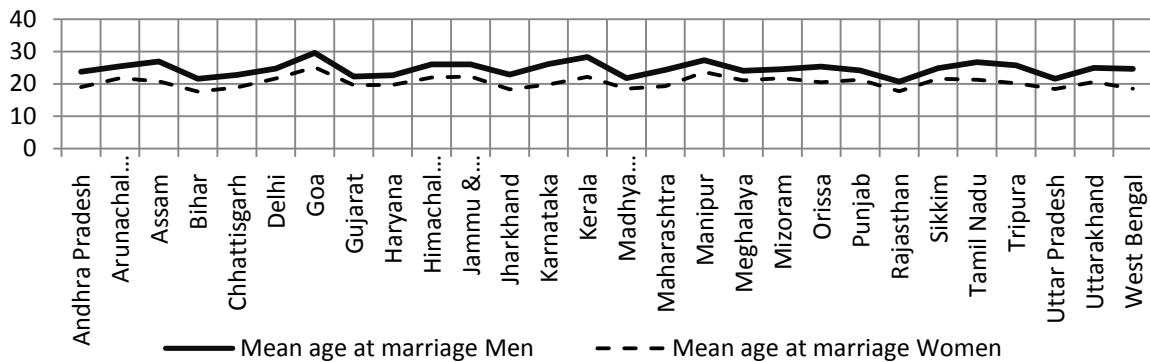
The mean age at marriage of men and women for each states are revealed over the graph 2 (B). It gets clear from the graph that, the mean at marriage of men are naturally higher than the women. However as a matter of our concern, in 'Uttar Pradesh' the mean age at marriage of both men (21.6 years) and of women (18.4 years) are below the 'All India' average of men (24 years) and women (19.8 years).

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Graph 2 (A) : Percentage Women Married Before Legal Age (Age 18) States Above & Below India average

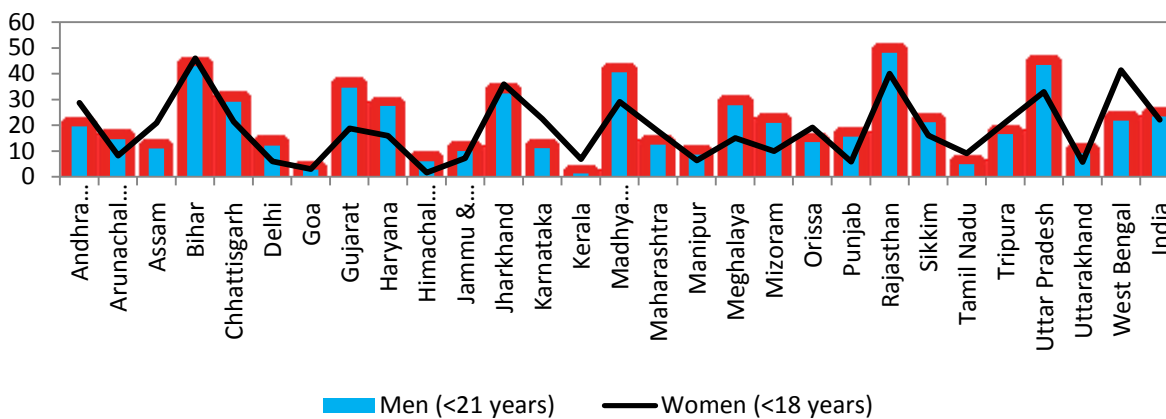


Graph 2 (B) : Mean Age at Marriage / Men & Women



The percentages of marriages of male and female before their legal age as for each states are shown in the graph 4/3/2(C).

Graph 2 (C) : Percentage of Marriages below legal age



It gets apparent that, 'Rajasthan', 'Bihar' and 'Uttar Pradesh' are the top three states with regard to the highest percentage of marriage of men before legal age (of 21 years). Likewise, the top three states with the highest percentage of marriage of women before legal age (of 18 years) are 'Bihar', 'West Bengal' and 'Rajasthan'. Interestingly there are as many as 9 states where the percentage of women who got married before their legal age are upper than that of the men. These states are 'Andhra Pradesh', 'Assam', 'Bihar', 'Jharkhand', 'Maharashtra', 'Orissa', 'Tamil Nadu' and 'West Bengal'.

As our matter of affair, in 'Uttar Pradesh' the percentage of men getting married before their legal marriage age (21 years) is 43.3 percent, which is much higher than the 'all-India' average of 23.4 percent. Likewise, the percentage of women getting married before their legal marriage age (18 years) is 32.9 per cent, which is much higher than the 'all-India' average of 22.1 per cent.

Health Facility and Health Personnel

The percentage of villages with different health facility and health personnel in each state in the year 2007-08 are presented in this section. Based on the data (DLHS-3, 2007-08, pp- 29) of we mark that,

In the year 2007-08, at 'all India' level as against 80.88 Crore² of rural population living in 6,39,445¹ number of villages; Only 16.4 percent of villages have 'Doctors'; 12.8 percent of villages have 'Primary Health Centre' (PHC); And less than half (41 per cent) of villages have 'Sub-Centre'.

However, 46.2 percent of villages have 'Any Governmental Health facility'. Further, Government's Health schemes like 'ASHA' (60.1 percent), 'Anganwadi' (91.8 per cent) and 'JSY beneficiary' (73.7 per cent) are well covered. Among the top three richest states namely, 'Delhi', 'Goa' and 'Punjab', except for 'Goa', both 'Delhi' and 'Punjab' have much more percentage of villages having 'Doctors' than the 'all India' average.

With regard to 'Uttar Pradesh' as the state of our concern we find that, in the year 2007-08, out of 14.92 Crore of rural population living in 1,07,106 number of villages, only 19.3 percent of villages are having 'Doctors'. Although, this is higher than the 'all India' average of 16.4 percent of villages having 'Doctors', yet the percentage of villages having 'PHC', 'Sub-centre' and 'Any Gov. Health Facility' are much below the 'all India' average. However, the government health schemes like 'ASHA', 'Anganwadi', 'JSY', and 'VHSC' all well covered in the villages of 'Uttar Pradesh'.

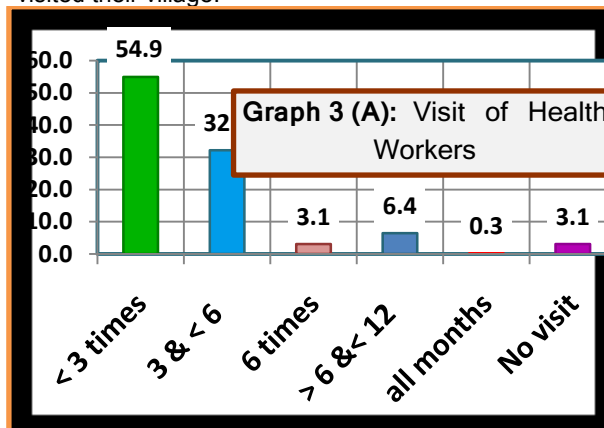
Section 2: Reflections from Study Area

Number of Visit of Health Workers

This section assigned with the percentage of women who responded about the number of visit of health workers (ASHA and others) as enumerated in our 'Primary Data'.

Highest of 54.9 per cent of women said that the Health Workers visited 'less than 3 times' a year. Subsequently 32.2 per cent of women claimed that the Health Workers visited '3 to less than 6'times; 3.1 per cent maintained that They visited six times; 6.4 per cent of women said 'more than six and less than twelve' times; 0.3 per cent of women asserted 'all months' and

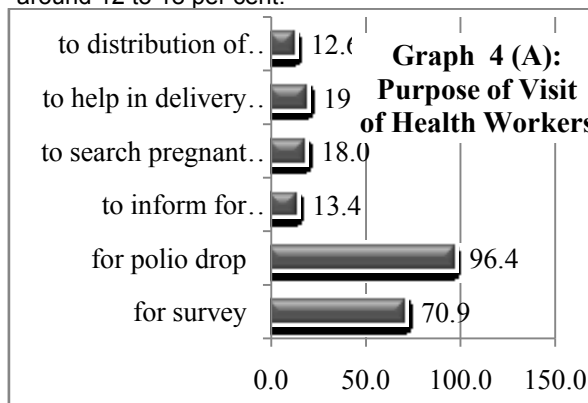
3.1 per cent argued that the 'Health Workers' never visited their village.



Purpose of Visit of Health Workers

This section dispensed with the percentage of women who responded about the purpose of visit of health workers (ASHA and others) as itemized in our 'Primary Data'.

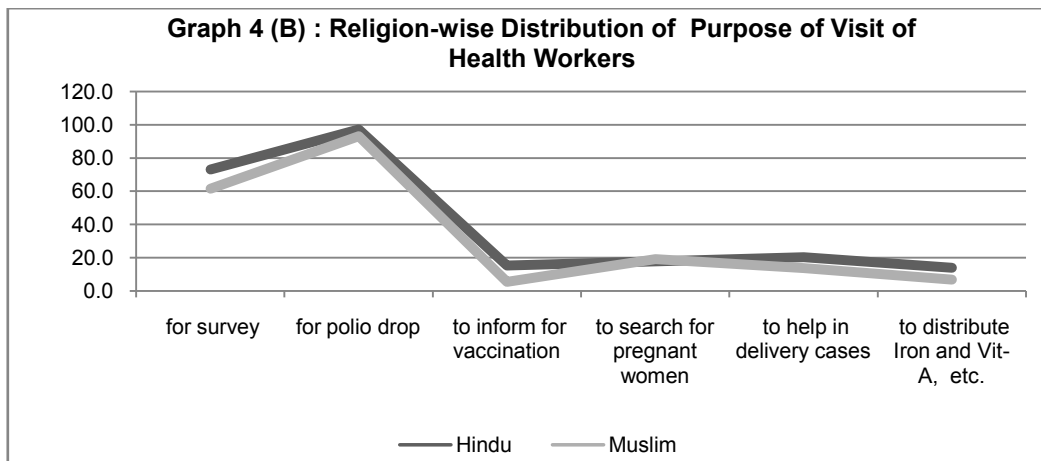
It is evident from the table 4 and its supporting graph 4 that, the maximum of 96.4 per cent of women stated that the purpose of visit of Health workers are 'for Polio drops'. The second highest purpose of visits are 'for Survey' as responded by 70.9 per cent of women. As against this, the response of women for the rest other purposes of visits was much low and varied between around 12 to 18 per cent.



The above pattern of response is now viewed as per the Caste-wise distribution of women and is depicted over the graph5/3/8 (A). It gets perceptible that amidst the maximum number of visit of Health workers are 'for Polio drops', the lowest of 94.1 per cent of response was by SC women as against the highest of 97.3 per cent of OBC women. More striking fact that gets extricated from the graph 5/3/8 (A) is the least response of SC women regarding all the types of purpose of visits by Health workers. This is an indication of how the SC women are left behind in each of visits by Health workers.

Out of academic curiosity we incorporated this aspect according to religion as shown over the graph 4 (B).

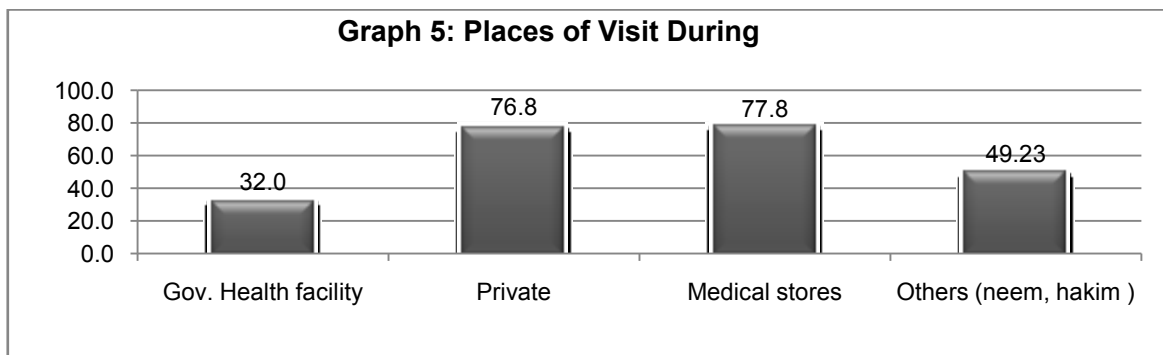
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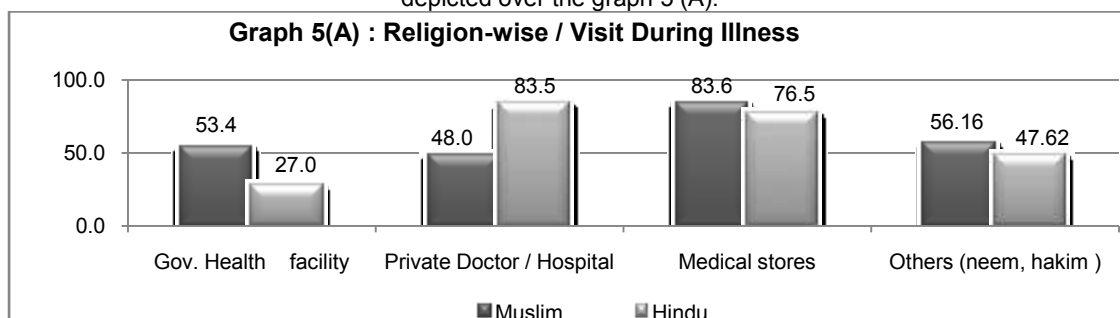
Places of Visit during Illness

As annotated in our 'Primary Data', this section is assigned with the percentage of women who visit different places for treatment during their illnesses.

Among all the social groups of women in our 'Primary Data', the highest of 77.8 per cent of them visit 'Medical stores' directly for treatment during their illness. Nearly similar percentage (76.8 per cent) of them also claimed to be visiting 'Private' doctors / hospitals. Only 32 per cent of them are marked to be availing 'Government Health facility'. Still 49.23 per cent of women also admitted to have taken local (Neem/Hakim) treatment.



The above pattern regarding the places of visit during illness is now evaluated on the basis of religion and depicted over the graph 5 (A).



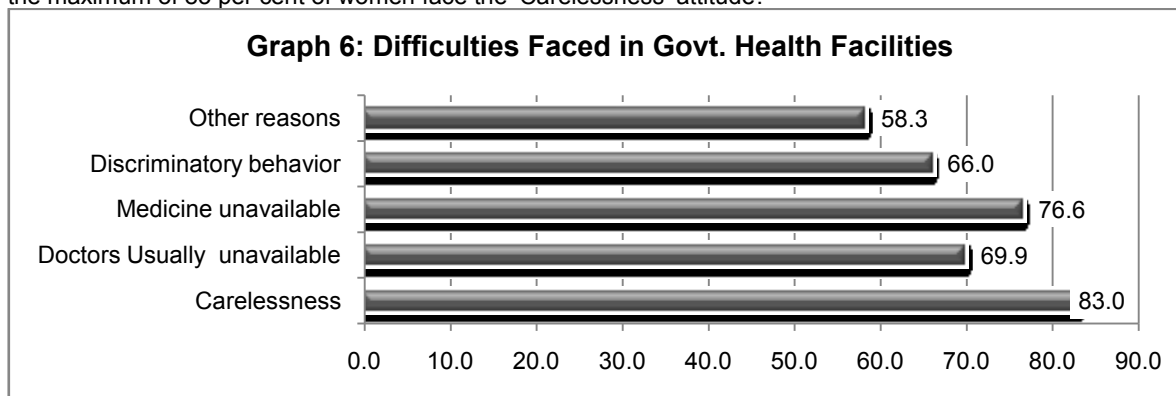
Noticeably, Except for visiting 'Private doctors / hospitals' where the percentage of Hindu women (83.5 per cent) is near to double than the Muslim women (48 per cent), in rest other places of treatment the percentage of Muslim women are considerably higher than the Hindu women.

Difficulties faced in the Government Health facilities

As captured by our 'Primary Data', this section deals with the difficulties faced by women who avail the Government Health facilities for treatment during their illness.

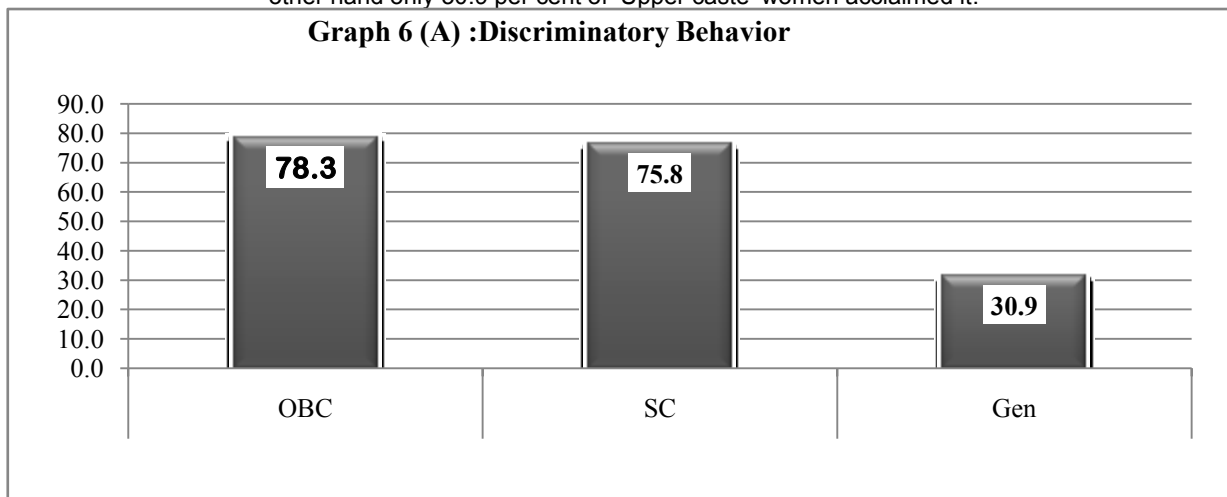
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The different types of difficulties faced by women in availing the Government Health facilities during their illness revealed that, the maximum of 83 per cent of women face the 'Carelessness' attitude.



The second highest percentage of women (76.6 per cent) also complained against the 'Unavailability of medicines' in the Government hospitals. Further, 69.9 per cent of these women criticized that the 'Doctors are usually unavailable'. What is more striking is the fact that, importantly 66 per cent of them furthermore urged that they face 'Discriminatory behavior' in the Government hospitals. This is surely a serious issue because not only 67.3 per cent of Hindu women but also 60.3 per cent of Muslim women were subjected to discrimination.

In order to locate the epitome of discrimination, we further bifurcated it as ; Among the Hindu women, while on one hand as high as 78.3 per cent of OBC women and equally high of 75.8 per cent of SC women alleged against discrimination, on the other hand only 30.9 per cent of 'Upper caste' women acclaimed it.



Concluding Remarks

The present paper concludes on the health status in the study area which has its roots in historical divisions along the line of caste. These inequalities are more structural in nature and have kept entire group trapped, unable to take advantage of opportunities that economic growth offers. Culturally rooted systems perpetuate inequality and rather than a 'Culture of Poverty' that afflicts disadvantaged groups, it is, in fact, these inequality traps that prevent these groups from breaking out. We extracted some dimensions of health especially of women by any ailment, number of visit of health workers, purpose of visit of health workers and Places of Visit during Illness, difficulties faced in the government health facilities. The paper makes a case for examining stratification pattern of rural India's population especially women's health continue to belong

to the lowest rung of the economic ladder after over 67 years of Independence.

References

1. Deaton, A., 2003. Health, Inequality and Economic Development. *Journal of Economic Literature*, March, 41(1), pp. 113-158.
2. Dougall, L. M., 2000. Gender Gap in Literacy in Uttar Pradesh: Questions for Decentralised Educational Planning. 6 May, 35(15), pp. 1649-1628.
3. Forsythe, N., Korzeniewicz, R. P. & Durrant, V., 2000. Gender Inequalities and Economic Growth: A Longitudinal Evaluation. *Economic Development and Cultural Change*, 48(3), pp. 573-617.
4. Gertler, Paul and Harold Alderman (1989). "Family resources and Gender Differences in Human Capital Investments," paper presented at the conference on "The Family, Gender Differences and Development," Economic Growth Center, Yale University.

Asian Resonance

5. Johnstone, E., 1968. Women in Economic Life: Rights and Opportunities. *Annals of the American Academy of Political and Social Science*, Volume 375, pp. 102-114.
6. Key, P., 1987. Women, health and development with special reference to Indian women. *Health Policy and Planning*, 2(1), pp. 58-69.
7. Khandekar, M., 1974. Utilization of Social and Welfare Services in Greater Bombay. Bombay: Tata Institute of Social Science.
8. Mehrotra, S., 2006. Child Malnutrition and Gender Discrimination in South Asia. *Economic and Political Weekly*, 41(10), pp. 912-918.
9. Mehrotra, S., 2008. Public Health System in UP: What Can Be Done?. *Economic & Political Weekly*, 6 December.pp. 46-53.
10. Mishra, A. K. & Singh, S. K., 2012. Structural Inequalities among various social groups: Examining the status at ground level. *The Indian Economic Journal (IEA)*, December.pp. 430-38.
11. Nath, K., 1968. Women in the Working Force in India. *Economic and Political Weekly*, 3 August, 3(31), pp. 1205-1213.
12. Rana, K. et al., 2005. *The Pratiche Health Report*. s.l.:Pratiche (India) Trust.
13. Ray, R. & Lancaster, G., 2005. On Setting the Poverty Line Based on Estimated Nutrient Prices. *Economic and Political Weekly*, 1 January.pp. 46-56.
14. Sen, A., 1992. *Inequality Reexamined*. Cambridge: Harvard University Press.
15. Shaw, A., 1990. Linkages of Large Scale Small Scale and Informal Sector Industries: A Study of Thanu Belapur. *Economic and Political Weekly*, 17 February, 25(7), pp. M17-M22.
16. Shaw, A., 1994. The Informal Sector in Indian Manufacturing Activities: A Regional Study. *Indian Journal of Labour Economics*, 37(3).