

## Home visit by health workers to integrate awareness related to health and family planning at Rajasthan in India: A socio-geographic study

Firdous Ansari

Ph.D, Assistant Professor (Statistics), Department of Mathematics and Statistics, Jai Narain Vyas University, Jodhpur, Rajasthan, India

### Abstract

**Objective:** To access the integrated knowledge of awareness related to health and family planning at Rajasthan in India.

**Method:** The data is taken from Reproductive and Child Health District Level Household Survey (DLHS-2) Rajasthan, 2002-04 and analyzed.

**Results:** Computed statistics are represented in the tabular form. Further results are described in the result section of article body.

**Discussion:** So far it seems that Rajasthan, Indian government is taking health and family planning into account very possessively and finely.

**Keywords:** health workers visit, health and family planning

### Introduction

According to World Health Organization (WHO), family planning allows individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births. It is achieved through use of contraceptive methods and the treatment of involuntary infertility. Whereas, home visitation program is a program in which health workers visit at home to assess their health status. Various studies in Bangladesh, India and Pakistan having high rates of infant mortality, showed that home visitation program may reduce neonatal death rates effectively [1, 2, 3, 4, 5].

In Indian scenario, in age group 20-24 years age specific fertility rate is found 154.06% more in illiterate women when a comparison is made between illiterate women and women having education of level graduate and above. Whereas, in Rajasthan, illiterates are found with 38.46% increased total fertility rate as compared to literate women and it is found to be 89.47% more in illiterates as compared to women having education level graduate and above [6].

In this study considered socio-geographic characteristics of married women are age, residence, education, religion and standard of living index. These characteristics are further analyzed under two heads, former is home visit (HV) by doctor, ANM and male health workers and latter is percentage of women satisfied with services /advices.

### Data Source

The data is taken from Reproductive and Child Health District Level Household Survey (DLHS-2) Rajasthan, 2002-04.

### Results

Under Socio-geographic characteristics results observed are as follows.

### Age

Under the head age, considered age groups are 15-24(AG-1), 25-34(AG-2) and 35-44(AG-3), number of women interacted, under the age groups were 11, 260, 12660 and 8991 respectively. Percentage of HV by doctors was 3.3%, 4.8% and 5.9% respectively in concerning age groups e.g. AG-1, AG-2 and AG-3. Whereas HV by ANM under these age groups were 92, 90.5 and 88 respectively. However in case of HV by male health workers were 5.9%, 7% and 8.4% respectively under the subsequent age groups. As far as percentage of women satisfied with services were concerned, percentages under AG-1, AG-2, AG-3 were 87.4, 85.3 and 84.6 respectively.

### Residence

In the survey conducted by the Government of Rajasthan, residence is categorized as rural residence and urban residence or simply rural and urban. The women interacted were 23,315 and 9595 in rural and urban areas respectively. HV by doctors were 3.8% and 8.2%, HV by ANM were 92.5% and 80.1% and HV by medical health workers were 5.5% and 14.3% in rural and urban areas respectively. Whereas in case of satisfaction with services, these values were found to be 86.7% and 81.8% in respective areas.

### Education

In case of education considered categorization is non-literate (cat-1), 9 years of education (cat-2) and 10 and above years of education (cat-3). According to the survey 21,757 belong to cat-1, 7425 women to cat-2 and 3707 women to cat-3. HV by doctor reported was 3.6%, 5.8% and 8% in cat-1, cat-2 and cat-3 respectively. Under these three categories HV by ANM were 91.7%, 89% and 85.5% respectively. The percentages of HV by male health workers were 6.4, 7.8 and 8.3 under the three categories. Women satisfaction with services found were 85.5%, 86.5% and 87.85 respectively for the three categories discussed above.

**Religion**

On the basis of religion 29,211(Hindu), 2846(Muslim), 427 (Sikh) and 362(Jain) married women were interacted. HV visitation by doctors was 4.4%, 5.1% and -6.1%for the respective religion. However HV by ANM numbered were 90.9%, 86.8%, 89.6% and -81.8% respectively. This visit by male health workers was found reported 6.8%, 8.4%, 5.5% and -12.1%for Hindu, Muslim, Sikh and Jain respectively. Percentage of services satisfaction was found observed 86.5%in Hindu,77.8% in Muslims,86.7% in Sikh and - 87.9% in Jain.

**Standard of living index**

13828 women belonging to low standard of living index (SLI) were interacted with 9733 and 9350 women that belonged to medium and high SLI. Doctor HV was 3.6%, 3.8% and 7.6% for low, medium and high SLI respectively. ANM visits were 92.3(low SLI),91.5(medium SLI) and 84.9(high SLI) along with 5.8%(low SLI),7.2 % (medium SLI) and 9.3% (high SLD).Women satisfaction in terms of percentage pinpointed was 87.2%,85.2% and 83.8% respectively in low, medium and high SLI.

Under socio-geographic characteristics results observed are as below (Table 1-5).

**Table 1:** Descriptive Statistics under characteristic Age

Heads	Mean	SD
Number of women	10,970.33	1,851.57
HV by Doctor	4.67	1.31
HV by ANM/LHV	90.17	2.02
HV by Male health worker	7.10	1.25
Services	85.77	1.46

**Table 2:** Descriptive Statistics under characteristic Residence

Heads	Mean	SD
Number of women	16,455.00	9,701.51
HV by Doctor	6.00	3.11
HV by ANM/LHV	86.30	8.77
HV by Male health worker	9.90	6.22
Services	84.25	3.46

**Table3:** Descriptive Statistics under characteristic Education

Heads	Mean	SD
Number of women	10,963.00	9,530.93
HV by Doctor	5.80	2.20
HV by ANM/LHV	88.73	3.11
HV by Male health worker	7.50	0.98
Services	86.60	1.15

**Table4:** Descriptive Statistics under characteristic Religion

Heads	Mean	SD
Number of women	8,211.50	14047.31
HV by Doctor	2.00	5.41
HV by ANM/LHV	46.38	85.47
HV by Male health worker	2.15	9.57
Services	40.78	85.88

**Table5:** Descriptive Statistics under characteristic Standard of Living Index

Heads	Mean	SD
Number of women	10,970.33	2482.21
HV by Doctor	5.00	2.25
HV by ANM/LHV	89.57	4.06
HV by Male health worker	7.43	1.76
Services	85.40	1.71

**Discussion**

Maximum number of women interacted either by doctor, ANM or male health workers is 29,211 in Hindu religion with a minimum of 362 in Jain religion. Home visit by doctor was observed maximum 8.2% in urban area of Rajasthan with a minimum percentage of -6.1in Jains. ANM and male health workers interaction were recorded maximum percentage of 92.5 (rural Rajasthan) and 14.3(urban Rajasthan) respectively. The minimum for the two considered visitation were -81.8% and -12.1% respectively belongs to the same religion that is Jain religion. Satisfaction with services were appreciable, which is more than 80% for all the characteristics but as we are discussing the betterment of services in Rajasthan, India, highest satisfaction with services was in education(cat-3) along with a minimum percentage 77.8 in Muslims.

**References**

1. Mascarenas DN, Wurzburger R, Garcia BN, Tomedi A, Mwanthi MA. The promise of home visitation by community health workers in rural Kenya: A protective effect that reduces neonatal illness. *Educ Health* [serial online]. 2015; 28:181-6.Availablefrom: <http://www.educationforhealth.net/text.asp?2015/28/3/181/178600>
2. Baqui AH, El-Arifeen S, Darmstadt GL, Ahmed S, Williams EK, Seraji HR, *et al.* Effect of community-based newborn-care intervention package implemented through two service-delivery strategies in Sylhet district, Bangladesh: A cluster-randomised controlled trial. *Lancet.* 2008; 371:1936-44.
3. Kumar V, Mohanty S, Kumar A, Misra RP, Santosham M, Awasthi S, *et al.* Effect of community-based behaviour change management on neonatal mortality in Shivgarh, Uttar Pradesh, India: A cluster-randomised controlled trial. *Lancet.* 2008; 372:1151-62.
4. Bhutta ZA, Memon ZA, Soofi S, Salat MS, Cousens S, Martines J, *et al.* implementing community-based perinatal care: Results from a pilot study in rural Pakistan. *Bull World Health Organ.* 2008; 86:452-9.
5. Bang AT, Bang RA, Baitule SB, Reddy MH, Deshmukh MD. Effect of home-based neonatal care and management of sepsis on neonatal mortality: Field trial in rural India. *Lancet.* 1999; 354:1955-61.
6. Ansari F. The impact of female education on fertility: A comparative study of India and Rajasthan. *Indian Journal of Applied Research.* 2015; 5(9):36-7.