



International Journal of Current Research Vol. 3, Issue, 09, pp.157-161, September, 2011

# RESEARCH ARTICLE

# UTILISATION OF REPRODUCTIVE HEALTH CARE SERVICES IN 'BIMARU' STATES IN INDIA

# Dr. K. Jothy\* and Mr. T. Pugalenthi

Department of Population Studies, Annamalai University, Annamalainagar-608002, Tamilnadu, India

#### ARTICLE INFO

## Article History:

Received 16<sup>th</sup> May, 2011 Received in revised form 20<sup>th</sup> July, 2011 Accepted 12<sup>th</sup> August, 2011 Published online 17<sup>th</sup> September, 2011

#### Kev words:

Reproductive health care, District Level Household, Facility Survey, HIV/AIDS.

#### **ABSTRACT**

There is a wide gap in the utilization of reproductive health services among the states in India. Certain states like Kerela, Tamilnadu and Maharashtra are well performing states in the utilization of reproductive health care services. But the so called BIMARU states (Bihar, Madhya Pradesh, Rajastan and Utter Pradesh) are poor in the utilization of reproductive health care services. In view of the above, this paper analyses the utilization pattern of the above states. The data for this analysis were obtained from the District Level Household and Facility Survey (DLHS-3) conducted by Reproductive Child Health Project. The utilization of Ante-natal care services, Delivery care, Initiation of Breast feeding, Children received immunization, Use of Family planning, Knowledge of HIV/AIDS, were used as the indicators of reproductive health care utilization.

Copy Right, IJCR, 2011, Academic Journals. All rights reserved

# **INTRODUCTION**

Reproductive health is defined as a state of complete physical, mental and social well being and not merely the absence of disease or infirmity in all matters relating to the reproductive system and its functions and process: Reproductive health therefore is multi dimensional and associated with various life cycle events of women such as menarche, marriage, pregnancy, child birth and menopause, poverty, lack of purchasing power, illiteracy and malnutrition are the main factors in the causation of reproductive health. Early age at marriage, large family size, high parity, small inter-pregnancy interval, ignorance and prejudices, social customs, non availability of skilled health service at times of need, poor referral services and communication systems are the other factors which have a direct bearing on the reproductive health of women. In every seventy girls who reach reproductive age in India; one will eventually die because of pregnancy, child birth or unsafe abortion compared to one in 7300 in the developed world. More will suffer from preventable injuries, infection and disabilities, often serious and lasting a life time, due to the failures in maternal care. Nearly 250 mothers will die of child birth in India in a day. Indeed, India contributes a little under a fourth of the world's maternal mortality (Deccan Chronicle, 24th October 2009, Hyderabad). At present 2.70 crore babies are born every year. 20 lakh babies and 70,000

pregnant women were dying every year in India (Deccan Chronicle, 2<sup>nd</sup> November 2010). According to World Bank reports most of the maternal and child death in India can be prevented: many are due to the lack of appropriate care during pregnancy and at the time of child birth, inadequate services for identifying and managing complication. How ever a large proportion of women and children still do not receive antenatal check-up because of inability to meet the cost related to visiting health facility, their thinking that it is not necessary, lack of knowledge and inadequate health services etc.

# Background

There is a wide gap in the utilization of reproductive health care services among the states in India. Certain states like Kerala, Tamilnadu, and Maharashtra are performing well in the utilization of reproductive health care services. But the so called 'BIMARU' state (Bihar, Maharashtra, Rajasthan and Utter Pradesh) are poor in utilizing the reproductive health care services. In view of the above, an attempt has been made to find out the utilization pattern and accessibility of the reproductive health services by the above states in India.

# **DATA SOURCES**

The data were obtained from the District Level Household and facility Survey-3(DLHS-3). The percentage of women utilizing the reproductive health care services from the

Table 1. Comparison of BIMARU states with the all India level regarding ANC, TT and IFA (in percentage)

S.NO	Ante Natal Care	BI	M P	RA	UP	BIMARU	IND	TN
1	Mothers who received any Ante Natal	59.3	61.8	56.6	64.4	60.5	75.2	98.8
	Care check-up							
2	Mothers who had	24.2	33.8	32.7	25.1	28.9	45.0	76.8
	Ante Natal Care check-up in the first							
	Trimester							
3	Mothers who had 3 or more Ante Natal	26.4	34.2	27.7	21.9	27.5	49.8	95.6
	Care							
4	Mothers who had	58.4	60.4	55.0	62.9	59.1	73.4	97.3
	at least one TT Injection							
5	Mother who consumed IFA for 90days or	9.7	11.8	12.8	8.7	10.7	22.3	43.2
	more where they were pregnant-with							
	their last child							
6	Mother who had full Ante Natal Care	4.6	8.6	6.6	3.3	5.7	18.8	51.8
	check-up							

Table 2. Delivery management and post natal care (in percentage)

S.NO	Delivery Care	BI	M P	RA	UP	BIMARU	IND	TN
1	Institutional	27.7	47.1	45.5	24.5	36.2	47.0	94.1
	Delivery							
2	Delivery at Home	71.5	52.1	53.7	74.5	62.9	52.3	5.7
3	Delivery at home conducted by skilled Health personal	4.2	3.0	7.2	5.8	5.0	5.7	1.5
4	Safe Delivery	31.9	50.1	52.7	30.3	34.5	52.7	95.6
5	Mother who received Post Natal Care within two weeks of delivery	26.2	37.7	38.2	33.8	33.9	49.7	89.2

Table 3. Percentage of women breastfeed their children in BIMARU

S.NO	Initiation of Breastfeeding	BI	M P	RA	UP	BIMARU	IND	TN
1	Initiation of Breastfeeding within one hour of birth (DLHS-3)	16.2	43.1	41.9	15.4	29.1	40.5	77.5
2	Children 0-5 months exclusively breast feed (NFHS-3)	27.9	21.6	33.2	31.3	28.5	46.3	33.3

Table4. Children received vaccination in BIMARU (percent)

S.NO	Vaccination BI	M P	RA	UP	BIMARU	IND	TN	-
1	Children (12-23 months of age) fully immunised	41.4	36.2	48.8	30.3	39.1	54.0	81.8
2	Children (12-23 months of age) not received any Vaccination	1.6	9.5	12.0	3.4	6.6	4.5	0.1
3	Children (12-23 months of age) who have received BCG	81.5	84.2	82.8	73.4	80.5	86.7	99.5
4	Children (12-23 months of age) who have received 3 doses of DPT	54.4	47.4	55.6	38.9	49.0	63.5	89.7
5	Children (12-23 months of age) who have received 3 doses of polio Vaccination	53.1	55.1	63.9	40.4	53.1	66.0	90.6
6	Children (12-23 months of age) who have received measles Vaccination	54.2	57.7	67.5	47.0	56.6	69.5	95.6
7	Children (age 9 months and above) received at least one dose of vit.A supplement	49.9	39.5	50.8	32.2	43.1	54.5	73.0

Table 5. Percentage of women using family planning in BIMARU

S.NO	Current use of	BI	M P	RA	UP	BIMARU	IND	TN
	Family Planning							
1	Any method	32.4	56.2	57.0	38.4	46.0	54.0	59.9
2	Any modern method	28.4	52.1	54.0	26.7	40.3	47.1	57.8
3	Female Sterilization	25.0	47.1	40.5	16.5	32.3	34.0	53.8
4	Male	0.3	0.8	0.5	0.1	0.4	1.0	0.2
	Sterilization							

Table 6. Percentage of unmet need of family planning in BIMARU

S.NO	Unmet need of Family planning	BI	M P	RA	UP	BIMARU	IND	TN
1	Tot unmet need	22.8	11.3	14.6	21.2	17.4	12.8	8.5
2	For spacing	10.7	5.4	7.3	9.1	8.1	6.2	4.0
3	For limiting	12.1	5.9	7.3	12.1	9.3	6.6	4.5

Table 7. Percentage of women who have knowledge about HIV/AIDS

S.NO	Knowledge about HIV/AIDS	BI	M P	RA	UP	BIMARU	IND	TN
1	Women who have heard of HIV/AIDS	35.2	45.3	33.8	40.0	38.5	57.0	94.0
2	Men who have heard of HIV/AIDS	70.0	68.3	74.2	74.3	71.7	80.0	97.7
3	Women who know that consistent condom use can reduce the chances of getting HIV/AIDS	22.4	15.7	27.3	27.2	24.4	34.7	42.1
4	Men who know that consistent condom use can reduce the chances of getting HIV/AIDS	58.4	61.9	63.2	66.3	62.4	68.1	81.8

BIMARU states and the averages of these state were compared with the National and Tamilnadu's averages.

# **Objectives**

The main objectives of this study are

- To investigate the extent of utilization of reproductive health services in 'BIMARU' states.
- To explore the relationship between population growth and utilization reproductive health services

# **RESULTS AND DISCUSSION**

The extent of utilization of the reproductive and child health care services such as ante-natal care, delivery care, breast feeing habits, received vaccination, current use and the unmet need of family planning, knowledge about HIV/AIDS were discussed in the following section.

# Ante Natal Care

The proportion of mother who had received any ante natal care checkup was 60.5 percent for BIMARU states as against 98.8 percent and 75.5 percent at the levels of Tamilnadu and India respectively. The percentage of mother who had full Ante-natal care check-up (those having 3 or more ANC visits consumed IFA for 9 days and at least one TT injection) were just 5.7 percent for BIMARU states as against 18.8 and 51.8 percentage level of India. As far as ante-natal care was concerned,( 3 or >ANC visits) again it is clear from the table that the coverage is poor in BIMARU states, i.e. 27.5 percent, while national coverage was 49.8 percent and the coverage in Tamilnadu is 95.6 percent.

# **Delivery Care**

The details of the delivery management at all India level and BIMARU states are presented in the table-2. About 52.3 percent of deliveries were being managed at home at all India level where as the proportion was about 62.9 percent in BIMARU states. Among BIMARU States, it varied from 52.1 percent in Madhya Pradesh to 71.5 percent in Bihar. The percentage of safe delivery (Institutional delivery + Delivery at home conducted by skilled health personal) was 52.7 at all India level while it was 30.3 percent in Utter Pradesh. For Tamilnadu it was 95.6 percent. With in BIMARU states, in

regard to the safe delivery, Rajasthan and Madhya Pradesh were performed well compared with Bihar and Utter Pradesh. Only33.9 percent of the mothers in BIMARU states received Postnatal care with in two weeks of delivery where as the percentage was about 50 percent in India and 89.2 percent in Tamilnadu.

## Initiation of Breastfeeding

Only 15.4 and 16.2 percent of women in Utter Pradesh and Bihar were initiated breast feeding within one hour of birth. The same were 40.5 and 77.5 percent for India and Tamilnadu respectively.

# Vaccination

Proportion of children vaccinated in BIMARU states were presented in the following table. Only 39.1 percent of children (12-23 months of age) in BIMARU were fully immunized. In Tamilnadu and India these percentages were 81.8 and 54.0 percent respectively. As universal immunization program was implemented by the Central and State Governments, the percentage of children (12-23 months of age) not received any vaccination in BIMARU was only 6.6. Though, it was slightly higher than the national level (4.5), the performance of Rajasthan and Madhya Pradesh shows an unhappy trend i.e. 12.0 and 9.5 percentages respectively. The proportion of children who have received BCG, 3 doses of DPT, 3 doses of polio vaccine and measles vaccination in BIMARU were 80.5, 49.0, 53.1 and 56.6 respectively, where as in Tamilnadu there percentages were 99.5, 89.7, 90.6 and 95.6 respectively, from the discussion, it can be noted that the BIMARU states have a long way to go to achieve the level of Tamilnadu. Among the BIMARU states Utter Pradesh records show that their performance in relation with the vaccinations were poor.

# Current use of Family Planning

The data on current use of family planning of BIMARU states as well as Tamilnadu show the inefficiency of the system to achieve a greater proportion of couples protected by family planning.

## Unmet need of Family planning

The above table shows the percentage of the total unmet need of family planning for BIMARU states and India. It can be

inferred from the table that the, unmet need of family planning services for all the four states were high. It is also interesting to note if the unmeet need of family planning of these state should have met out, the current use percentage of family planning would have reached a higher level and the state like Rajasthan and Madhya Pradesh may surpass the national average. Hence measures are to be initiated to meet out the unmet need of family planning.

# Knowledge about HIV/AIDS

The extent of knowledge of women on HIV/AIDS is also a vital factor which has a direct bearing on reproductive health status of women. The percentage of women who have heard of HIV/AIDS in BIMARU was only 38.5; where as the percentage of male counterpart were 71.7. These proportions in Tamilnadu were 94.0 and 97.7 for female and male respectively. Only 24.4 percent of women in BIMARU know that consistent condom use can reduce the chance of getting HIV/AIDS. In regard to male the proportion was 62.4. As the HIV/AIDS epidemic plays an important role in improving the reproductive health as well as the overall health status of women, awareness programmes should initiated to women to make them aware of HIV/AIDS. The above table shows the percentages of population of BIMARU states in the year 2001 and 2025. The share of population of BIMARU to India was 35.58 percent in 2001 and it will be around 38 percent in 2025. There is a race between development and growing population. The burgeoning population growth in these states was rendering development planning worthless. All the developmental plans are going awry due to the enormous population growth in the BIMARU states.

# **Conclusions**

As far as ante-natal care was concerned, it was found that in every aspect of ANC services, BIMARU states remain for behind as compared to the country as a whole. Only 60.5 percent of women in BIMARU states received any ANC check-up, where as it was 75.2 and 98.8 for India and Tamilnadu. Mothers who had 3 or > ANC visits was only 27.5 percent in BIMARU states, while it was 49.8 and 95.6 for India and Tamilnadu. Shockingly only 5.7 percent women in BIMARU had full ANC check-up. Nearly 63 percent of deliveries are being managed at home in BIMARU states. The same for India and Tamilnadu were 52.3 and 5.7 respectively. The percentage of safe delivery in BIMARU, India, and Tamilnadu were 34.5, 52.7, and 95.6.

Only 39.1 percent of the children in BIMARU states were fully immunised, where as it was 54.0 and 81.8 for India and Tamilnadu. Shockingly, 12.0 percent of the children in Rajasthan and 9.5 percent of the children in Madhya Pradesh were not received any vaccination. More than ½th of the population of India are Utter Pradesh and Bihar. The current use of family planning methods in these states were 38.4 and 32.4 percent; while it was 54.0 for India and 59.9 for Tamilnadu. At the same time, the percentage of unmet need of family planning in Bihar and Utter Pradesh were 22.8 and 21.2 respectively, where as it was 12.8 for India as a whole. The percentage of women who heard of HIV/AIDS and who know that consistent condom use can reduce the chance of getting HIV/AIDS in BIMARU states were 38.5 and 24.4, where as for men it was 71.7 and 62.4. The contribution of the

BIMARU states to the national population was 35.58 in 2001 and it would be projected as 37.94 percent in 2025.

## Policy suggestions

As the percentage of mother who had full ANC checkup in BIMARU was only 5.7 percent, appropriate measures may be taken to make use and educate the mother in these states to make use if the ANC services. Within BIMARU states in regard to safe delivery the performance of Utter Pradesh and Bihar were poor compared with other states. As Utter Pradesh and Bihar contribute more than 25 percent of the national population, necessary steps should be taken to increase the number of Institutional deliveries. Only 29.1 percent of the mothers in BIMARU states initiated breastfeeding within one hour of birth within BIMARU states, this percentage was very low in Utter Pradesh 15.4 and Bihar 16.2. Proper awareness camps should be organized in the rural areas of Utter Pradesh and Bihar in order to motivate the people to know the importance of colostrums feeding. Only 39.1 percent of children (12-23 month of age) not received any vaccination in Rajasthan and Madhya Pradesh were 12-0 and 9.5 respectively. As Utter Pradesh record in regard to child immunization shows poor performance, necessary steps should be taken to educate the maternal mothers to know the importance of child immunization.

Though India has introduced the family planning programme in the year 1952, its achievement in the use of family planning programme by mothers was only 54.0 percent and that too in BIMARU states it was only 46.0 percent. Regarding, the unmet need of the family planning services, the percentage for BIMARU state was12.8. As the percentage of unmet need were high among Bihar and Utter Pradesh. Hence, stringent measures should be initiated to organic mass awareness campaigns in all the four states to make them aware of the uses of family planning methods and to make easy access of the family planning service to all the people to meet out the unmet need especially in Bihar and Utter Pradesh. The extent of knowledge about HIV/AIDS was poor in all the four states among women; women should be educated regarding the HIV/AIDS epidemic. The burgeoning population growth in these states was rendering development planning worthless. All the developmental plans are going away due to rapid population growth. Hence the existing population control measures should be implemented intensively and there is a need to find some innovative methodology to curb the population growth especially in these four states and that too in Utter Pradesh.

# **REFERENCES**

Census of India 2001, Population Projection for India and States 2001-2006, National Commission on Population, 2006.

IIPS 2005, Reproductive and Child Health project: District Level Household survey" Bihar, Mumbai.

IIPS 2005, Reproductive and Child Health project: District Level Household survey" Madhya Pradesh, Mumbai.

IIPS 2005, Reproductive and Child Health project: District Level Household survey" Rajasthan, Mumbai.

IIPS 2005, Reproductive and Child Health project: District Level Household survey" Uttar Pradesh, Mumbai.

- International Institute for Population sciences, National family Health survey-3 Bihar, Mumbai, 2005-06, India.
- International Institute for Population sciences, National family Health survey-3 Madhya Pradesh, Mumbai, 2005-06, India
- International Institute for Population sciences, National family Health survey-3 Rajasthan, Mumbai, 2005-06, India
- International Institute for Population sciences, National family Health survey-3 Uttar Pradesh, Mumbai, 2005-06, India
- Nagdev D, and Baharat. D 2003, Urban-rural differentials in Maternal and child health care in Andhra Pradesh India".
- Prakasam C.P, 1995, "Utilization of Primary Health Care Sources in rural set up", Health and Population perspectives and issues, Vol.18 (2), PP 70-80.
- Srinivasan, K, Mohanthy, S.K. 2004, Health Care Utilization by resources on levels Deprivation in major states of India from NFHS 2" Demography India, Vol.33, No 2 PP 107-126.

\*\*\*\*\*