



A study of antenatal services utilisation among reproductive age group females in ahmedabad district surveyed under multi indicator cluster survey 2011

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ABSTRACT

Objective To know about various socio-demographic, cultural and existing utilisation of women health care services of people living in Ahmedabad district.

Setting: The study was conducted over a time span of 20 weeks period, from April 2011 till Aug 2011 in selected areas of Ahmedabad district, which has an approximate population of 15,94,010 as per census 2001.

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Conflict of Interest—none

Setting The study was conducted over a time span of 20 weeks period, from April 2011 till Aug 2011 in selected areas of Ahmedabad district, which has an approximate population of 15,94,010 as per census 2001.

Funding—none

Study Design Cross Sectional Observational Study

Participants All the eligible Antenatal Mothers as per sampling technique during the period of 1/7/2010 to 30/6/2011.

Methods 30 clusters sampling method based on Probability Proportional to Size (PPS) for cluster selection.

Results The total population surveyed was 6,076, those were available in 1060 households with average family size of 6.75. Overall sex ratio was 990 and under-five sex ratio was 1026. Among this BPL card holders families were 34.6% and total SC/ST population surveyed was 32.4%.

Keywords: Antenatal care, Reproductive age group, Utilization

INTRODUCTION

Multi Indicator Cluster Survey is conducted regularly by various Government Medical Colleges in various districts of Gujarat. The MICS was originally developed in response to the World Summit for Children to measure progress towards an internationally agreed set of mid-decade goals. Since long the MICS has enabled to produce statistically sound and comparable estimates of a range of indicators especially in the areas of Maternal and Child Health (MCH) care. MICS -1 was done in 1995,

followed by MICS-2 in year 2000 and MICS-3 in 2005-06. The fourth round of Multiple Indicator Cluster Surveys (MICS) is scheduled for 2009-2011. This provides countries with the opportunity to monitor progress toward national goals and global commitments, including the Millennium Development Goals (MDGs) as the target year 2015 approaches¹.

In this survey, efforts are taken principally to evaluate the various socio demographic and cultural indicators as well as activities related to woman health-care services. The basic idea of this survey is to analyze the present situation, showing trend and to identify

the areas for intervention. These findings will be helpful in planning and monitoring appropriate programs to make the conditions of women better in the state.

METHODS

The survey was conducted in rural population of Ahmedabad district having ten blocks, 569 villages with total population of 15, 94, 010. Based on probably proportional to size (PPS) thirty clusters were selected. Each cluster (Village) has been divided in to arbitrary equal quadrant for better representation. The data collection by four member team for each

quadrant was done on house to house basis till two women who delivered during last year (01-07-2010 to 30-06-2011) were surveyed. So at the end of each cluster, eight women who delivered in above mentioned period were surveyed. About five percent of data has been validated by senior faculty member of the department who were not the part of the data collection team.

RESULTS

Table 1 Demographic profile of surveyed population

Criteria	Frequency
Total number of household survey	1060
Total population survey	6076
Average Family size	6.752
Total number of females in the families	3023 (49.7%)
Overall sex ratio (per thousand males)	990
Total number of women in reproductive age group (15-45 years age group)	1469 (24.1%)
Total number of women delivered in last one year	278 (4.57%)
Average age at marriage	18.5 (years)
Number of women using contraceptive methods	424 (34.55%)
Availed Benefits of "Janani Suraksha Yojna"	73 (33.5%)

During the survey we covered total 1060 households, covering population of 6076 with average family size of 6.752. Overall sex ratio in our district was 990 per thousand males with total women in reproductive age group equal to 24.1 %. Among the surveyed population 278 women delivered during last year. Average age of marriage was found to be 18.5 years with only 34.55% of them using contraception and 33.5% using benefit of Janani Suraksha Yojna.

Table 2 Distribution of women according to marital status (n=1469)

Marital status	Frequency	Percentage (%)
Unmarried	242	16.5
Married	1214	82.6
Divorced	3	0.2
Separated	3	0.2
Widow	7	0.5

In our survey 82.6% women were married and 16.5% were unmarried. Separated, Divorced or widow doesn't even make 1%.

Table 3 Distribution of women according to services availed to them who delivered in last one year

Services	Once	Twice	Thrice	More than three
Antenatal check up (n=262)	13 (5.0%)	30 (11.4%)	55 (21%)	164 (62.6%)
Blood Pressure Examination (n=246)	14 (5.7%)	29 (11.8%)	42 (17.2%)	154 (62.3%)
Per Abdomen examination (n=246)	13 (5.3%)	38 (15.4%)	42 (17.1%)	153 (62.2%)
Iron Folic Acid Tablets Consumed (n=257)	29 (11.3%)	27 (10.5%)	46 (17.9%)	155 (60.3%)
Tetanus injections received (n=267)	19 (7.1%)	248 (92.9%)	--	---

In the surveyed population 62.6% have ANC check up done more than three times and the same were checked for the blood pressure measurement also. Nearly 60% of all had undergone per abdominal examination more than thrice during their ANC and also received iron folic acid tablets for same duration. 92.9% women have received two TT injections during their ANC.

Table 4 Distribution of women according to preferred place and person for Antenatal checkups (n=262)

Preferred place for ANC	Frequency	Percentage
Government	156	59.8
Private	93	35.6
Trust/NGO	7	2.7
Govt and Private both	6	1.9
Preferred Person for ANC		
Doctor	170	65.2
ANM/Nurse/Lady Health Visitor	81	30.6
Doctors and ANM both	11	4.2

Near to 60% of women preferred to be examined at government place and that to by doctor. Still 35.6% preferred private hospitals.

Table 5 Details of transportation and care accessed by women during their last pregnancy. (n=221)

Services accessed	Frequency	Percentage
Transportation facility availed		
Emergency Medical Research Institute vehicle (108 service ambulance)	53	24.0
Hired vehicle	110	49.7
Owned vehicle	47	21.3
Others (borrowed or any available vehicle)	11	5.0
Accompanied person to delivery centre		
Accredited social health activist (ASHA)	37	16.9
Auxiliary Nurse Midwife (ANM)	2	0.9
Anganwadi worker (AWW)	5	2.3
None from the health staff	177	79.9
Duration of stay at centre		
Less than one day	80	36.1
One to two days	80	36.1
Two to seven days	54	24.6
More than seven days	7	3.2

Half of the surveyed women availed the services of hired vehicle during labor, followed by services of 108 (24%) and owned vehicle (21.3%). To the surprise 79.9% of women were not accompanied by any of the health staff during the delivery. Only 16.9% of ASHA workers accompanied the women during intra-natal period. Equal (36.1%) proportion of women stayed for less than one or 1-2 days in the hospital. Only 3.2% have to stay beyond seven days.

DISCUSSION

Out of total 1060 household surveyed, average family size was found 6.752 with overall sex ratio of 990, which was high compared to the Ahmedabad district data of 2011 showing sex ratio of 903 only. And it also shows increase of 11 % from the figure of 2001 census (892) 2, 3. In our study we found decline in average age of marriage from 19.6 years (District Level Household and Facility Survey 2007-08. 4, 5 to 18.5 years, with 24% of female in reproductive age group. As per pandit et.al. almost 63% of girls got married before legal age of marriage, which is 18 years for female in India⁶.

The Janani Suraksha yojna is in existence to reduce Neonatal and Maternal mortality by promoting institutional deliveries as well as better antenatal care and postnatal care through accredited social health activist (ASHA) 7 In our study only 33.5% women has It was found that near 5% of pregnant women have at least once gone for ANC check up, 62.6% gone for more than three times. District Level Household and

availed the benefit of Janani Suraksha Yojna, which is very low compared to the annual report of 2009-10 with 84.26 lakhs women have availed the benefit. 8

Number of women using any contraceptive methods was found 34.5%. It was very low (61%) compared to District Level Household and Facility Survey 2007-08 and National Family Health Survey III (56.3%) 2005-06. 4, 9 In a study done by Palas Das, in Rural Bengal only 2.93% of the surveyed women uses family planning services¹⁰. Niraj at all revealed that almost 27% of women were using birth control measures at that time and 58% of them were aware of birth control measures.⁶

About 16.5% women were unmarried during our time of survey where as 83.5% were ever married females.

Facility Survey 2007-08, results indicate that 71.5% had gone once, while 64.9% have more than three ANC checkups. (Ahmedabad Rural 55.8%).⁴

62.28% of women were examined for Blood pressure for more than three times during their pregnancy. But in NFHS-III studies it was found only 51% had gone once for check up during entire ANC.⁵ As per Zulfiakhan of Uttarpradesh, India, only 52% of all mothers had at least one antenatal check up at government or private facilities. Although the emphasis of the National RCH program is to promote institutional deliveries, the poor infrastructure and the limited government facilities in states like Uttarpradesh make home deliveries more common.¹¹

Nearly 60.3% of women had consumed IFA for more than three months which is marginally rise compared to District Level Household and Facility Survey (50.7%) 2007-08 ⁴, NFHS-III it was 35.7% and very high in Ahmedabad rural 28.9% 2009-10.¹² During this survey it was found that at least 7.1% of them had taken one dose of T.T. where as NHFS-III found it near to 68.6%.¹³ As per the Zulfiakhan 60.5% of mothers received at least one injection T.T. during pregnancy. Many women asked for, and received injection T.T. from private provider without undergoing Antenatal checkup.¹²

Nearly 59.8% women preferred Government health facility for Antenatal check up, while 35.6% preferred private health facilities. As per NHFS-III 54.6% women (42.2% in rural areas) preferred institutional delivery. Majority of women (65.2%) preferred doctor to carry out Antenatal checkups. which was similar to NHFS-III findings (64.7%)¹². Around 90% of women in rural Bengal preferred to be accessed by doctors for checkups.¹⁰ Nearly 52% deliveries were safe in India as per World Health Organization Report.¹³ The safe

delivery process conducted in an institution will have a definite impact on reduction of maternal mortality.¹⁴ Home deliveries was norm in studied slums of Aligarh City, 79.5% of all mothers giving birth at home with only 20.5% of mothers delivered in an Institution. The most common reason for home delivery were said to be family tradition (47.2%), Economic constrains (16.9%) and rude behaviors of hospital staff (16.4%).¹¹

Almost half of the surveyed women hired the vehicle to reach the institution for the delivery and only 16.9% were accompanied by ASHA worker to the place of delivery. After the implementation of JSY, ASHA's have been successful in promoting institutional deliveries. Family members and mothers are convinced to go for institutional deliveries, so effective promotion among the pregnant women and their family members played a role for rise in institutional deliveries.¹⁵

CONCLUSION

In Ahmedabad District it was found that the average family size was 6.752 and has sex ratio 990 per thousand males with total women in reproductive age group equal to 24.1 %. Average age of marriage was found to be 18.5 years with 82.6% women married and only 34.55% of them using contraception. Nearly 33.5% have availed the benefit of Janani Suraksha Yojna. Nearly 62.6% of women had received total antenatal checkups during pregnancy. About 60% of women preferred the Government setup and one fourth of total women have utilized 108 (EMRI) services for the delivery purpose.

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