# SOCIO-DEMOGRAPHIC FACTORS INFLUENCING UTILIZATION OF ANTENATAL HEALTH CARE SERVICES UNDER JSSK IN A RURAL AREA OF J&K: A CROSS SECTIONAL STUDY

*M. Rafiq Mir[1], Rifat Jan[2], I. H. Munshi[3]*

*[1]Associate Professor, Department of Community Medicine, SKIMS Medical College, Bemina.*
*[2]Tutor/Demonstrator, Community Medicine, SKIMS Medical College, Bemina.*
*[3]Associate Professor (Retd.), Department of Community Medicine, GMC, Srinagar.*

**ABSTRACT**

**BACKGROUND**

Antenatal Care (ANC) is the care of the woman during pregnancy. Women in reproductive age constitute 22% of total population.(1) One of the major concerns of Reproductive and Child Health Programme phase II (RCH) is an extremely low percentage of institutional deliveries. Among women living below poverty line and in remote villages, the number of institutional deliveries is almost negligible.

**METHODOLOGY**

The study of socio-demographic factors influencing utilization of antenatal health care services under JSSK in a rural area of J&K – a cross-sectional study was conducted in district Ganderbal (Kashmir) as a community-based cross-sectional study. Recently delivered mothers (Those who had delivered 6 months prior to the study). A total of 230 beneficiaries were interviewed during the entire study period.

**RESULTS**

Background information of mothers shows that the mean age of the women was 30.9 years with a standard deviation of 1.966. More than 2/3rd of the women were in the age group of 30-34 years and only 1 woman was less than 25 years. All of the pregnant women (studied) were registered at public health facility. All the mothers were immunized with tetanus toxoid injection. In our study, consumption of 100 or more IFA tablets was observed in 96% of mothers. The study found that more than a 2/3rd of the women visited the health facility regularly for checkups.

**CONCLUSION**

The results revealed that utilization of antenatal services was good as majority of them received full antenatal care. The prime reason for non-compliance of IFA tablets was side effects. The private health facility was visited less compared to government services. The various antenatal components were utilized by majority of mothers, yet there is scope for improvement.

**KEYWORDS**

Antenatal, JSSK, JSY, Health Services.

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## INTRODUCTION

Antenatal Care (ANC) is the care of the woman during pregnancy.(1) The content and quality of antenatal care and the availability of effective referral with essential obstetric care are important for antenatal care to be effective. However, many studies have revealed low utilization of antenatal health care services for varying reasons. A few studies show considerable improvement in utilization of antenatal care, but there is little evidence on the content and quality of antenatal care.(2) Preventing maternal deaths associated with pregnancy and child birth remains the greatest challenges for India. Every 5th woman dying globally due to maternal causes is an Indian and every 10 minutes one woman dies in any part of India due to pregnancy and its related complications.(3)

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*Corresponding Author:*
*Dr. M. Rafiq Mir,*
*Associate Professor,*
*Department of Community Medicine,*
*SKIMS Medical College,*
*Bemina-190017.*
*E-mail: dr.mmrafiq@gmail.com*
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India is moving well in achieving millennium development goals (MDG-5), but the progress is slow. Over the last 10 years, there has been a significant decline in maternal mortality rate by 35% from 327 in 2001 to 167 in 2013.(4) Several initiatives were put up by the G.O.I under the ministry of health and family welfare under NRHM including Janani Suraksha Yojna to bring down maternal and infant mortality rates through safe delivery practices. However, even though institutional deliveries increased significantly in number, out of pocket expenses as incurred by pregnant woman remained high.

Expenditure on transport for ferrying the pregnant woman from home to facility and back and also to higher institution (in case of referral) also acted as a barrier to avail health care facilities. Out of pocket expenditure constitute 71% of total health expenditure or 3.3% of Gross Domestic Product (GDP).(5)

To mitigate this problem, Ministry of Health and Family Welfare launched Janani Shishu Suraksha Karyakram on 1st June 2011, to provide better health facilities to pregnant woman and sick newborn. Its main aim is to achieve 100% institutional deliveries.

**The Free Entitlements for Pregnant Woman Include**
**Diagnostics**
Up to 6 weeks.

**Drugs**
Up to 6 weeks and even for any pregnancy related complications.

**Consumables**
The diet is provided at a cost of Rs. 100/day up to a maximum of 3 days in case of normal delivery, up to a maximum of 7 days in case of caesarean section and up to a maximum of 5 days to mother of sick newborn.

**Provision of Blood**
**Referral Transport**

a. From home to facility.
b. In between facilities.
c. From facility to home.

**Exemption from all kinds of user charges including OPD, IPD**
The sick neonate is also entitled for free diagnostics, free drugs, free transport (Home to facility and back and between facilities), free user charges, free provision of blood up to 30 days of sickness which has been extended up to 1 year (As per JSSK guidelines). There is also a provision for free consumables (For the mother) up to 5 days of hospitalisation. No cash will be paid to the beneficiary in lieu of these entitlements. The scheme laid emphasis on the "free entitlements" to eliminate out of pocket expenses for both pregnant woman and sick newborn in Government Institutions. This scheme is going to benefit 1 crore pregnant woman and newborns in both rural and urban areas.[6]

## MATERIALS AND METHODS

The study was conducted in district Ganderbal (Kashmir)

**Study Design**
Community-based cross-sectional study.

**Study Period**
The study was conducted from June 2014 to December 2014.

**Study Participants**
Recently delivered mothers (Those who had delivered 6 months prior to the study). A total of 230 beneficiaries were interviewed during the entire study period.

**Inclusion Criteria**
Women who had delivered 6 months prior to the study.

**Exclusion Criteria**
Those who had delivered more than 6 months prior to the study.

**Data Collection**
The first house in the centre of the sub-center area was visited (Which was selected by moving in a pre-specified direction from the sub-center area). Any recent delivery in that house was enquired about. Subsequently, the next adjacent house was visited until the desired number of recently delivered mothers were got.

**Data Analysis**
Data was entered in Microsoft Excel (2007) and was analysed after generating frequency tables using SPSS 16 software. Results were expressed in proportion.

## RESULTS

Table 1 describes the socio-economic distribution of women. The mean age of the women was 30.9 years with a Standard Deviation of 1.96. Majority of the women were in the age group of 30-35 years (73.5%) followed by 25-30 years (21.7%); 35.7% were middle pass, 98.3% of the women were home makers, whereas only 4 (1.7%) were employed.

| | Category | N | % |
|---|---|---|---|
| Age (in years) of beneficiaries | <25 | 1 | 0.5 |
| | 25-30 | 50 | 21.7 |
| | 30-35 | 169 | 73.5 |
| | 35-40 | 10 | 4.3 |
| | Mean age (in years) | 30.91 | |
| Literacy status | Illiterate | 47 | 20.4 |
| | Primary (5th standard) | 22 | 9.6 |
| | Middle (8th standard) | 82 | 35.7 |
| | High school (10th) | 60 | 26.1 |
| | Higher secondary (12th) | 18 | 7.8 |
| | Graduate | 1 | 0.4 |
| Occupation | Employed | 4 | 1.7 |
| | Unemployed | 226 | 98.3 |

***Table 1: Socio-Demographic Profile of Mothers***

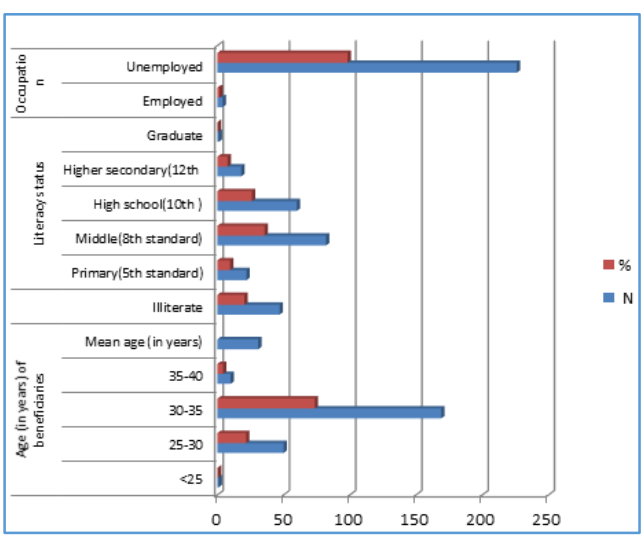


***Fig. 1: Graphic Representation of Socio-Demographic Profile***

Table 2 depicts process of registration of women under JSSK. Majority of the women (92.6%) got registered in 1st trimester of pregnancy and 7.4% in 2nd trimester; 97.83 had >3 checkups, 42.2% of women were registered at PHC 41.3% at sub-center, while (16.5%) got registered at CHC.

| Particulars | | N | % |
|---|---|---|---|
| Time (of pregnancy) when woman got registered | 1st trimester | 213 | 92.6 |
| | 2nd trimester | 17 | 7.4 |
| | 3rd trimester | 0 | 0 |
| | **Total** | **230** | **100** |
| Place of Registration | Primary Health Centre | 97 | 42.2 |
| | Community Health Centre | 38 | 16.5 |
| | Sub-centers | 95 | 41.3 |
| | *Others | 0 | 0 |
| | **Total** | **230** | **100** |

***Table 2: Percentage Distribution of Recently Delivered Women as per Place and Time of Registration***

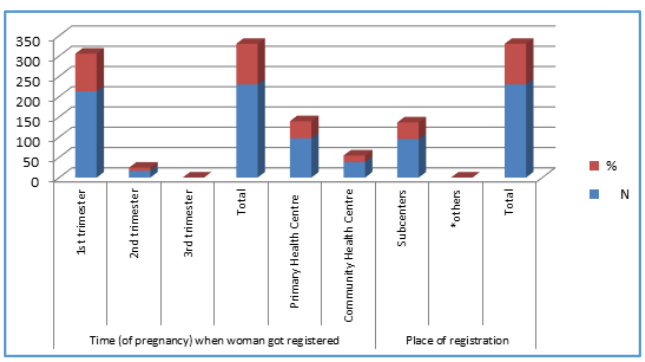


***Fig. 2: Distribution of Recently Delivered Women as per Place and Time of Registration***

Regarding distribution of RDW as per place of ANC placed in Table 3, majority (53.9%) had antenatal check-up at PHC followed by 37.7% at CHC and only 2.2% at sub-center; 6.5% had their routine check-up at Private Hospital and Private Clinics; 97.83 received >3 checkups.

| | | N | % |
|---|---|---|---|
| Place of Antenatal Checkups | PHC | 124 | 53.9 |
| | CHC | 86 | 37.4 |
| | Sub-center | 5 | 2.2 |
| | Others | 15 | 6.5 |
| **Total** | | **230** | **100** |
| Number of Antenatal Visits | 1 | 0 | 0 |
| | 2 | 5 | 2.17 |
| | >3 | 225 | 97.83 |

***Table 3: Distribution of Recently Delivered Women as per the Place of Antenatal Checkups***

55.6% of beneficiaries received two doses of Tetanus toxoid injection, 44% received booster dose; 96% consumed recommended Iron Folic Acid tablets, i.e. 100 tablets while 4% did not. The data is placed in Table 4.

| | | N | % |
|---|---|---|---|
| No. of T.T received | Single/Booster | 128 | 55.6 |
| | 2 | 102 | 44.4 |
| Consumed 100 IFA Tablets | Yes | 220 | 96 |
| | No | 10 | 4 |

***Table 4: Recently Delivered Women as per the Administration of Tetanus Toxoid***

Majority (97.4%) of the women visited the facility regularly for checkups and a meagre number of women (2.6%) had irregular visits. The same is placed in Table 5.

| Regular Visits | N | % |
|---|---|---|
| Yes | 224 | 97.4 |
| No | 6 | 2.6 |
| **Total** | **230** | **100** |

***Table 5: Percentage Distribution of Recently Delivered Women as per Regular Visits to the Facility***

*Regular: minimum of 4 antenatal checks and a maximum of 13 visits.

## DISCUSSION

Background information of mothers shows that the mean age of the women was 30.9 years with a standard deviation of 1.966. More than 2/3rd of the women were in the age group of 30-34 years and only 1 woman was less than 25 years. This is in contrast to a study by Ahmad Khurshid et al,[7] where only 21% were in the age group of 30-34 years and 29% of women were aged 20-24 years. All of the pregnant women (studied) were registered at public health facility. The results are consistent with the findings of Banerjee B (2003), where registration was found to be 100%.[8] Regarding the place of antenatal check–up, 54% had received antenatal check-up at PHC followed by CHC. Only 2% had visited the sub-centers for health checkups. The probable reason for fewer checkups at sub-centers might be non-availability of a doctor at the sub-centers; 6.5% had their checkups done at Private Hospitals and Private Clinics as well. This is in contrast to a study by Roy et al, where most pregnant women went to S/C or PHC for antenatal checkups.[9]

All the mothers were immunized with tetanus toxoid injection. Our findings are in agreement with DLHS-3 according to which in Karnataka 81.6% of mothers had 3 or more antenatal visits and 86.9% of them were immunized with at least one dose of tetanus toxoid. An article review by A Chatterjee and VP Pailey reveal that overall in India educated women are more likely to receive a full course of IFA, receive Tetanus toxoid.[10]

In our study, consumption of 100 or more IFA tablets was observed in 96% of mothers. The reason for non-compliance was due to dislike of taste and epigastric discomfort. An article review by A Chatterjee and VP Pailey reveal that overall in India educated women are more likely to receive a full course of IFA, receive Tetanus toxoid.[11]

The study found that more than a 2/3rd of the women visited the health facility regularly for checkups. The reasons given by those who had irregular visits were that they were unaware of the services, non-accessibility to the facility and financial problems. This was much higher than NFHS-3 (2005-06) and Singh et al.[12]

## CONCLUSION

The results revealed that utilization of antenatal services was good as majority of them received full antenatal care. The prime reason for non-compliance of IFA tablets was the associated side effects of taste change and gastric acidity. The private health facility was utilized more compared to government services. Literacy, socioeconomic status and parity of mother significantly influenced the utilization of full antenatal care.

## LIMITATIONS

The study needs to be replicated in other districts also, especially in hard reach areas. Since this study did not involve

those areas, hence a true picture of utilization will not be reflected in the study

**RECOMMENDATIONS**

To strengthening utilization of JSSK Services in J&K, extensive IEC (Information, Education and Counseling) strategy is needed to create more awareness among women. There is also need of upgradation of PHC's/CHC'S as per IPHS standards. Strengthening health sector through PPP is also needed. Promotion of female literacy and empowerment are required to improve utilization of maternal health services. On job training can be given to health care providers on various antenatal components and advices.

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