Original Article

A Comparative study of utilization of Janani Suraksha Yojana (Maternity Benefit Scheme) in rural areas and urban slums

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ABSTRACT

Background: Janani Suraksha Yojana (JSY) was launched on 12th April 2005, under the umbrella of National Rural Health Mission (NRHM) with the main objective of reducing maternal, neo-natal mortality and promoting institutional delivery. It was implemented in all states and UTs with special focus on 10 low performing states (LPS). Uttarakhand is one of the LPS and JSY was implemented here in Sept.2005. **Objective:** To find out the difference in utilization of Janani Suraksha Yojana in rural areas and urban slums. **Material and Methods:** A cross-sectional study was conducted under Rural Health Training Centre and Urban Health Training Centre of the field practice area of department of Community Medicine. A total of 227 married women in reproductive age (15-49 years), who delivered in government hospital were considered for the study out of which 88 women belonged to rural areas and 139 women were from urban slums. **Results:** Out of the total number of married women who delivered at govt. hospital i.e. 227, majority (78.42%) were registered with some health personnel. Out of these, 74.15% women were registered with ASHA and maximum number (83.64%) of these women belonged to urban slums. Only 29.21% women went for three or more ANC visits and the proportion was higher (33.64%) in urban slums. Only 48.31% women consumed hundred IFA tablets and the proportion was high (79.41%) in rural women. All the women received complete TT immunization. **Conclusion:** The JSY utilization was found to be low in rural areas i.e. 38.7% .Thus, IEC activities should be strengthened and ASHA's work should be properly monitored.

Key words: Utilization, JSY, Married women.

Introduction:

As far as the sphere of health is concerned, maternal and child health issues still continue to be a forefront of national and global health policies [(1)] .WHO, UNICEF and UNFPA had reported an estimate of India and Nigeria account for a third of maternal deaths worldwide[(2)]. A quarter of the world's unattended deliveries occur in India [(3)] India alone accounts for 22% of pregnancy-related deaths worldwide [(2)].

One of the major concerns of the state Reproductive and Child Health (RCH) Programme, phase II, is the extremely low percentage of institutional deliveries. Among women living Below Poverty Line (BPL) and in remote villages the number of institutional deliveries is almost negligible [(4)]. Saving mothers' lives is not only a moral imperative, but a sound investment that benefits their children, their families, their communities and their countries. "Indeed, there is a clear connection between maternal health and other Millennium Development Goals, such as eradicating extreme poverty, reducing child mortality and combating HIV and AIDS and other diseases" [(5)].

In India, 75.3% of all births in rural areas occur at home [(6)]. This is mainly due to the fact that the expenditure incurred in institutional deliveries is much higher as compared to that in domiciliary deliveries. Even in government facilities, average expenditure incurred has been reported to be as high as Rs. 882 even for the BPL households. Nearly 1/3rd of the total expenditure was incurred in buying medicines/ diagnostic services from outside and 1/4th on transportation [(7)].

To combat the problem Janani Suraksha Yojana (JSY), a safe motherhood intervention was launched on 12th April, 2005 under the umbrella of NHRM with the objective of reducing maternal and neo-natal mortality by promoting institutional delivery. Uttarakhand is one of the low performing state (LPS) and Empowered Action Group (EAG) and JSY implemented in the state since Sept.2005 (8).Thus the present study was carried out with the objectives to find out the difference in utilization of Janani Suraksha Yojana in rural areas and urban slums

Material and Methods:

This cross - sectional study was conducted in the rural areas and urban slums covered under Rural Health Training Centre & Urban Health Training Centre of department of Community Medicine,HIMS, Dehradun. The study was carried over a period of 12 months (15May-08 to 14th May-09).

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Received: 18/02/11 **Accepted:** 19/06/11

Since the scheme had completed more than two years at the time of conduction of the study of all the married women who had delivered within last two years were interviewed for utilization of JSY services (ANC visits, IFA, TT immunization, Incentives etc). For the purpose of this study detailed information was collected on a self –designed and pre-tested questionnaire.

All the data collection forms were checked routinely for completeness and consistency and all errors and discrepancies were corrected. The data was entered in SPSS software version 10 and subsequently analyzed using SPSS and Epi Info software (with Yate's correction).

Results:

The study showed that 21.58% women were not registered at the health facility. They did not receive any ANC services (IFA tablets, Antenatal visits, T.T immunization) but their deliveries were institutional. Out of the total number of married women who delivered at govt. hospital i.e. 227, majority (78.42%) of the women were registered with some health personals. Out of these two-third (74.15%) of the women were registered with ASHA and maximum number (83.64%) of these women belonged to urban slums (Table 1).

Table 1: Distribution of married women (15-49 years) according to registration

S. No.	Registered (<12 weeks)	No. of married women who delivered in last 2 years					
		Rural	Urban slums	Total (%)	Zcal	Z.01	p value
		n=88	n=139	n=227			
1	No	20 (22.7)	29(20.86)	49(21.58)	0.3309	2.58	p>.01
2	Yes	68 (77.2)	110(79.14)	178(78.42)	0.3304	2.58	p>.01
a	with ASHA	40 (58.8)	92(83.64)	132(74.15)	3.55	2.58	P<.01*
b	with ANM	20 (29.4)	18(16.36)	38(21.35)	1.99	2.58	p>.01
c	with AWW	08 (11.7)		08(4.50)	3.007	2.58	P<.01*

It was found that only 29.21% women went for three or more ANC visits and the proportion was higher (33.64%) in urban slums. Only 48.31% women consumed hundred IFA tablets and the proportion was high (79.41%) in women belonging to rural areas. All the women received complete TT immunization (Table 2).

Table 2: Distribution of married women (15-49 years) according to ANC services received

S. No.	ANC services	No. of married women who delivered in last 2 years		Total (%) N=178	Zcal	Z.01	p value
		Rural n=68	Urban slums n=110				
II	No. of ANC visits						
(a)	< Three	53 (77.9)	73 (66.3)	126 (70.7)	1.05	2.58	p>.01
(b)	?Three	15 (22.0)	37 (33.6)	52 (29.2)	1.71	2.58	p<.01*
III	No. of IFA tabs consumed						
(a)	100 tabs	54 (79.4)	32 (29.0)	86 (48.3)	7.69	2.58	p<.01*
(b)	<100 tabs	14 (20.5)	78 (70.9)	92 (51.6)	7.69	2.58	p<.01*
IV	Received TT immunization						
	Yes	68 (100.0)	110 (100.0)	178 (100.0)	0	2.58	p>.01

* The difference is statistically significant.

It was revealed that only (44.05%) of the women were accompanied by ASHA at the time of delivery, out of these majority (87.50%) of women were from rural area. In majority (60 %) of the cases ASHA stayed with the index case for a period of one day out of which higher proportion (62.34%) of women belonged to rural areas. In only 7% cases, ASHA stayed with the index case for more than two days and all of these belonged to rural areas. More number of the women stayed in the hospital for 1-3 days i.e. 46.26% followed by (44.93%) women who stayed in the hospital for less than a day (Table 3).

Table 3: Distribution of women (15-49 yrs) according to services provided at the time of delivery

SNo	Services at the time of delivery	No. of married women who delivered in last 2 years		Total (%) N=227
		Rural n=88	Urban slums n=139	
1	Pregnant lady accompanied by ASHA at the time of delivery			
	No	11(12.50)	116(83.45)	127(55.95)
	Yes	77(87.50)	23(16.55)	100(44.05)
	(a)Duration of stay of ASHA with index case			
	< few hrs	10(12.98)	08(34.78)	18(18.00)
	1 day	48(62.34)	12(52.17)	60(60.00)
	1-2 days	12(15.58)	03(13.05)	15(15.00)
	>2 days	07(9.10)	_	07(7.00)
	(b)Duration of stay of index case in hospital			
	<1day	44(50.00)	58(41.73)	102(44.93)
	1-3 days	28(31.82)	77(55.40)	105(46.26)
	4-8 days	16(18.18)	04(2.87)	20(8.81)

SNo.	No. of PNC visits	No. of married women who delivered in last 2 years		Total (%) N=227
		Rural n=88	Urban slums n=139	
1.	Facilitation by ASHA for PNC visits			
	No	58(65.90)	95(68.35)	153(67.40)
	Yes	30(34.10)	44(31.65)	74(32.60)
	one	02(6.67)	05(11.36)	07(9.46)
	Two	10(33.33)	12(27.27)	22(29.73)
	Three	6(20.00)	14(31.82)	20(27.03.)
	>Three	12(40.00)	13(29.55)	25(33.78)

Only 32.60% of the women were facilitated by ASHA for PNC visits and the proportion was slightly higher (34.10%) in rural areas. Only in 33.78% women more than three PNC visits were facilitated by ASHA followed by 29.73% women in whom two PNC visits were facilitated by ASHA. In both the cases the proportion was higher in rural areas i.e. 40 % and 33.33% respectively (Table 4).

Table 4: Distribution of women (15-49 yrs) according to no. of PNC visits

Greater percentage (44.93%) of the women received incentive after a month of delivery. Only 9.7% had received incentive at the time of discharge. In majority (48.47%) of the women the money was given by clerk/ANM followed by ASHA (36.56%).Majority (85.46%) of the women had no difficulty in receiving money and the proportion was approximately equal in rural areas and urban slums.

Discussion:

In the present study, 78.42% of the women were registered within 12 weeks of pregnancy with health personnel. A greater percentage (85%) of women were registered early, according to a study in Rajasthan (Ramakant Sharma, 2006-07) [9].

The percentage (91.4%) of JSY beneficiaries who were registered with the health personnel was found to be very high in Orissa but only 19.3% beneficiaries in Orissa were reported to register themselves in the first trimester, according to UNFPA report (Bella Patel Uttekar et al,2007)[10]. Shobha Malini et al in Orissa (2008) reported that a lower proportion (70%) of beneficiaries registered themselves in the first trimester [11].

As compared to our country where 44% women went for early registration (NFHS-3) [12], a lower figure of women registering in first trimester i.e. 26.20% was reported from a study by Kasabiiti jennifer Asiimwe regarding the utilization of antenatal services among adolescents (Uganda, 1998) [13].Only 18.8% women in the reproductive age group registered themselves in the first trimester according to a study by C L Ejembi (Nigeria, 2004) [14].

In the present study, only 29.21% women went for three or more ANC visits. A lower percentage (32.1%) of women went for four or more ANC visits according to a study in Andhra Pradesh by K.Mallikharjuno Rao (2000), regarding utilization of RCH services (15).Almost all the women (99%) went for three or more ANC checkups according to a study by S.Sumitra in Kerala (2006), regarding MCH services utilization. The reason could be high literacy status of women in Kerala [15].

The percentage of women who went for three or more than three ANC checkups was also reported to be high in West Bengal, Assam and Orissa i.e. 97.8%,89.6% and 83% i.e. 83%,97.8% and 89.6% respectively and comparatively low in U.P, M.P and Rajasthan i.e72.8%,65.5% and 65.4% respectively (MOHFW,2007)[17].

According to NFHS-3, almost half the women (52%) received three or more antenatal checkups across India. As compared to our country E. Materia et al (Ethiopia,1993) reported that a greater proportion (61%) of the women received antenatal care reported having had 3 or more visits according to a study regarding MCH service utilization[18].

In the present study, only 48.31% women consumed hundred IFA tablets. A smaller proportion of women in our nation [12] and state [19] consumed hundred IFA tablets as per NFHS-III data i.e. 26% and 23% respectively.

The percentage of women who consumed hundred IFA tablets was found to be very high i.e. 98% in Kerala (S.Sumitra, 2006) [16].The possible reason could be high literacy status of women in Kerala. According to another study by Ramakant Sharma (Rajasthan, 2006-07), a slightly lower percentage of women i.e. 86.5% received hundred IFA tablets[9] .Comparable findings were reported in Madhya Pradesh by D K Pal et al (2008) where 82% women consumed hundred IFA tablets[20].

In the present study, all the women received complete TT immunization. However, the percentage was found to be low across India (12) and our state (19) i.e.69% and 76% respectively (NFHS-III) .Almost all the women from Kerala received complete complete TT immunization i.e. 99% according to a study by S.Sumitra (Kerala, 2006) [16].High literacy status of women in Kerala may be responsible for this. A lower percentage of women in Rajasthan received complete TT immunization i.e. 82% according to a study by Population Research Centre (Ramakant Sharma, 2006-07) [9].

Conclusion:

JSY utilization was found to be low in rural areas..Thus, to improve the utilization of services among rural women: IEC activities with emphasis on maternal and child health should be strengthened. The incentives given to the mother and

ASHA should be given in installments according to the services received and given so as to ensure their participation throughout the antepartum, intrapartum and postpartum period. ASHA's work should be regularly monitored. Transport facilities including ambulance services should be made available for timely assistance.

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Source of Support: Nil, **Conflict of Interest:** None