

# ORIGINAL RESEARCH ARTICLE

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# A study on Awareness and Utilization of Rashtriya Swashtya Bima Yojana among Beneficiaries in Jamnagar District, India

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## **ABSTRACT**

**Background:** In India, poverty is propagated due to sickness, 1% of the poor fall below the poverty line due to their illness, and 65% of the poor in India get further into debt. To reduce Out of Pocket expenditure for health care and financial burden on the poor, a national health insurance scheme, Rashtriya Swasthya Bima Yojana (RSBY) was launched on 1st April 2008.

**Aims & objectives:** The present study was conducted to assess the socio-demographic profile of beneficiaries of RSBYand to assess the knowledge of the respondents regarding various components of RSBY.

**Materials and methods:** Total 300 household were interviewed from Jamnagar district. A pretested semi structured questionnaire was used to interview a respondent from the family. The data entry and data analysis was done using EPI INFO version 3.5.3, Microsoft Office Excel 2007 and MedCalc version 15.11.3.

**Results:** Most of the RSBY card holders were aware about registration cost but other features of RSBY like transportation cost, accommodation, free food etc. were not known to them.

**Conclusion:** We can conclude that awareness about scheme features is very less hence extra efforts needs to be put into.

**Key word:** Rashtriya Swasthya Bima Yojana (RSBY), knowledge, Attitude

### **INTRODUCTION**

Poverty is a relative phenomenon and multi-faced wretched state of deprivation of basic minimum needs, facilities and services. There are different levels to its adverse influence on individual, family and community.<sup>1</sup>

Poor health not only leads to financial bankruptcy but also gives many sufferings to the affected individual and their family. Health is a fundamental human right and it is the responsibility of the governments, both at the central and states, to provide health care to all people in equal proportions. Total health care boosts economic growth, reduces poverty and lowers mortality rates. The saga of success of many countries lies in their special effort to provide the entire population with good health care facilities.<sup>2</sup>

The Indian public health care system suffers from inadequate funds, poor infrastructure, lack of quality care and poor accessibility for large sections of the rural population. These factors force a number of low-income households to visit private providers and relatively more expensive health care that result in significant OOP expenditure.<sup>3</sup>

Announcement regarding Rashtriya Swasthya Bima Yojana (RSBY) was done by the former Prime Minister Manmohan Singh on August 15, 2007.<sup>4</sup>It has been an important step for efforts to provide quality health care to the poor and underprivileged population.<sup>3</sup>The RSBY was launched on 1<sup>st</sup> April 2008, explicitly to protect the poor from catastrophic hospital expenditure.<sup>5</sup>

RSBY is India's first social security scheme that embraces a profit motive, and is a good example of

public-private partnership in the social sector.6

All poor households in the nation below poverty line (BPL) are eligible to enroll in this scheme. RSBY is a voluntary private health insurance scheme, wherein a BPL family of (maximum) five people can be enrolled with Insurance Company by paying a token enrolment fee of INR 30 per family per year. Insurance companies enroll BPL families and provide them with a RSBY "smart card" that contains the biometric details of the enrolled family; the smart card is necessary for all transactions at the hospital. The premium for each family is being paid by the government directly to the insurance company.<sup>7</sup>

This national health insurance scheme aims at providing health insurance to households living below poverty line in order to protect them from major health shocks that involve hospitalization up to INR 30,000.8

Those BPL people are usually penniless and illiterate or semi-illiterate and many of them now are migrant workers hence RSBY beneficiaries' utilization of inpatient healthcare is cashless, paperless and highly portable. Despite so many advantages, it is very surprising that the enrolment rate and utilization of RSBY are still very low.9

The current study intended to know about knowledge, Attitude and Utilization of RSBY among beneficiaries in study district and explore various factors that influence people's decision to join or the barriers to enrollment in the scheme.

## MATERIALS AND METHODS

There were6 talukas in the study district, which includes 431 villages. According to census 2011, population of the study district is 14, 07,635 (Urban: 7, 29,270; Rural: 6, 78,365). Males constitute 51.61% of the population and females 48.39%. The male: female ratio is 1000: 938.10 There were 86,059 BPL families in study district. Among them 23,508 were RSBY card holders.

The present study was a cross sectional study conducted in urban and rural areas of the study district. The study was carried out from Aug 2014 to July 2015.

Sample size: To calculate sample size for assessment of awareness of beneficiaries, pilot study was conducted. It was found that awareness regarding various RSBY components like amount of coverage, empanelled hospitals and travelling allowance to be 60%. At 95% confidence limit and 10% relative precision, using following formula, sample size was calculated to be 256. After adding 10% refusal rate it came to be 282 which was rounded up to 300. Half of the sample was selected from urban and rural areas.

Sample size (N) = {  $\mathbb{Z}^2_{1-\alpha/2} * P(1-P)$ } / $\varepsilon^2$  Where,  $\mathbb{Z}_{1-\alpha/2}$ represent the number of standard errors from the mean ( $Z_{1-\alpha/2}$  is function of confidence level); P was anticipated population proportion (in this study it is 60%) and  $\varepsilon$  was relative precision (in this study it is 10%)

Sampling method and sample selection: To represent rural population one village from each taluka and for urban population one urban ward from each taluka were selected by simple random sampling. Household selection from each selected village and urban ward was done from the list of enrolled BPL families available on the website using systemic random sampling

Ethical approval was taken before the commencement of the study from the ethical committee of the concerned institution.

A pretested semi structured questionnaire was used to interview a respondent from the family. General demographic profile of enrolled family members, utilization of RSBY scheme and awareness regarding various components of RSBY were collected.

House to house visit of the selected beneficiaries or patients was done. The purpose of the study was explained and informed verbal consent was obtained before starting the interview.

**Statistical analysis:** The data entry was done using EPI INFO version 3.5.3 and data analysis was done using EPI INFO version 3.5.3, Microsoft Office Excel 2007 and MedCalc version 15.11.3.

### **RESULTS**

Table 1 shows that there were 83.3% male headship and 16.7% female headship in studied households. Out of total 150 rural beneficiaries, there were 124 (82.7%) male headships and 26 (17.3%) female headship. While out of 150 urban beneficiaries, there were 126 (84.0%) male headships and 24 (16.0%) female headships. More than three fourth i.e. 78.7% beneficiaries belonged to the Hindu religion. Only 27.3% in rural and 15.3% in urban were Muslims. None of the beneficiaries belonged to other category like Sikh, Christian etc. Majority of the beneficiaries were from SEBC category (65.3%). Lowest percentage of beneficiaries belonged to ST category (4.0%). In rural area 74.0% and in urban area 56.7% belonged to SEBC category. Type of structure of the household was also a parameter to determine the poor status of the households under study. Most (61.3%) of the households belonged to kutcha structure category.

Table -1: General information of Household

Characteristics	Rural (%)	Urban (%)	Total (%)		
N	150	150	300		
Household headship					
Male headship	124 (82.7)	126 (84.0)	250 (83.3)		
Female headship	26 (17.3)	24 (16.0)	50 (16.7)		
Family size					
<=5	93(62.0)	99(66.0)	192(64.0)		
>5	57(38.0)	51(34.0)	108(36.0)		
Religion					
Hindu	109 (72.7)	127 (84.7)	236 (78.7)		
Muslim	41 (27.3)	23 (15.3)	64 (21.3)		
Social group					
SEBC	111 (74.0)	85 (56.7)	196 (65.3)		
SC	15 (10.0)	23 (15.3)	38 (12.7)		
ST	8 (5.3)	4 (2.7)	12 (4.0)		
Other	3 (2.0)	16 (10.7)	19 (6.3)		
Don't know	13 (8.7)	22 (14.7)	35 (11.7)		
Type of house structure					
Pucca	56 (37.3)	47 (31.3)	103 (34.3)		
Kutcha	87 (58.0)	97 (64.7)	184 (61.3)		
No structure	7 (4.7)	6 (4.0)	13 (4.3)		

Table -2: Socio demographic profile of household members

Rural (%)	Urban (%)	Total (%)			
612	590	1202			
335 (54.7)	312 (52.9)	647 (53.8)			
277 (45.3)	278 (47.1)	555 (46.2)			
Age wise distribution					
197 (32.2)	166 (28.1)	363 (30.2)			
131 (21.4)	126 (21.4)	257 (21.4)			
108 (17.6)	75 (12.7)	183 (15.2)			
83 (13.6)	79 (13.4)	162 (13.5)			
93 (15.2)	144 (24.4)	237 (19.7)			
<b>Education qualification</b>					
196 (33.2)	206 (35.9)	402 (34.5)			
236 (40.0)	193 (33.6)	429 (36.9)			
127 (21.5)	120 (20.9)	247 (21.2)			
24 (4.1)	29 (5.1)	53 (4.6)			
7 (1.2)	26 (4.5)	33 (2.8)			
	335 (54.7) 277 (45.3) n 197 (32.2) 131 (21.4) 108 (17.6) 83 (13.6) 93 (15.2) ion 196 (33.2) 236 (40.0) 127 (21.5) 24 (4.1)	612 590  335 (54.7) 312 (52.9) 277 (45.3) 278 (47.1)  197 (32.2) 166 (28.1) 131 (21.4) 126 (21.4) 108 (17.6) 75 (12.7) 83 (13.6) 79 (13.4) 93 (15.2) 144 (24.4) 100  196 (33.2) 206 (35.9) 236 (40.0) 193 (33.6) 127 (21.5) 120 (20.9) 24 (4.1) 29 (5.1)			

In both rural and urban areas majority (58.0% and 64.7% respectively) of household belonged to kutcha structure category. Pucca structure was reported by 37.3% and 31.3% in rural and urban areas respectively.

Table 2 shows that there were 53.8% male beneficiaries and 46.2% female beneficiaries. This distribution remains same in rural and urban area. The figures go in concurrence with the state trend. There were 30.2% of beneficiaries below the age of 20 and 19.7% of beneficiaries belonged to the age group of above 50 years. In rural areas maximum 32.2% beneficiaries belonged to the age group of below 20 years and minimum i.e., 13.6% beneficiaries belonged to the age group of 40-49 years, while in urban areas maximum 28.1% beneficiaries belong to the age group of below 20 years and mini-

mum i.e., 12.7% beneficiaries belong to the age group of 30-39 years. Among studied beneficiaries, 34.5% were illiterate, more than one third (i.e. 36.9%) studied up to primary level followed by 21.2%, 4.6% and 2.8% as having education up to secondary, high secondary and graduate & above level respectively. In rural areas majority 40.0% studied up to primary level and only 1.2% studied up to graduate & above level.

Table 3 shows that majority (i.e.88%) respondents had heard about RSBY scheme. In rural areas 91.3% and in urban areas 84.7% beneficiaries had heard about RSBY scheme. Majority (i.e. 90.0%) of beneficiaries were aware about registration fee in rural area. This proportion was higher as compared to urban area and difference is statistically significant. Around half (i.e. 50.0% and 42.7%) of the beneficiaries were aware about cost covered under RSBY scheme and number of family members covered respectively in rural area. This proportion is also higher as compared to urban area but difference is not significant. Only 4.0% of beneficiaries were aware about transportation cost in both areas. None of beneficiaries were aware about free accommodation of attendant under scheme in both rural and urban areas.

Table 4 shows that majority of beneficiaries were getting benefit of this scheme since more than 2 year. Majority (62.7%) of beneficiaries in urban and 51.3% of beneficiaries in rural areas had been enrolled in this scheme since more than 2 year. Around 54 (18.0%) of beneficiaries were getting benefit of this scheme. Majority (23.3%) of beneficiaries in urban and 12.7% of beneficiaries in rural areas were getting benefit of this scheme.

## **DISCUSSION**

The success of RSBY largely depends on the local understanding of the dimensions of the scheme and determinants of access to health services. Over the time, increased awareness should raise the utilization rates. The understanding of different features of RSBY is very important for enrolment as well as hospitalization by use of smart cards. Though the macro level awareness about availability of RSBY is very high, additional efforts are needed to enhance the level of awareness about the features of the scheme (like affordability and accessibility to health facilities) amongst the beneficiaries. The intrinsic benefits of the scheme to households are obvious, but issues of awareness and understanding of the program remain.

In the study conducted in Udupi district, India by Ramachandra Kamath (2014) observed that the majority (70.9%) of household were headed by men.<sup>11</sup> This was different than our findings.

Table-3: Association between awareness regarding RSBY scheme and locality of beneficiaries

Awareness about	Rural (%)	Urban (%)	Total (%)	P-value
N	150	150	300	
Heard about scheme	137 (91.3)	127 (84.7)	264 (88.0)	0.076
Since how many years this scheme is going on	30 (20.0)	26 (17.3)	56 (18.7)	0.553
Scheme cost	75 (50.0)	65 (43.3)	140 (46.7)	0.247
Registration fee	135 (90.0)	115 (76.7)	250 (83.3)	0.002
Hospitals covered	43 (28.7)	39 (26.0)	82 (27.3)	0.604
Number of family member covered	64 (42.7)	50 (33.3)	114 (38.0)	0.096
Free food provide by hospital	4 (2.7)	1 (0.7)	5 (1.7)	0.185
Transportation cost	5 (3.3)	7 (4.7)	12 (4.0)	0.385
Accommodation of attendant	0 (0.0)	0 (0.0)	0 (0.0)	-

Table-4: Distribution based on since how long the beneficiaries are enrolled in RSBY scheme& utilization of RSBY scheme by the beneficiaries

Duration of enrollment in RSBY & utilization of RSBY scheme	Rural N=150	Urban N=150	Total N=300	P-Value
More than 2 years	77 (51.3)	94 (62.7)	171 (57.0)	0.04
Utilization of RSBY scheme	19 (12.7)	35 (23.3)	54 (18.0)	0.01

As per the RSBY insurance scheme, BPL families having 5 members or up to 5 members are entitled to get the benefit of the scheme. The size of the family hence is important to understand if all the members in the families under study avail the benefits of the scheme. The findings in this regard revealed that majority (64.0%) of the families under study were having a family size of 5 or less members. Household with >5 members were 36.0%. This distribution was same in rural and urban area i.e. 62.0% and 66.0% respectively having a family size of 5 or less members. Same distribution in rural and urban area i.e. 38.0% and 34.0% respectively were having a family size >5 members.

In the study "Facility Level Survey to Assess Quality of Hospitals in RSBY Network & Post Utilization Survey of RSBY Patient Experience at Empanelled Hospitals in Kerala" it was observed that 42.6% of the households under study were having a family size of 3 members followed by 31.5% with 4 family members. Households with 2 and 5 members were the least with 13% each. 12 This was different than the current study may be due to higher level of education in Kerala.

P.P. Mini (2013) in his study found that the Christian families figured quite prominently with 38.4%. Hindus and Muslims succeeded with 28.4% and 30.4% respectively. There are about 2.8% beneficiaries in the category of others. <sup>13</sup>This was different than the current study.

Similar observation found in Ramachandra Kamath (2014) study that A larger majority belonged to the other backward class (OBC) (enrolled = 73.4% and non-enrolled = 79.7%).<sup>11</sup>

In the study "Facility Level Survey to Assess Quality of Hospitals in RSBY Network & Post Utilization Survey of RSBY Patient Experience at Empan-

elled Hospitals in Kerala" it was found that most of the households belonged to 'semi pucca' structure category. Pucca structure was reported by 30.6% while 2.8% and 3.7% each stated about the absence of structure or unserviceable kutcha respectively. Serviceable kutcha structure was mentioned by 16.7%. <sup>12</sup>This finding was similar as present study.

Similar finding seen in the study of P.P. Mini thatthere were 53.2% male beneficiaries and 46.8% female beneficiaries in Ernakulam district, 51.4% male beneficiaries and 48.6% female beneficiaries in Wayanad district.<sup>13</sup>

P.P. Mini (2013) in his study found that majority of the beneficiaries (about 40.3%) were in the category of above 50 years, followed by 32.8% in the category of 40-50 years, 17% in the category of 30-40 years, 8.6% in the category of 20-30 years and only 1.3% of the beneficiaries coming below the age of 20 years.<sup>13</sup>

Ramachandra Kamath (2014) in his study observed that the majority of participants admitted had completed primary education (enrolled = 45.6% and non-enrolled = 56.3%).<sup>11</sup>

In the study "Evaluation Study of Rashtriya Swasthya Bima Yojana in Shimla & Kangra Districts in Himachal Pradesh" it was observed that 89.50% RSBY Enrolled household were aware about registration fee i.e., Rs. 30 followed by 73.40% awareness of maximum enrolment of 5 members of household and only 4.20% were aware about transportation allowance.<sup>14</sup>

In the study "Evaluation of implementation of Rashtriya Swasthya Bima Yojana in selected districts of Bihar, Uttarakhand and Karnataka" it was noted that highest (91.6%) in Uttarakhand and 84.7% in Bihar were aware about registration fee for enrolment. More than 70% were aware of the 5



members limit. More than 3/4th of the enrolees reported that they were aware of the coverage under RSBY scheme.15

P.P. Mini (2013) in his study observed that 36.0% of the beneficiaries were aware of free food to the patient during hospitalization and travelling allowance of Rs. 100/-.13

#### **CONCLUSION**

Out of total 300 households, most of the familieswere having male headship, fulfilling family size criteria of RSBY, fall in the SEBC category and belonged to kutcha structure category. More than one-third beneficiaries were illiterate andstudied up to primary level respectively. In rural area majority of beneficiaries was aware about registration fee, cost covered under RSBY scheme and number of family members covered. Few beneficiaries were aware about provision of transportation cost and none of the beneficiaries was aware about free accommodation of attendant under scheme in both rural and urban areas. Majority of beneficiaries had heard about RSBY scheme and were getting benefit of this scheme since more than 2 year.

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