

## ORIGINAL ARTICLE

# Knowledge & Utilization of Rashtriya Swasthya Bima Yojana & Mukhyamantri Amrutam Yojana in a Block of Gandhinagar, Gujarat.

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<a href="#">Abstract</a>	<a href="#">Introduction</a>	<a href="#">Methodology</a>	<a href="#">Results</a>	<a href="#">Conclusion</a>	<a href="#">References</a>	<a href="#">Citation</a>	<a href="#">Tables / Figures</a>
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## Abstract

**Background:** Major illness requiring hospitalization in poor family makes the family poorer with further tragic outcomes. In that view, Rashtriya Swasthya Bima Yojna (RSBY) by GOI and Mukhyamantri Amrutam (MA) Yojna by Gujarat Government were launched for Below Poverty Line families. **Aims & Objectives:** To assess knowledge and utilization regarding these two schemes amongst the registered families. **Material & Methods:** A community-based survey was carried out in a block of Gandhinagar using 30 clusters sampling. Sample size was calculated taking RSBY utilization rate 2.0%. **Results:** 98.4% had RSBY card & 83.7% had MA card. Common reasons for not having card were either “card not issued/people did not go to collect card” or “were unaware about the schemes/card”. Only 1.5% families had valid RSBY cards. Knowledge regarding both the schemes (when & where to use, benefit amount etc.) was very poor (20- 25%). RSBY & MA utilization among valid card holders for last 1 year was 1.2% & 0.2% per enrolled member respectively in last 1 year. In both RSBY & MA, 30 – 40% beneficiaries had out of pocket expenditure, mainly towards transport & food. Few had towards medicines and/or investigations. However, most were satisfied with the services. **Conclusion:** Looking to the poor knowledge, it is important to carry out IEC activities to make people aware about the schemes which will help increase the utilization.

## Keywords

RSBY; MA; Health Insurance; Knowledge; Utilization

## Introduction

For below poverty line (BPL) families, an illness not only represents a permanent threat to their income earning capacity, but also could result in the family falling into a debt trap. It consumes their savings, forces them to sell their assets or cut other important spending like children’s education. Ignoring the treatment may lead to unnecessary suffering and death.(1)

To avoid such tragic outcomes, Government of India (GOI) introduced Rashtriya Swasthya Bima Yojna (RSBY) in early 2008. In Gujarat, RSBY scheme was extended to all districts in year 2011-12. It targets BPL households and provides cashless hospitalization up to Rs. 30,000 per annum per household. Beneficiaries need to pay Rs. 30/- as registration fee and the card needs to be renewed annually.(1)

Mukhya Mantri Amrutam (MA) Yojana (2) was introduced by Government of Gujarat (GOG) in 2012 to help BPL families in cases of treatment of cardio vascular surgery, neurosurgery, sever kidney diseases, cancers, burns, poly trauma and severe neonatal illnesses. Beneficiaries are entitled to cashless hospitalization up to Rs. 2,00,000 per annum per family. No renewal is required for BPL card holders.

It is important to know the knowledge of the beneficiaries regarding the schemes and to have the information about their use to ensure their optimum utilization.

### Aims & Objectives

1. To assess the knowledge regarding RSBY & MA schemes amongst the families registered under these schemes.
2. To study the utilization of these schemes.

### Material & Methods

**Study Area:** Kalol Block (including urban area), District Gandhinagar.

**Study Population:** As eligibility criteria for both MA& RSBY are same and MA beneficiary list was the latest updated, it was selected for our study population. List of families enrolled in MA scheme was obtained from Taluka Health Office, Kalol as on January 2014. Study population and sample: Taking RSBY utilisation rate for rural population as 2% (3) ( $p=0.02$ ) and allowable error (I) as 20% of p, sample size calculated was 4900. As cluster sampling was planned taking into account the large area, design effect of 2 was considered and the final sample size came out to be 9800 enrolled individuals. As maximum of 5 members per family can get enrolled under these schemes; 1960 families were to be surveyed which was rounded up to 2000. Therefore 67 families were needed to be surveyed per cluster (total 30 clusters). However, in actual, study covered 2173 families.

**Study Method:** From each of the clusters, enrolled families were identified with the help of local health personnel (ASHA/AWW) irrespective of their use of the scheme. If there were less than 67 families in a cluster, families were taken from the next nearest village to meet the desired sample.

**Study tool:** Pre designed and pretested proforma was used to gather the information. Information was gathered by interviewing preferably the head of family or the available most elderly person in the family after taking their oral informed consent.

**Data Collection and Analysis:** Data was collected by trained paramedic staff of Department of Community Medicine under direct supervision of investigators after receiving necessary training. The data collected was entered into master chart and was analysed using MS Excel.

### Results

Out of total 2173 families surveyed, 2139 (98.4%) and 1819 (83.7 %) families had RSBY and MA cards respectively. Most common reasons for not having RSBY/ MA card were card not issued/received even after doing required procedure, did not go to collect card, unawareness about the card and no reason given/ card lost/misplaced [Table 1].

1/3rd of families had APL card, rest had BPL cards except few (3%) who did not have any type of card. The families who had health scheme cards belonged to APL, BPL or none of them in the similar proportions as of type of ration cards. 6.3% of families were SCs, 0.3% was STs and rest were others (includes SEBC/OBC/General). The families who had health scheme cards belonged to Others, SC or ST in the similar proportions as of overall caste distribution.

Considering the 1 year validity of RSBY card, only 1.5% of cards were valid at time of interview while rest were requiring renewal.

Of 2139 families with RSBY cards, Total enrolled members were 9175. However, 1368 families with 5856 members had valid RSBY cards for previous year and were considered for estimating last 1 year utilization while for MA, it was 7862 members in 1819 families. Utilization when calculated per enrolled member in last 1 year, it was 1.2% for RSBY and 0.2% for MA. [Table 2]

More than 75% of families didn't know when and where to use RSBY card and more than 95% did not know about amount of benefit can be availed, coverage of transportation allowance and need of annual renewal of card [Table 3]. More than 80% of families did not know when/in which illnesses and where to use MA card and more than 95% did not know amount of benefit can be availed or coverage of transportation allowance or card has to be renewed for those who got it on the basis of income certificate. [Table 4]

Commonest age group of patients who utilized RSBY was 21- 40 years among which 68% were the female beneficiaries. Most common morbidities for which RSBY was used were delivery/ miscarriage (20.6%)

followed by hysterectomy (16.2%) and surgery for stone (8.8%). Most beneficiaries (60.3%) took the benefit of RSBY from private/ trust hospital. 32.3 % beneficiaries had out of pocket expenditure (OPE) with a range between Rs 150 and Rs 25000 ( $7 \leq$ Rs 1000, 10 between Rs 1000 & Rs5000 &  $5 \geq$  Rs 5000). In cases where this expenditure was  $\leq$ Rs 1000, it was mainly towards transport and food while those who had spent over Rs 1000, cost was also for medicine/investigations/consultation. In few cases, hospital authority did not approve card (probably it was not empanelled). A beneficiary could produce card not on admission but on discharge and did not get benefit. One beneficiary got benefit after visiting multiple hospitals and in the process had to shell out money. [Table 5]

Majority of patients who utilized MA were in age group of 31- 50 years with 70% of male beneficiaries. Heart related ailments (47.1%) followed by cancers (35.3%), fracture (11.8%) and brain surgery (5.9%) were common morbidities for utilization of MA. All beneficiaries received benefit from government hospital. 41 % beneficiaries had some OPE with a range between Rs 500 and Rs 1, 30,000; in all cases it was towards transport and/or food & medicines except one where beneficiary suffered from spine fracture and had to spend for investigations and consumables of surgery [Table 6]. However, most of the beneficiaries who utilised the RSBY/MA schemes were satisfied with the service.

## Discussion

In the present study, 98.4% and 83.7 % of surveyed families had RSBY and MA cards respectively even though they were enrolled with common reasons for not having cards were card not issued/received even after doing required procedure, did not go to collect card and unawareness about card. Others were no known reason, card lost/misplaced or no information of camp or out of home/village at time of camp etc [Table 1]. If the smart cards can be given on the same day, most common two reasons can be taken care of. The above-mentioned various reasons also indicate that people are not sensitized for the usefulness of these scheme cards. We could not find other studies showing reasons for not having card after enrolment.

Though the schemes were for BPL, one third of families who had health scheme cards belonged to APL, possibly because BPL list was not updated. Only 1.5% of families had valid cards or usable cards for

that year at time of interview while rest required renewal, which is a cause of concern because 98.5% of families would be out of scope of using the scheme if cards are not renewed.

In this study, knowledge regarding both the scheme was very poor [Table 3 & Table 4]. More than 75%-80% of families didn't know when and where to use RSBY/MA card and more than 95% did not know amount of benefit can be availed, entitlement for transportation allowance and regarding renewal of card indicating weakness in dissemination of these information in community. In study conducted at Chhattisgarh (4), when inquired about the purpose of smart card, the majority of patients simply understood it to be along the lines of "health insurance" or a "free medical services". Awareness regarding the amount available under the scheme was high (90%), while that of the Smart Card validity period was just 25%. In a study conducted in urban slums of Ahmedabad city (5), knowledge of RSBY was ranged from 29.0 to 43.1% among households and that of MA from 23.7 to 36.0% among households. Study in Amreli (6) district of Gujarat with small sample size, showed good awareness about RSBY i.e. 70% awareness regarding amount of benefit, 53% for coverage of transportation and 75% regarding renewal. As per post enrolment survey in Gujarat (7) Around 53% knew that free treatment is provided in hospitals under this scheme, 33.7% of the respondents knew about coverage of transportation allowances followed by 11.6% knew that they do not have to pay for medicines and drugs.

Utilization of these schemes for previous 1 year in this study was again very less i.e. 1.2% for RSBY and 0.2% for MA per enrolled member looking to the hospitalization rate as per NSSO 71st round (8), which was 3.5% in rural and 4.4% in urban. So, there is a scope of increasing utilization rate, probably, if awareness regarding the use of scheme can be increased. In a study conducted in urban slums of Ahmedabad city,(5) utilization of RSBY ranged from 7.8 to 37.5% among households and that of MA from 8.0 to 13.8% among households. In a study conducted in 229 districts of 22 states of India in 20119, overall hospitalization ratio was 2.4% of all enrolled individuals with range of 0.1% in Assam to 5.2% in Kerala.

Commonest age group of patients who utilized RSBY [Table 5] in this study was 21- 40 years with higher proportion of female beneficiaries which can be correlated with common morbidities for which RSBY

was used i.e delivery/ miscarriage (20.6%) and hysterectomy (16.2%) followed by surgery for stone/tumour/cataract and others. In a study conducted at Chhattisgarh (4), the common reasons for seeking care under the scheme were weakness (33%), fever (18%), surgery (13%), abdominal pain (10%), accidents (9%) followed by diarrhoea/dysentery/vomiting, C-Section, paralysis and AIDS. In an evaluation study in 3 states of India<sup>10</sup>, majority (90%) used the smart card for treatment of diseases i.e. urinary disorders, stomach ailments to cataracts. 8% used RSBY smart card for treatment during accidents. Use for maternity benefits is reported to be very low (2%).

In present study, about 60% availed the benefit of RSBY from private/ trust hospital. Similarly, in an evaluation study in 3 states of India (9), high proportion (78%) took benefit from Private hospitals. An evaluation study in Chhattisgarh (10) showed private hospitals captured 53.1% to 55.1% of smart card holders in rural and 51.6 to 71.4% in urban areas. In present study, 32.3 % beneficiaries had OPE with a range between Rs 150 and Rs 25000 with average being around Rs. 4800. It was mainly towards transport and food and/or for medicine/investigations/consultation, which in few because of going to unempanelled hospital, forgetting to take card on admission or wandering to multiple hospitals before reaching to empanelled hospital. In study of Chhattisgarh (4), 37% incurred OPE with average amount of Rs 686. Most had expenditure on medicines, followed by doctor fees, in diagnostic, on food, as tip to the nurse and 48% were unaware of the purpose for which the money had been solicited. In a Study in Amreli (6) district of Gujarat, 38% has reported to pay for different services at the hospital despite of having RSBY card i.e. transportation, food & lodging for family members, medicines and diagnostic tests. Out of these beneficiaries, 55% had to pay more than Rs 3000 to avail services with mean treatment cost being Rs 5786.

No studies could be found regarding utilization pattern of MA scheme. In present study, majority of patients who utilized MA [Table 6] were in age group of 31- 50 years with 70% being males. Heart related ailments (47.1%) followed by cancers (35.3%), fracture (11.8%) and brain surgery (5.9%) were common morbidities for utilization of MA. All beneficiaries received benefit from government hospital. 41 % beneficiaries had some OPE with a

range between Rs 500 and Rs 1, 30,000; in all cases it was towards transport, food & medicines except one where it was towards investigations and consumables of surgery also.

Most of the beneficiaries were satisfied with the services under both the schemes. Similar findings for patient satisfaction were there in other RSBY studies also (7,9,10,11,12) and in a study of MA (13).

### Conclusion

Knowledge regarding both the schemes was very poor (20- 25%) in all aspects. Utilization of the schemes was also poor. It was 1.2% & 0.2% per enrolled member respectively in last 1 year among valid card holders. However, most beneficiaries were satisfied with the services.

### Recommendation

1. Repeated IEC activities during 'Laghu Shibir', 'Guru Shibir' or 'Gram meeting' are required to increase awareness among the beneficiaries and in turn, to increase utilization of these schemes.
2. ASHA, AWW, Sanjeevni Samiti should have updated list of empanelled hospitals so that beneficiaries can be guided to these hospitals and avoid unnecessary OPE.

### Limitation of the study

The results are applicable to the study area only and may not be generalized to state or country.

### Relevance of the study

The study throws light on knowledge and utilization pattern of RSBY and MA in study area. This would help in planning awareness programme for such schemes and help improve utilization.

### Authors Contribution

Both the authors were involved in study design, supervision and preparation of manuscript. Author 1 did data analysis.

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**Tables**

**TABLE 1 REASONS FOR NON-AVAILABILITY OF RSBY/MA CARD AT TIME OF INTERVIEW**

Reason for not having card	RSBY		MA	
	No.	%	No.	%
<b>Card not received/issued / Didn't go to collect</b>	13	38.3	144	40.6
<b>Not aware</b>	7	20.6	79	22.3
<b>No reason/do not know why</b>	7	20.6	40	11.3
<b>Card lost</b>	4	11.8	65	18.4
<b>No information whether anyone has come to issue card</b>	1	2.9	12	3.4
<b>Counter closed prior to our turn in queue</b>	1	2.9	0	0
<b>Didn't know about place where cards were being issued</b>	1	2.9	1	0.3
<b>Out of Village/not at home at time of camp</b>	0	0	12	3.4
<b>Name was not in list at Taluka</b>	0	0	1	0.3
<b>Grand Total</b>	34	100.0	354	100.0

**TABLE 2 RSBY AND MA UTILIZATION AMONGST VALID CARD HOLDER FAMILIES/ENROLLED MEMBERS IN LAST 1 YEAR**

Card utilised in last 1 year	RSBY				MA			
	Families		Enrolled members		Families		Enrolled members	
	No.	%	No.	%	No.	%	No.	%
<b>Yes</b>	68	5.0	68	1.2	17	0.9	17	0.2
<b>No</b>	1300	95.0	5788	98.8	1802	99.1	7845	99.8
<b>Total</b>	1368	100.0	5856	100.0	1819	100.0	7862	100.0

**TABLE 3 KNOWLEDGE REGARDING RSBY AMONG NON-UTILIZERS**

Sr. No.	Variables pertaining to knowledge of RSBY	No.	%
1	When to use		
	During illness	481	23.2
	During accident/ For Medical treatment (1 each)	2	0.1
	Do not know	1588	76.7
2	Where to use		
	Any hospital	388	18.7
	Government hospital	67	3.2
	Government & private hospital	3	0.1
	List of Hospitals in book	2	0.1
	Do not know	1611	77.8
3	Up to what amount, benefit can be availed		
	Rs. 30,000	79	3.8
	Rs. 2,00,000	2	0.1
	Free medicines	1	0.1
	Do not know	1989	96.0
4	Whether transportation cost covered		
	Yes	32	1.5
	No	2039	98.5
5	When to renew the card		
	Every year	86	4.2
	Do not know	1985	95.8
	Total	2071	100.0

**TABLE 4 KNOWLEDGE REGARDING MA SCHEME AMONG NON-UTILIZERS**

Sr. No.	Variables pertaining to knowledge of MA	No.	%
1	When to use (N=1802)		
	During illness/major illness/ When admitted in hospital	343	19.0
	Do not know	1459	81.0
2	Name of illnesses covered under MA (responders are those who gave some answer to the above question - when to use) (N = 343)		
	Major/critical illness	34	9.9
	Cancer/ Accident/Cancer & accident/Injury/ Operation	7	2.1
	Do not know	302	88.0
3	Where to use (N = 1802)		
	Any hospital	210	11.6
	Government hospital	55	3.1
	Government and private	4	0.2
	List of hospitals in book	2	0.1
	Do not know	1531	85.0
4	Up to what amount, benefit can be availed (N = 1802)		
	2,00,000	44	2.4
	Money for health problem/medicines	4	0.2
	1,00,000/1,20,000/ Half cost of medicines	3	0.3
	Do not know	1751	97.2
5	Transportation cost covered (N = 1802)		
	No/ don't know/ can't say	1775	98.5
	Yes	27	1.5
6	When to renew MA card (N = 1802)		
	No need to renew	19	1.0
	Every year	5	0.3
	Don't know/ can't say	1778	98.7

**TABLE 5 UTILIZATION PATTERN OF RSBY (N = 68)**

Sr. No	Variables	No.	%
<b>1</b>	Age group (Years)		
	≤ 20	7	10.3
	21 – 40	32	47.0
	41 – 60	24	35.3
	≥ 61	5	7.4
<b>2</b>	Sex		
	Male	22	32.4
	Female	46	67.6
<b>3</b>	Morbidities for which RSBY used		
	Delivery/Miscarriage	14	20.6
	Hysterectomy	11	16.2
	Surgery for stone	6	8.8
	Surgery for some tumour	3	4.4
	Cataract	3	4.4
	Asthma/ Breathing difficulty	5	7.4
	Ear disease	3	4.4
	Piles	3	4.4
	Appendicectomy	2	2.9
	Hernia	2	2.9
	Fracture	2	2.9
	Surgery for unknown	2	2.9
	Snake/ insect bite	2	2.9
	Hepatitis/ Paralysis/ Abdominal pain/ TB / Chest pain/ Fever/ Electric shock/Lower limb injury (1 each)	8	11.8
	Unknown illness	2	2.9
<b>4</b>	Hospital from where benefit taken		
	Government	27	39.7
	Private/trust	41	60.3
<b>5</b>	Out of pocket expenditure		
	Yes	22	32.3
	No	45	66.2
	Don't know - beneficiary in hospital during survey	1	1.5
	Total	68	100.0

**TABLE 6 UTILIZATION PATTERN OF MA (N = 17)**

Sr. no	Variable	No.	%
<b>1</b>	Age group (years)		
	31 – 40	6	35.3
	41 – 50	5	29.4
	51 – 60	3	17.6
	61 – 70	3	17.6
<b>2</b>	Sex		
	Male	12	70.6
	Female	5	29.4
<b>3</b>	Morbidities attended		
	Cardiac surgery /treatment (MI, angioplasty, valvular surgery)	8	47.1
	Cancer	6	35.3
	Fracture	2	11.8
	Brain surgery	1	5.9
<b>4</b>	Out of pocket expenditure		
	Yes	7	41.2
	No	10	58.8
	Total	17	100.0