Evaluation of Rashtriya Swasthya Bima Yojana

Former president of World Bank Groups, Jim Yong Kim, highlighted in his speech the importance of universal health coverage in emerging economies (2014, Washington, D.C.). In addition to augmenting health outcomes, health coverage also has strong implications for economic growth and poverty reduction due to the improved productivity and earning capacity of the healthy households. With these twin effects, World Bank Group aims at ending extreme poverty by 2030 by promoting universal health coverage globally. India too has a plethora of health insurance options for its citizens, among which is *Rashtriya Swasthya Bima Yojana*, providing coverage to the unorganized sector workers. This paper aims at evaluating the scheme and elucidating the various impacts it had.

INTRODUCTION

The interdependence of economic growth and human development has made it essential for governments to promote better educational and health outcomes in order to eradicate poverty. In terms of health, studies have indicated that there exists "direct relationship between poverty and incidences of catastrophic illness" (Wagstaff, Van Doorslaer, 2003), where catastrophic illness pushes people towards a vicious cycle of poverty as substantial part of the income is used for financing treatments. In India, high health expenditure leads to substantial loss of saving as well as increased indebtedness, consequently "around 39 million Indians enter poverty each year". Furthermore, according to NSSO "out-of-pocket expenditure (OOPE) is 83% of the total health expenditure", due to which 21% and 64% of the poorest are indebted due to out-patient and in-patient care respectively (Sinha, 2013).

S. NO.	Classification of out of Pocket Expenses and Indebtness	All India	Poorest
1.	Average Out of Pocket Payments made per hospitalization in Government facilities	70	54
2.	Average Out of Pocket Payments made per hospitalization in private facilities	158	115
3.	Percentage of people indebted due to Outpatient Care	23	21
4.	Percentage of people indebted due to Inpatient Care	52	64

Fig. 1: Classification of OOPE and Indebtedness
Source: Sinha, 2013

While OOPE accounts for 78% of the health expenditure, government contribution is only 20%, which has emerged as the primary reason for increasing catastrophic expenses (Swarup, Jain, 2011). Additionally, evidence by Sinha (2013) suggests that health expenditure in terms of percentage of GDP has slightly reduced from 1990 to 2007, indicating a negligence of healthcare system. As a consequence of low healthcare spending, "Indian health-care system suffered from inadequate funds, poor infrastructure, lack of quality care and poor accessibility for large sections of the rural population" (Gill, Shahi, 2012). While the government implemented various central/state insurance schemes to address the issue, and yielding a positive outcome for its beneficiaries, the OOPE remained high due to the failure of

the scheme to include the unorganized sector. Since 94% of the workforce worked under unorganized sector, the scheme only covered 6% of the population and thus had no effect on OOPE (Sinha, 2013). Therefore, the lower government spending on health coupled with the inability to provide coverage to unorganized sector led to the negligence of the financial burden of the poorest population. Hence, Central government launched *Rashtriya Swasthya Bima Yojana* (RSBY) for the BPL population and unorganized sector.

RSBY is among UNDP's list of top 18 social security schemes and has received numerous plaudits for its structured understanding between public and private sector and successful incorporation of technology (Press Release, 24-March-2013). Yet it is argued that RSBY has failed to achieve its goals and has emerged as unviable and inefficient. Therefore, the paper explores various achievements and failures of the scheme, concluding with lessons *Pradhan Mantri Jan Arogya Yojana* (PMJAY) can learn.

RASHTRIYA SWASTHA BIMA YOJANA

Launched on April 1st, 2008 by Ministry of Labour and Employment, RSBY aimed at providing financial support and improved access to healthcare to the BPL families and unorganized sector. To overcome the failures of previous schemes, RSBY was designed to be cashless since the targeted beneficiaries belong to the poorest population group. RSBY is also portable across nation, catering the needs of the migrant workers, and requires minimal documentation (Swarup, Jain, 2011).

Under RSBY, hospitalization charges up-to INR30,000 on in-patient care, and transportation charges up-to INR1,000 per annum for enlisted family of five, is covered. Additionally, the scheme also covers "pre- and post-hospitalization expenses incurred one day before hospitalization and up to five days from the day of discharge from the hospital" (www.rsby.gov.in), and covers all the pre-existing diseases from the start of enrollment. To ensure portability, the scheme uses biometric smart-card technology, enabling the beneficiaries to avail benefits from hospitals within the network. The financing of the insurance premium is shared as 75:25 between the Central Government and State Government, while the beneficiary has to pay INR30 for registration and INR60 for the smart card. The share is 90:10 for Jammu and Kashmir and the North-eastern states, and in Union Territories without a legislature the scheme is entirely funded by the Centre. Since April 1st 2015, "RSBY scheme has been transferred to the Ministry of Health and Family Welfare" (MoHFW, Annual Report 2018-19).

The scheme is implemented in a complex, yet well-defined manner, with balanced cooperation between public and the private sector. Once scheme is implemented in a district, Government delegates work with *State Nodal Agency* an independent body, which is responsible for preparing BPL data in the prescribed format. After preparing the list, agency identifies the Insurance Companies in order to "outsource managerial services which is difficult for government due to manpower constraints" (Swarup, Jain, 2011), and selects them through an open bidding process. After the insurers are selected, they are responsible for facilitating enrollment process by setting up mobile stations equipped with technology for recording biometric information. The stations also have a government official called *Field Key Officer* who is responsible for checking the authenticity of the process, and approval of generated smartcards before distributing them to the families. In addition, Insurance Companies provide necessary information regarding the scheme during enrollment, and further sets up a kiosk in the district for smartcard related services. Once the enrollment is completed, the insurer then sends the enrollee's list to the *State Nodal Agency*. Insurers also hire Non-Governmental Organizations and Microfinance Institutions for assistance during enrollment and for effective utilization of the scheme. Insures also empanel public and private

healthcare providers for "making markets efficient and complete, by generation competition" (Sinha, 2013), before commencement of the enrollment process. Finally, after receiving the smartcard, beneficiaries can avail healthcare services by themselves from the empanelled hospitals across India. (www.rsby.gov.in)

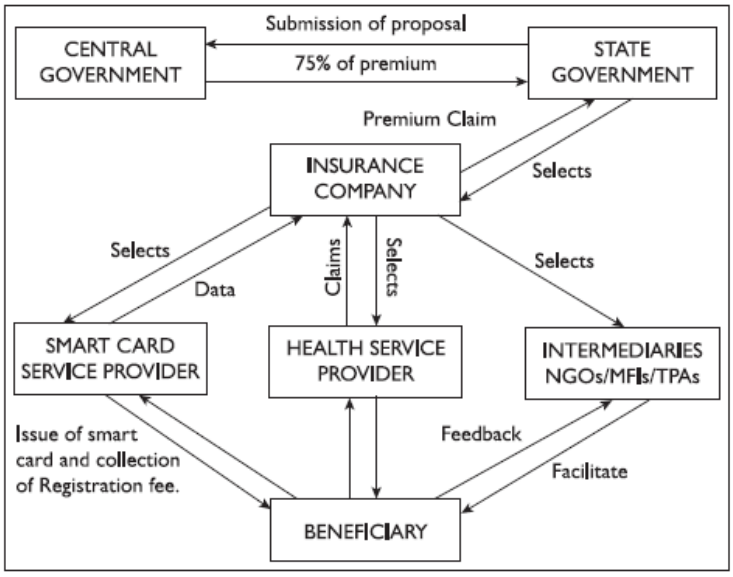

Fig. 2: Arrangement of RSBY
Source: Gill, Shahi, 2012

IMPLEMENTATION OF RSBY

RSBY was implemented in phases, where "implementation started with few districts and then extended to all the districts" (Jain, 2011). In the initial phase, RSBY was implemented in 26 states within the span of 2 years and approximately 4 million people were enrolled under the scheme by March 2009, which increased to 34.16 million by February 2013. Additionally, there has been an upward trend in the number of hospitalization cases which increased from "12,500 in 2008-09 to 1.75 million in 2011-12, and further to 4.98 million in 2013" (Press Release, 24-March-2013) indicating the success of the RSBY. Recently in 2018-19, "RSBY was implemented in 12 States/UTs, across 204 districts", where 65.45% of the targeted families were covered, and a network of 7,000 hospitals was developed for the beneficiaries (MoHFW, Annual Report 2018-19). Being voluntary in nature, the initial statistics of RSBY were promising. However, to understand the implementation of the scheme, data from various years have been analyzed.

The scheme was launched with an initial expenditure of INR103 Crore, which showed a continuous increase till 2012-13 with its peak at INR1002 Crore. Later, the expenditure reduced approximately by half for the years 2014-2018, with a sharp decline after 2018 with the onset of the new Health Insurance scheme PMJAY, under which RSBY got subsumed.

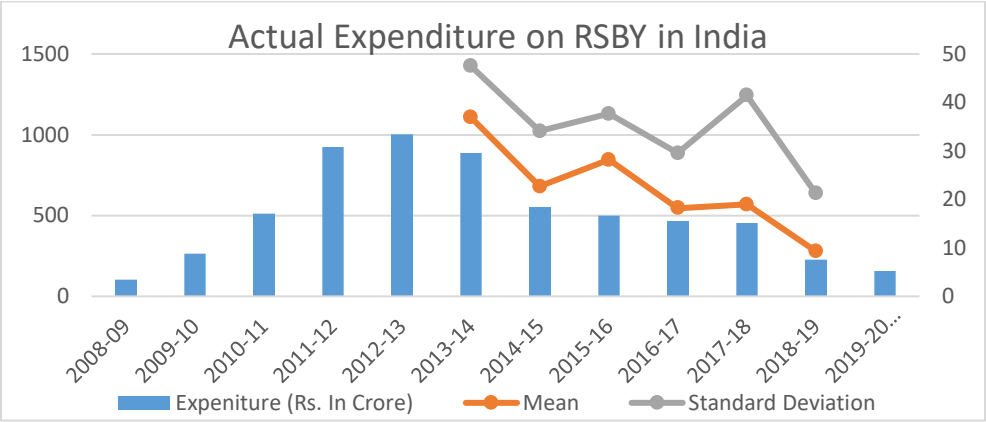

Fig. 3: Actual Expenditure on RSBY 2008-2020
Source: MoHFW

State-wise central funds released under RSBY for 2013-16 indicates that most states received the least funds in 2014-15, which coincides with the lower Centre actual budget spending. In addition, there is a large variation between the funds received, evident from Standard Deviation measure. Fig. 4 further bolstered this point by highlighting that on one hand states like West Bengal, Bihar, and Kerala received 16%-20% central share, while many northeastern states received less than 5%. Additionally, there is a significant difference between the funds received in different years for the same state, indicating the phase-wise implementation of RSBY.

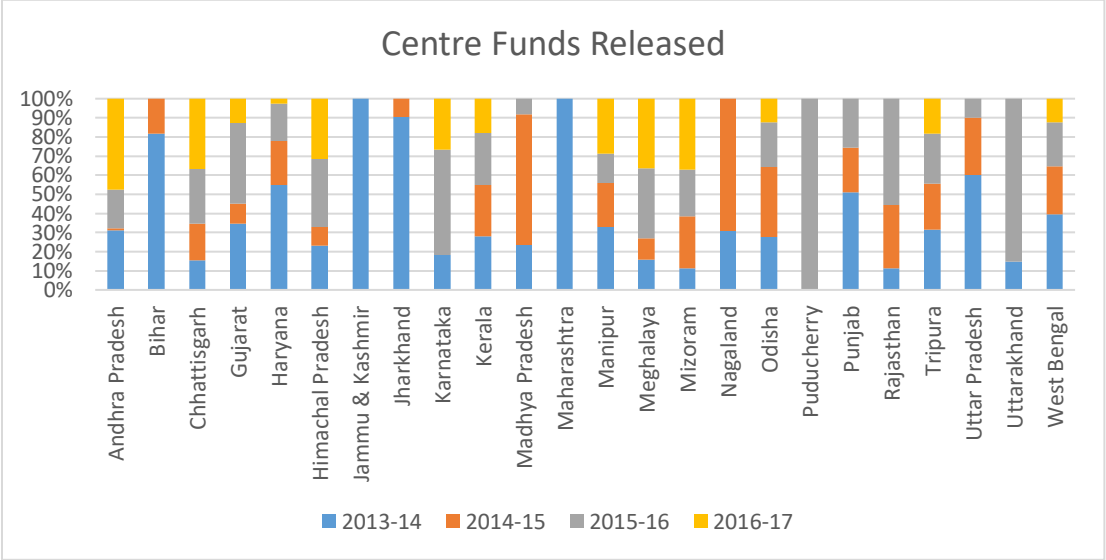

Fig. 4: State-Wise Centre Funds Released for 2013-2017
Source: MoHFW

During initial years, from a total of 620 districts RSBY enrolled 39% of the districts up-to 2010, which increased to 59% up-to 2012, and 73% up-to 2016. Additionally, districts in only Delhi and Kerala had 100% participation in initial years, while most of the states increased their district participation to 100% by 2016. This further highlights the phase-wise implementation of the scheme. However, the scheme was implemented on a pilot basis in Andhra Pradesh and Jammu and Kashmir for 2013-14, and discontinued for Maharashtra in 2014-15, Chandigarh, Madhya Pradesh, Nagaland and Puducherry in 2015-2016.

Participating States	Total Districts	Participating Districts up to 2010	Participating Districts up to 2012	Participating Districts up to 2016	Percentage Coverage up to 2016
Andhra Pradesh	23	0	0	23	100
Assam	27	4	5	23	85
Bihar	38	18	38	38	100
Chhattisgarh	18	15	18	N.A.	N.A.
Delhi	7	7	N.A.	N.A.	N.A.
Goa	2	0	2	0	0
Gujarat	27	9	27	27	100
Haryana	21	19	21	21	100
Himachal	12	11	12	12	100
Jammu Kashmir	14	0	0	0	0
Jharkhand	24	7	21	24	100
Karnataka	28	0	6	28	100
Kerala	14	14	14	14	100
Madhya Pradesh	48	0	0	0	0
Maharashtra	35	29	32	0	0
Orissa	30	5	12	30	100
Punjab	20	17	20	20	100
Rajasthan	33	0	0	33	100
Tamil Nadu	31	0	0	2	6
Uttar Pradesh	70	67	70	70	100
Uttrakhand	13	5	13	13	100
West Bengal	19	5	17	19	100
Other NE States	54	8	38	52	96
UTs	12	1	1	1	8
All Districts	620	241	367	450	73

Fig. 5: Districts covered under RSBY
Source: Karan el al. 2017

According to Jain (2011), RSBY was the first insurance scheme to enroll its beneficiaries by recording their biometric information and issuing smartcards in order to avail medical services. This was done primarily to reducing communication and awareness gaps, so the beneficiaries could reap maximum benefits, and government could avoid unnecessary expenditure. Secondly, by charging beneficiaries INR90 for registration and smartcards, "government aimed at encouraging beneficiaries to demand services as they incurred some expenditure" (Jain, 2011) and thus increasing utilization under RSBY. Therefore, it has been argued that enrollment ratios (percentage household enrolled to the targeted households) remains below 100%, with only limited beneficiaries. Fig. 6 indicates that enrollment ratios have remained a little above half, with its trough in 2014-15 at 49.57% and peak in 2016-17 at 61.46%. Additionally, state-wise data indicates that states have enrollment ratios around or lower than 50% on an average. However, the spread between the states have remained high, with maximum in 2014-15. Fig. 7 further depicts that on one hand Delhi and Maharashtra had lowest enrollment rates for 2012-14 and Uttar Pradesh for 2014-16, while Kerala and Northeastern States have continued to perform well throughout 2012-2016. There are instances where few states like Chhattisgarh, Meghalaya, and Tripura in 2015-16, and Uttrakhand in 2014-15 surpassed the target and successfully enrolled a higher number of beneficiaries.

Year	Target BPL	BPL Enrollment	Enrollment Ratio	Average	Standard Deviation
2012-13	66538966	37446846	56.28	49.37	19.14
2013-14	70580136	37294731	52.84	44.49	22.79
2014-15	72485464	35927971	49.57	55.01	84.98
2015-16	69676701	41331073	59.32	50.75	48.76
2016-17	59118140	36332626	61.46	33.33	33.19

Fig. 6: Enrollment under RSBY
Source: MoHFW

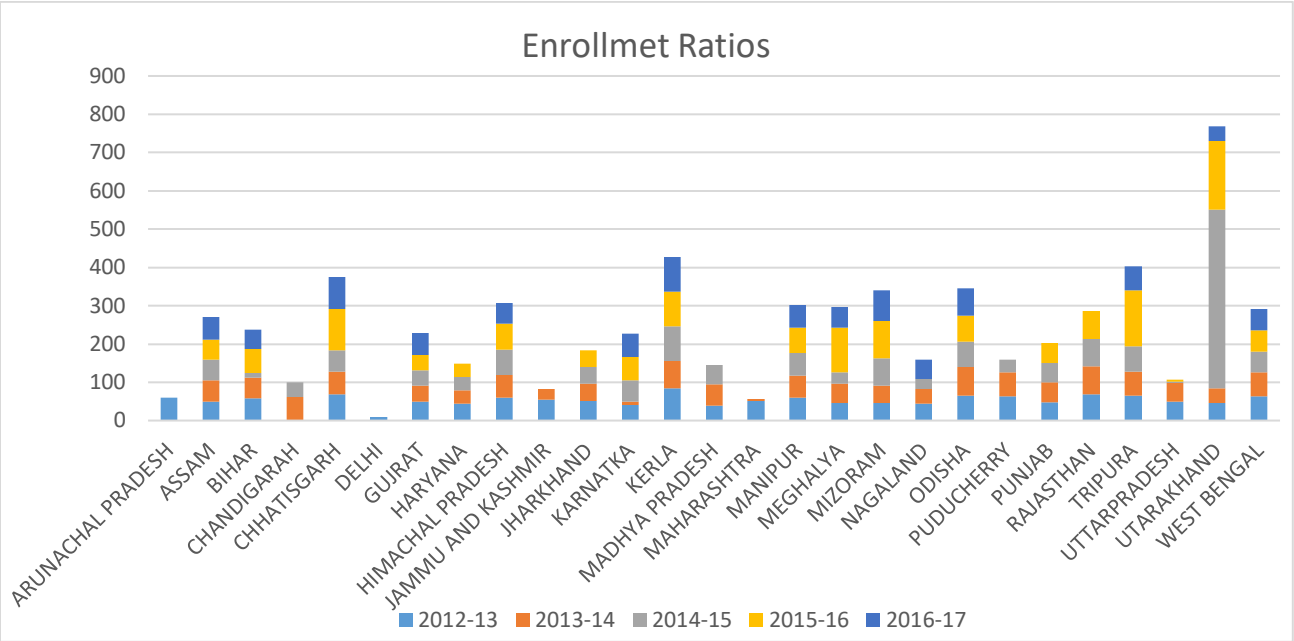

Fig. 7: State-Wise Enrollment Ratios for 2012-2017
Source: MoHFW

The implementation of the scheme has been commendable as compared to previous schemes in India. However, increasing enrollment does not translate to success of the scheme, and thus the impact of the scheme has been studied which provides a plethora of evidence against the effectiveness of RSBY.

AREAS OF CONCERNS

Besides successful use of technology and increasing enrollments, RSBY has also brought significant improvements in health infrastructure, especially the establishment of private hospitals in rural areas, improved BPL data collection, and slight reduction in linkages due to smartcard use. Additionally, survey conducted by Sethi (2011), highlights that the beneficiaries who received treatments at the empanelled hospitals were largely satisfied by the services of the staff and the treatment process, and did not face difficulty during the smartcard verification process. Despite these improvements, studies have also indicated that RSBY policy makers have ignored the various shortcomings of the scheme, "and continue to invest public funds even when evidence suggests RSBY had no scientific basis, had been ineffective, was wasteful, and had led to fragmentation of the public-health system, fraud, and serious violations by the private players" (Nandi et al. 2012).

Targeting Effectiveness

RSBY was initially implemented for BPL families, and later extended to MGNREGA workers and unorganized segments "including rag pickers, rickshaw pullers, taxi and auto-drivers, miners, sanitation workers and toddy worker" (MoHFW, Annual Report 2018-19). Despite having a well-planned implementation, nearly 50% of the eligible beneficiaries are unable to get enrolled in almost every state. Taneja and Taneja (2016) elucidates that the possible reason for this is "poor targeting and use of outdated

data, high enrollment cost, and high migration rates". Additionally, RSBY has been criticized for the lack of coordination between government agencies and insurance companies, which leads to the cancellation of enrollment drives (Sinha, 2013). RSBY also suffers from serious inefficiency in targeting the poorest, which has been highlighted by Sinha (2013), who assessed NSSO data for 2007-10 and concluded that "coverage for lowest deciles is negligible, while upper deciles are fairly covered". Similarly, by using 2011-14 NSSO estimates, Ghosh and Gupta (2017) found that "only 12.7% of the poorest quintile received RSBY, accounting for only 25.9% of overall enrollments", while almost 50% enrollees belonged to non-poor category. In another study on Ranchi, Sinha (2018) found similar results, and indicates that the primary reason for exclusion is that insurance companies try to economize their cost by avoiding covering the most vulnerable population. Another reason for low enrollment is the attitude and shallow knowledge of the beneficiaries about the scheme. Beneficiaries are aware of the health coverage, members covered and enrollment charges, however they lack the knowledge about various entitlements of the scheme which leads to conflicts, under-utilization and dissatisfaction, thus demotivating beneficiaries from enrolling (Taneja and Taneja, 2016). Monitoring gaps from government, exclusion from the part of insurance companies and lack of trust by targeted beneficiaries have therefore emerged as major reasons for low enrollment under RSBY.

Utilization and Claim Settlement

For capturing utilization of the scheme, many studies have used hospitalization ratio (hospitalization cases to the total enrollments) and claim settlements data, which indicates whether the beneficiaries were able to receive healthcare and were reimbursed for the same. According to hospitalization ratios, approximately 0.5% hospitalization cases were there in 2010-11 which increased to 6.11% in 2011-12, and was 6.15% for 2016-17. However, Utilization pattern is highly skewed where few states like Kerala and Punjab had ratios greater than 20%, while Tripura and Chhattisgarh had ratios higher than 10%. On the contrary Chandigarh and Arunachal Pradesh had the least hospitalization ratios ranging from 0-1%. However, Fig. 8 indicates that the variation between the states have reduced over 2009 to 2013. One explanation for lower hospitalization cases is that the most vulnerable beneficiaries, especially older population are deliberately kept outside the scheme by the insurance companies in order to reduce their cost (Sun, 2011). Sun (2011) also suggests that due to lack of awareness, especially in rural area, beneficiaries are not confident while using smartcards, which often forces them to not avail the services. This generates welfare loss as insurance companies end up getting premium without having to pay for claims.

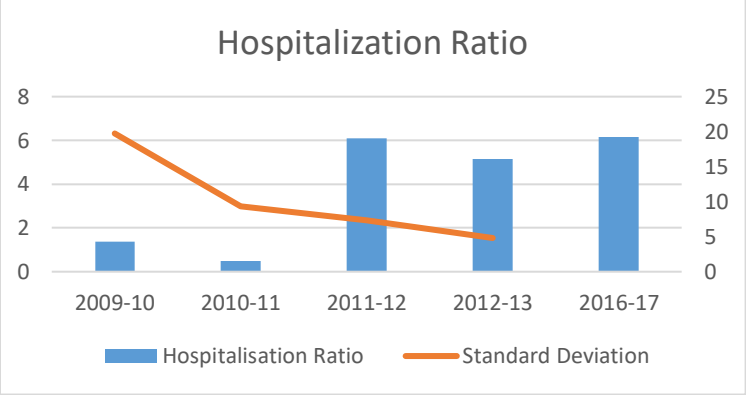

Fig. 8: Hospitalization Ratio
Source: MoHFW

On other hand, approximately 9.5 billion claims were made and 80% of the claims were settled on average from 2013 to 2016. Additionally, there exists a large variation between the States/UTs where Puducherry has settled around 95% of the claims, while in Chandigarh 550 claims were made among which none got settled for the years 2013-15. Although majority of the claims have been settled, insurance companies are highly criticized because of their failure to settle 100% of the claims, and major delays in claim settlements, which further leads to delay in the premium payments by the government. Furthermore, there has been instances of frauds from both the insurer and the hospitals which further leads to the failure of 100% settlement of the claims. This ultimately leads to inefficiency for providing quality health insurance to the beneficiaries (Taneja, Taneja, 2016).

Year	Total Claims Made	Total Claims Settled	%age	Average	Standard Deviation
2013-14	9133851999	7674253309	84.02	78.17	18.99
2014-15	8526600229	7208246610	84.54	70.22	33.17
2015-16	10556208252	7850505274	74.37	42.22	36.56

Fig. 9: Claims made and settled under RSBY
Source: MoHFW

Out-of-pocket Expenditure

Designed for reducing the out-of-pocket expenditure, studies have indicated that the RSBY has failed to accomplish this goal. Sinha (2013) indicates that from 2007-2010, there has been some reduction in the in-patient expenditure, while out-patient expenditure has increased drastically leading to an overall increase in the OOPE. On an average, OOPE incurred was "INR1078 in private sector and INR309 in government sector". Fig. 10 further indicates that OOPE as a percentage of current expenditure has not reduced, and is negatively correlated (0.74) to enrollment ratios, which indicates that by increasing health coverage to higher larger population, then OOPE might reduce.

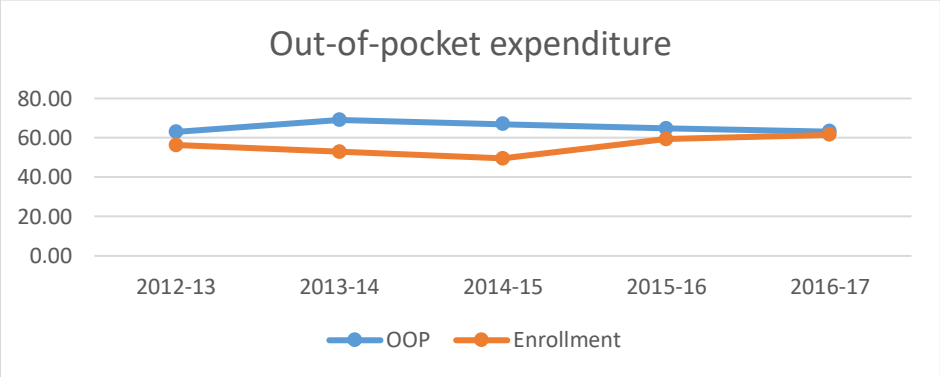

Fig. 10: Out-of-pocket Expenditure 2012-2017
Source: World Bank

Similarly, Ghosh and Gupta (2017) further highlighted that there is no significant difference in OOPE between the households that are insured and households that are uninsured. Additionally, the financial protection received by the poorest population under RSBY has been low in terms of both OOPE on medical care and faced additional cost due to missing out on work and travelling large distances for availing treatment (Karan, et al. 2016). Several state-specific studies also point out high OOPE irrespective of the implementation of RSBY. A study on Chhattisgarh found that "58% of the respondents who used

private healthcare services and 17% who used government healthcare services incurred OOPE" (Nandi et al. 2012). Similarly, "almost 42% of the families in Delhi reported wage/income loss of an average INR922 during hospitalization" (Nair et al. 2013), for which no reimbursement was provided leading to low impact of RSBY on OOPE. A study on Amaravati district in Maharashtra also elucidates that 70% of the population had to incur wage loss, while 33% incurred some expenses prior to reaching empanelled hospitals (Rathi et al. 2012). RSBY's failure to provide coverage for out-patient services has emerged as the primary reason for high OOPE, as out-patient cases outnumber in-patient cases. Secondly, evidence confirms that expenditure on medicines and drugs have not been reduced since patients are either asked to get these from other sources which RSBY does not cover, or they are for durations beyond 5 days, resulting in no coverage. In Delhi, almost half of the respondents reported that they had to purchase medicines from outside, and majority was prescribed to take medicines for almost 10 days (Nair et al. 2015), while in Amaravati 79% of the population had to incur OOPE due to drugs and medicines (Rathi et al. 2012). In addition, it has also been argued that insurance companies cover limited conditions, and the coverage of INR30,000 for a family is also low, leading to OOPE. Families are also persuaded to utilize in-patient services which are not included in the package, or often members are denied treatment at the empanelled hospitals, further aggravating the problem (Ghosh, Gupta, 2017; Karan et al. 2017). Due to the aforementioned reasons, there are significant gaps between the objective and the outcomes of RSBY concerning OOPE.

CONCLUSION

Government-sponsored health coverage, RSBY, has emerged as one of the major health reforms in India which aimed at reducing the financial burden and improved access to healthcare for the poorest population. RSBY has provided coverage against in-patient care and transportation, along with incorporating the use of technology and a balanced nexus between public and private sectors. Evidence suggests that although RSBY is the first health insurance which enrolls the beneficiaries, it has done a commendable job, along with improving the satisfaction received from treatments, health outcomes, data collection and health infrastructure (Devadasan et al. 2013). However, even after twelve years RSBY has been unable to achieve its goals satisfactorily, due to which GOI launched PMJAY in 2018 as a modification of the existing scheme, in order to bridge the gap and improve the existing condition of health insurance in India.

Although RSBY covered 50% of the eligible beneficiaries, it is inadequate and suffers from significant exclusion and equity problem, where the population who are the most vulnerable are covered less. Therefore, under PMJAY proper monitoring of enrollment process and insurance companies is highly important. Additionally, under RSBY the utilization of the services in terms of hospitalization and claim settlement has been low, for which insurance companies are criticized heavily. PMJAY can solve these issues by improving their monitoring for higher inclusion of vulnerable groups in order to improve hospitalization, and insurance companies for complete and quick settlement of the claims. Further, under PMJAY, special focus should be placed on increasing awareness through awareness programs and campaign among the beneficiaries in order to increase both the enrollments and utilization and including robust grievance redressal mechanism for building beneficiaries trust. One of the biggest failure of RSBY has been its inadequacy to reduce OOPE. Many studies have indicated that over the period of time, OOPE has not been reduced significantly due to insufficient coverage and exclusion of the vulnerable, increasing hospitalization costs, exclusion of out-patient services from coverage, expenses on medicines and drugs, limited procedures being covered, and only 5 days post-hospitalization coverage under RSBY. Although PMJAY has increased the coverage from INR30,000 to INR5,00,000, has released the cap of five members

only, and extended the post-hospitalization period to 15 days, yet PMJAY can learn from RSBY and introduce further rectifications. The scheme can add out-patient services, provide coverage for opportunity cost, especially wage loss, and empanel higher number of hospitals for avoiding additional costs due to medicines or diagnosis in order to significantly reduce the catastrophic health expenditure in India. Conclusively, PMJAY has a lot to take away from RSBY, which can enable India to achieve a quality universal health insurance system and improve the quality of living, especially by the poorest population.

REFERENCES

Department of Health and Family Welfare, "Annual Report 2018-19", *Government of India*.

Devadasan, N. et al. 2013. "Promoting universal financial protection: evidence from RSBY in Gujarat, India", *Health Research Policy and Systems.*

Ghosh, S., Gupta, N.D. Jan, 2017. "Targeting and Effects of RSBY on Access to Care and Financial Protection", *Economic and Political Weekly,* Vol. 52, Issue 4.

Gill, H. Singh, Shahi, A. Kaur. May, 2012. "RSBY in India- Implementation and Impact", *International Journal of Multidisciplinary Research,* Vol. 2, Issue 5.

Jain, N. 2011. "A descriptive analysis of the RSBY data for the first phase", Book: *India's Health Insurance Scheme for the Poor: Evidence from the Early Experience of the RSBY,* edited by Palacos, R., Das, J., Sun, C.

Jim Yong Kim. Jan. 14, 2014. "Speech on Universal Health Coverage", *World Bank Group,* www.worldbank.org

Karan, A. et al. March, 2017. "Extending health insurance to the poor in India: An impact evaluation of RSBY on out-of-pocket spending for healthcare", *Social Science and Mecicine,* Vol. 181, pp. 83-92.

Ministry of Health and Family Welfare, "RSBY-Operational Guidelines"

Ministry of Labour and Employment, 24 March, 2013. "RSBY-Highlights", *Press Information Bureau Government of India.*

Nandi, S. et al. Dec, 2010. "A study of RSBY in Chhattisgarh, India", *BMC Proceedings,* Vol. 6.

Nair, K.S. et al. 2013. "Implementing RSBY: Experience from Delhi", *Journal of Health Management",* Vol. 15, pp. 127-140.

Rathi, P. et al. Sept, 2012. "RSBY: Evaluating Utilization, Roll-out and Perceptions in Amarvati District, Maharashtra", *Economic and Political Weekly,* Vol. 47, Issue 39, pp. 57-64.

Sethi, S. 2011. "Can RSBY help bridge the quality chasm?", Book: *India's Health Insurance Scheme for the Poor: Evidence from the Early Experience of the RSBY,* edited by Palacos, R., Das, J., Sun, C.

Sinha, R.K. Nov, 2013. "A Critical Assessment of Indian National Health Insurance Scheme-RSBY", *European Academic Research,* Vol. 1, Issue 8.

Sinha, R.K. 2018. "Impact of Publically Financed Health Insurance Scheme (RSBY) from Equity and Efficiency Perspective", *Vikalpa, The Journal for Decision Makers,* Vo. 43, Issue 4, pp. 1-16.

Sun, C. 2011. "An analysis of RSBY enrolment patterns: Preliminary evidence and lessons from the early experience", Book: *India's Health Insurance Scheme for the Poor: Evidence from the Early Experience of the RSBY,* edited by Palacos, R., Das, J., Sun, C.

Swarup, A., Jain, N. 2011. "Rashtriya Swasthya Bima Yojana", *Sharing Innovative Experiences,* UNDP, Vol. 18.

Taneja, P.K., Taneja, S. 2016. "RSBY for Universal Health Coverage", *Asian Journal of Management Cases,* Vol. 12, pp. 108-124.

Wagstaff, A., Doorslaer, E. Van. 2003. “Catastrophe and Impoverishment in paying for health care: with applications to Vietnam 1993-1998”, *Health Economics,* Vol. 12, pp. 921-933.

Data Source:

MoHFW Data, www.data.gov.in

MoHFW Data, www.indiastat.com

Open Data, World Bank8, www.data.worldbank.org