Study on OOPE Incurred by Beneficiaries of PMJAY in Valsad District, Gujarat

By

Jyoti Kumari

Dissertation submitted in partial fulfillment of the requirements of the degree

MBA Hospital and Health Management

Academic year, 2017-2019

The IIHMR University, Jaipur

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IIHMR UNIVERSITY

TO WHOMSOEVER MAY CONCERN

This is to certify that Jyoti Kumari, student of MBA Hospital and Health Management from The IIHMR University, Jaipur has undergone internship training at NHM, Gujarat from 4th February to 6th May.

The candidate has successfully carried out the study assigned to her during internship training and her approach to the study has been sincere, scientific and analytical.
The Internship is in fulfillment of the course requirements.

I wish her all success in all her future endeavors.

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Date: 08-05-2019

The certificate is awarded to

Jyoti Kumari

In recognition of having successfully completed her
Internship in the department of

Ayushman Bharat

and has successfully completed her Project on

Study on OOPE among Beneficiaries under PMJAY

from 04-02-2019 to 08-05-2019

Organization – National Health Mission, Gujarat

She comes across as a committed, sincere & diligent person who has a strong drive
and zeal for learning.

We wish her all the best for future endeavors.

8/5/19

Chief District Health Officer
District Health Society
Jilla panchayat, Valsad

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled "A study on OOPE incurred by beneficiaries of PMJAY in Valsad district, Gujarat" and submitted by **Jyoti Kumari** Enrollment No. IIHMR-U/01/2017-19/0581 under the supervision of **Dr. Monika Chaudhary** for award of MBA in Hospital and Health of the University carried out during the period from 04/02/2019 to 06/05/2019 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institution of higher learning.

Jyoti

Signature

ABSTRACT

Introduction: Indian government has launched Ayushman Bharat in place of centrally sponsored scheme Rashtriya Swasthya Bima Yojna and Senior Citizen Health Insurance scheme. These both schemes are subsumed into Ayushman Bharat. Ayushman Bharat is made to abolish the out of pocket expenditure of needy and deprived families. The purpose of this project is to find out whether beneficiaries are incurring out of pocket expenditure in PMJAY. We estimated the proportion and extent of out of pocket expenditure under PMJAY.

Methods: Adescriptive study was conducted among beneficiaries who availed services from PMJAY empaneled hospitals under PMJAY scheme. The proportion of beneficiaries incurring OOPE and its extent was calculated.

Results: Overall OOPE of beneficiaries in all the domains taken together was 26.5%. Out of 200 beneficiaries only 53 beneficiaries incurred OOPE. Out of 53, 88.6% beneficiaries had OOPE on transportation. Out of 88.6% beneficiaries only 6.3% beneficiaries did not get reimbursed for transportation from hospital. The overall median (range) of OOP expenditure was Rs 160 (20-1200). Median(range) OOPE for transportation wasRs450(70-1000). Out of 17.6% beneficiaries,11.3% beneficiaries incurred OOPE on diagnostic investigations.Median(range) OOPE of diagnostic tests done by beneficiaries was Rs 500(100-1000).

Conclusion: In our study overall proportion of beneficiaries incurring OOPE was 17.6% and median (range) was Rs 160 (20-1200). Health seeking behavior has been improved among beneficiaries. Beneficiaries know about the scheme and its benefits.

Keywords: OOPE, PMJAY

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Jyoti Kumari

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LIST OF SYMBOLS AND ABBREVIATIONS

1	OOPE	Out of Pocket Expenditure
2	PMJAY	Pradhan Mantri Jan Arogya Yojana
3	CSC	Common Service Centre
4	VCE	Village Computer Enterprenuer
5	DEO	Data Entry Operator

LIST OF APPENDIX

INTRODUCTION

As per WHO, out of pocket expenditure has great effects in low income countries and its common in India. In a recent survey it was found that the population which is covered under health insurance is only 15% in India.[1] According to NFHS factsheet-4 (2015-16) only 28.7 % of household are there in which any usual member is covered by a health scheme or health insurance.[2] In 2013-14, India's expenditure in health sector was 1.2% of GDP which is increased to 1.4% in 2017-18.[3]

In the development of India, health always has an important part. To achieve the Universal health coverage or Health for all, Indian government launched Ayushman Bharat, an initiative induced by Hon'ble Prime Minister in 2018. On-going centrally sponsored schemes - Rashtriya Swasthya Bima Yojana (RSBY) and the Senior Citizen Health Insurance Scheme (SCHIS) will be subsumed into National Health Protection Scheme

To address health holistically i.e. preventive, promotive, and ambulatory care, it has taken path breaking steps at primary, secondary and tertiary level. A two-pronged approach has been followed by this scheme. First; the sub-centers, primary health centers have been strengthened as Health and wellness centers. To bring health care nearer to people, 1,50,000 Health and wellness centers pertain to establish.

Pradhan Mantri Jan Arogya Yojana is the second component in which poor and vulnerable families are provided with health protection. This scheme helps these families to get free health services under PMJAY.

Features of the scheme:

- Over 10 crore poor and vulnerable families will be covered under this scheme
- This scheme will provide a benefit cover of Rs. 5 lakhs($7209) per family per year
- These benefits will be applicable for secondary and tertiary health care hospitalization
- Beneficiarieswill have cashless benefits from any empaneled private or public hospitals as this scheme is portable across the country

- In this scheme, entitlement is based on the SECC (Socio-economic Caste Census) database
- The payments for treatment will be done on package rate (to be defined by the Government in advance) basis, to control the cost.
- It is proposed that at apex council Modi care will be chaired by Union Health and Family Welfare Minister to give policy direction and to foster co-ordination among center and state.
- State health agency will implement the scheme at state level .

Health system:

This scheme will help India in achieving the Universal Health Coverage and Sustainable Developmental Goal.

- Ayushman Bharat will help to reduce out of pocket expenditure significantly.
- This scheme will improve affordability and accessibility of quality secondary and tertiary health services .
- This scheme will co-ordinate the private sector and public health goals
- Ayushman Bharat will increase the accessibility in rural areas
- Increase health expenditure by Government as a percentage of GDP
- Through infusion of insurance revenues, it will strengthen public health care systems
- Around 40% of benefit cover will be increased
- Through an online portal by the state government empanelment of the hospitals under Ayushman Bharat will be conducted.

At National level:

E-cards issued: 2,89,63,698

Hospital empaneled: 15,291

Number of beneficiaries admitted: 18,35,227

Expenditure consist:

Central and State Governments in specified ratios will share the expenditure incurred in premium payment as per Ministry of Finance guidelines. The premium will be shared in the ratio of 60:40 for all states and union territories with legislature and 90:10 for North east states and for three more states i.e. Himachal Pradesh, Jammu & Kashmir and Uttarakhand

About district Valsad:

In Valsad district Ayushman Bharat is in its initial stage. It has been launched here in September, 2018. Six blocks are there in Valsad; Valsad, Pardi, Vapi, Kaprada, Umargam and Dharampur. There are total 6,04,287 beneficiaries in Valsad district. Each block has given target of beneficiaries to verify under PMJAY. There are three bodies who are responsible for making cards of beneficiaries; CSC (Common Service Centre) government run Digital Sewa,which are providing various business and Government services to people and are Information, Communication and Technology enabled delivery points, VCE or e-Gram (Voluntary Computer Entrepreneur), DEO (Data Entry Operator) at PHC, CHC level. Aadhaar card and Ration card are two necessary documents are needed for card making. BIS (Beneficiary Identification System) is software where beneficiary gets approval for card. There are two levels in BIS. First level approval is given by insurance company'sdistrict coordinator, medical officers and second level approval is given by state authorities.

In Valsad district:

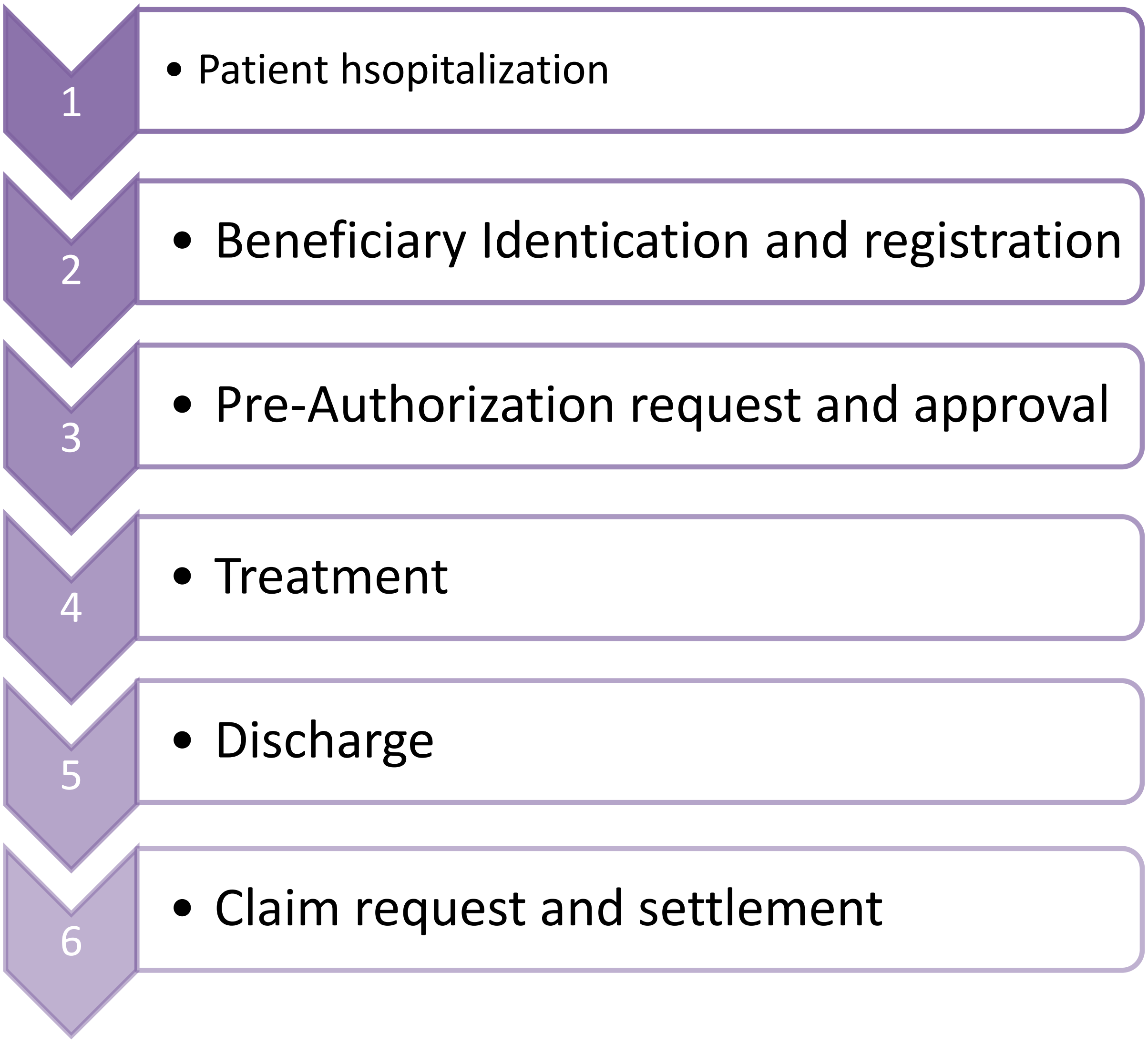
Total estimated beneficiaries: 6,04,387
Total beneficiaries verified: 1,87,280
Total empaneled hospitals: 14 (Private hospitals)
71 (Public Hospitals)

Objectives:

Primary objective: To estimate the proportion of PMJAY beneficiaries incurring OOPE at PMJAY empaneled hospitals in district Valsad, Gujarat.

Secondary objective: To estimate the extent of OOPE incurred by PMJAY beneficiaries at PMJAY empaneled hospitals in district Valsad, Gujarat.

Process of availing care under PM-JAY



Purposeof Research

The purpose of this project is to find out the catastrophic expenditure incurred by PMJAY beneficiaries. Ayushman Bharat is said to be the largest public health insurance and will reduce the out of pocket expenditure of public. This research helps us to know whether PMJAY beneficiaries are incurring OOPE. And if beneficiaries are incurring OOPE then in which domain they are incurring.

Review of Literature

S.no	Authors (Year)	Study location	Sample size	Sampling techniques	Sailent features
1	Gupt A., Kaur P., Kamraj P., Murthy B. N. (2013)	Solan, Himachal Pradesh	91 by using Epi software	Cluster sampling technique	Cross-sectional study was done on OOPE for hospitalization among BPL households. Semi- structured questionnaire was administered Results: Beneficiaries group had median overall OOPE of Rs 713 whereas in non-beneficiaries it was Rs 2567. OOPE was higher in non-beneficiaries than beneficiaries but it was not statically significant (87.2% vs. 80.9%)
2	Johnson D. and Krishnaswamy K.	India except Andhra Pradesh, Karnataka and Tamil Nadu	297 controls and 204 treatment districts with total households 1,86,065.	Stratified multi-stage random sampling	A survey conducted by world bank has been done using NSSO round 61 and 66 as survey instrument on impact of RSBY on out of pocket expenditure. Results: In this study it was

					found that average inpatient expense per month was (Rs. 14) whereas average outpatient expense was double than this (Rs 31.3). In terms of out of pocket expenditure, inpatient expense of 1.2%(2.59%) household was more than Rs. 10,000 (Rs5000) per annum.It was also noted that hospital utilization was increased by approx. 20% due to RSBY and expenditure on outpatient was decreased by 15% and by 8% total medical expenditure was dropped.
3	Yasobant S, Shewade HD, Vora KS, Annerstedt KS, Isaakidis P, Dholakia NB, Mavalankar DV (2017)	Gujarat, India	997 multiparous eligible women	Multistage sampling	Retrospective cohort study on multiparous eligible women has been done on OOPE under state led PPP scheme Chiranjeevi Yojna to promote institutional birth. Results: Median of OOPE with scheme utilization was (0-33rs) with non-utilization was (0-49rs).
4	Archana R, Kar SS, Premaranjan KC, Lakshminarayanan S.	Puducherry, South India	200 households, 935 individuals	Purposive sampling	An exploratory study was done in Ramanathpuram village of Puducherry on out of pocket expenditure among

	(2014)				the households. Results: 58.1% of the households did not incur any health expenditure. For acute illness, chronic diseases and hospitalization the mean expenditure per visit was Rs 72.7-143.4, 135.7-196.2 and 1340-1192.9 respectively.
5	Nandi S, Schneider H, Dixit P (2017)	Chhattisgarh, India	6026 individuals	Stratified two-stage sampling design	Study done on out of pocket expenditure in hospitals under the universal government health insurance scheme. Results: Through face to face interviews in public sector, with insurance there was no OOPE incurred whereas 16.1% without insurance got cashless services. The median OOP expenditure in private with insurance was (Rs. 10,000) whereas in public sector it was (Rs.1,200) eight times more.

Research Methodology

Design and study population

ADescriptive study was conducted among the beneficiaries of Pradhan Mantri Jan Arogya Yojana in Valsad district of Gujarat. The study consists of patients who already availed services under PMJAY and if any patient refused or unwilling to be a part of study then next patient is taken. The patient data was taken from empaneled hospitals in Valsad. We conducted study from February 6,2019 till May 6, 2019 by administering interview schedule to the patients.

Setting

The study setting was patient's home who availed services under PMJAY and got discharged from hospital in the months from February 6, 2019 till May 6, 2019 in Valsad district of Gujarat.

Sampling Size and technique

Conviencesamplingwas adopted where were we surveyed 200 discharged PMJAY beneficiaries.

Data collection method

Data was collected by using structured interview schedule.On different domains data was collected like socio-demographic profile of the patient, out of pocket expenditure incurred on drugs, diagnostics, transportation and hospital stay.

Data analysis

General characteristics of beneficiaries of PMJAY were described. Data was entered in Microsoft excel 2019. Overall proportion of beneficiaries who incurred OOPE overall, on various domains like drugs, diagnostics, hospital stay and transportation were computed. Proportion of general characteristics of respondents in various domains like age, family type,occupation, qualification of respondentcaste and monthly income of family were calculated. Beneficiaries were asked whether they have heard about Ayushman Bharat and have knowledge about PMJAY and also from where they have made their card.

Overall median OOPE and domain wise in three sections were computed. Overall median and range for the beneficiaries who incurred OOPE on drugs, diagnostics, hospital stay and transportation from home to health facility and from health facility to home was estimated. Patients were also asked about the type of services they have availed. The transportation expenditure for both the sides is clubbed together. They were also asked about Rs 300 that used to be given to the beneficiaries at the time of discharge. Then, beneficiaries who had paid for their transportation and did not get 300rs is considered as out of pocket expenditure.

Ethical considerations

We took permission from District Panchayat, Valsad. We provided information sheet to the respondents and obtained written informed consent from them. We ensured the participants about the confidentiality of the data provided by them.

Results

General characteristics of patients:

200 discharged patients were surveyed who are beneficiaries of PMJAY. The median age of respondents was 35 years and the range were from 14 years to 85 years.Out of 200 patients, 91% lived in joint families and 9% lived in nuclear families. The beneficiaries who had attended school till middle level were 55% while 36% of beneficiaries had attended till higher secondary level. 46% of beneficiaries were agriculture laborers. Among the beneficiaries 83% were from unprivileged section of the society such as Schedule Caste. The median monthly income of the family of beneficiaries was Rs 7700 with the minimum of Rs 3500 and maximum of Rs 70,000 per month.

Table 1. General Characteristics of Patients

		N=200	
S.no.	**General characteristics**		**n(%)**
1	Age	Median(range)	35(14-85)
2	Type of family	Nuclear family	18 (9%)
		Joint family	182(91%)
3	Occupation of family head	1 Agriculture	92(46%)
		2 Government service	3(1.5%)
		3 Unskilled laborers	66(33%)
		4 Own business	0(0)
		5 Unemployed	34(17%)
		6 Other (specify)	6(3%)
4	Educational qualification of patient	1 Never attended	2(1%)
		2 Middle level b	110(55%)
		3 Secondary Level	14 (7%)
		4 Higher secondary	72(36%)
		5 Diploma / Graduate and above	2(1%)
5	Caste	1 General	4(2%)
		2 OBC	6(3%)
		3 Schedule caste	166(83%)
		4 Schedule tribe	24(12%)
6	Monthly income	Median(range)	7700 (3500-70,000)

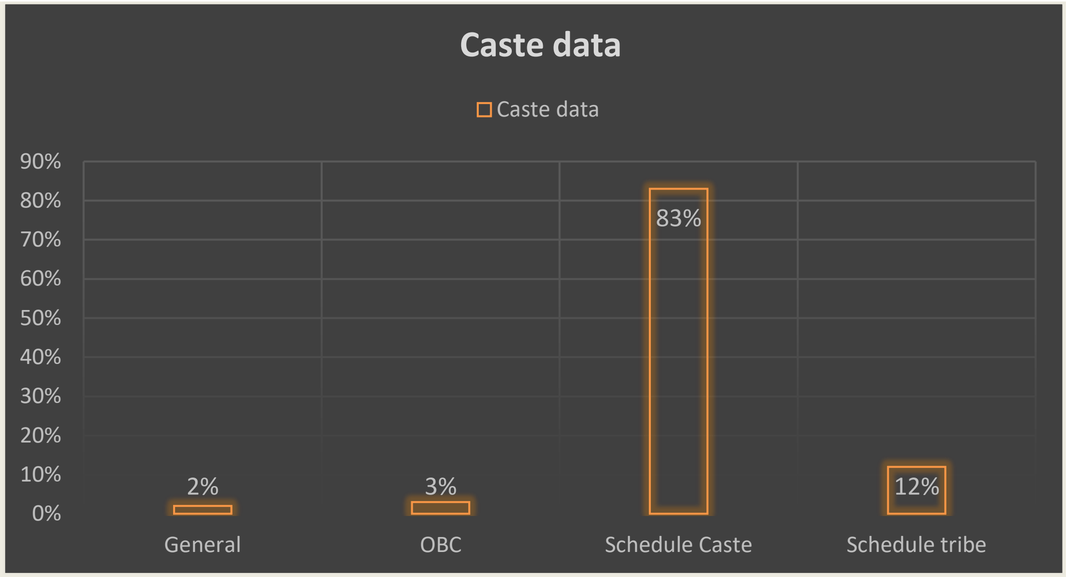


Figure 1. Caste Data

Figure 1 shows that the underprivileged group of society is availing more services of this scheme as this scheme was designed to cover this section of society. Some parts of Valsad are tribal and very little exposed to technology so underprivileged section is in abundance.

About the place, where card has been made patient and their family members were asked where their card has been made. Out of 200 beneficiaries, 84% have made their card at Common Service Centre and 16% of made it at PHC/CHC centers.
VCE has been initialized few months back only.

Table 2. Place of card making

S.no.	Characteristics	N=200	n(%)
1	PHC (Primary Health Centre)	32	32(16%)
2	VCE Village Computer Entrepreneur)	0	0
3	CSC (Common Service Centre)	168	168(84%)

Figure 2. Place where card made

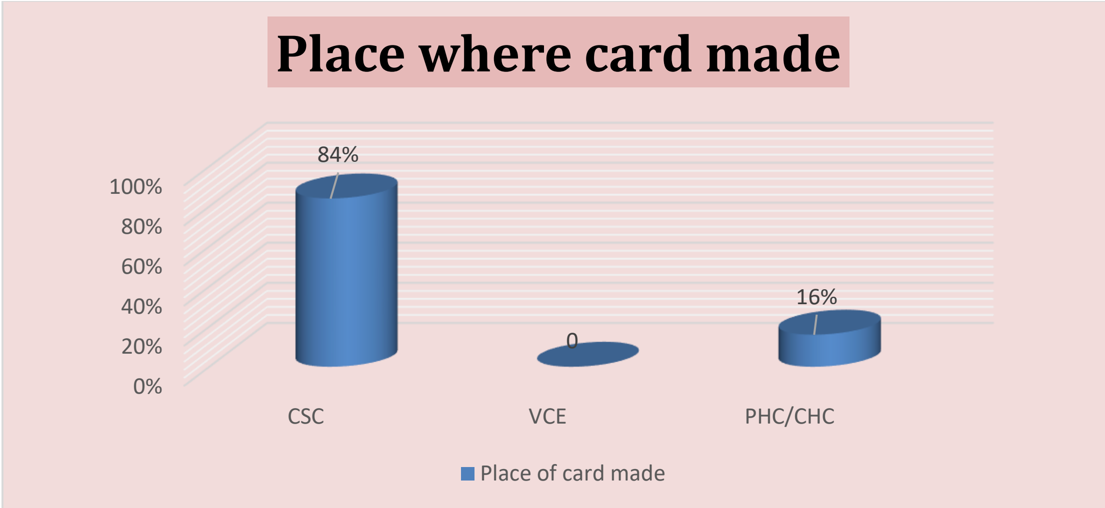


Figure 2 shows that CSC operators are more into card making than PHC. As there are 161 CSC centers working in Valsad, Gujarat.

Services availed:

Beneficiaries were asked what type of services have they availed. Out of 200 beneficiaries, 27.5% of them have availed services under General medicine, 24% of them took services under General Surgery. Among beneficiaries 23% were treated under Cardiology package. Rest 25% of patients availed services like Oncology, Neurology, Urology, Surgical-oncology and Obstetrics and gynecology.

Table 3. Services Availed

S.no.	Services availed	N=200	n (%)
1	General surgery	48	24
2	General medicine	55	27.5
3	Orthopedics	17	8.5
4	Cardiology	46	23
5	Polytrauma	8	4
6	Oncology	9	4.5
7	Neurology	6	3
8	Urology	8	4
9	Surgical oncology	1	0.5
10	Obstetrics and Gynecology	2	1

Proportion incurring OOPE:

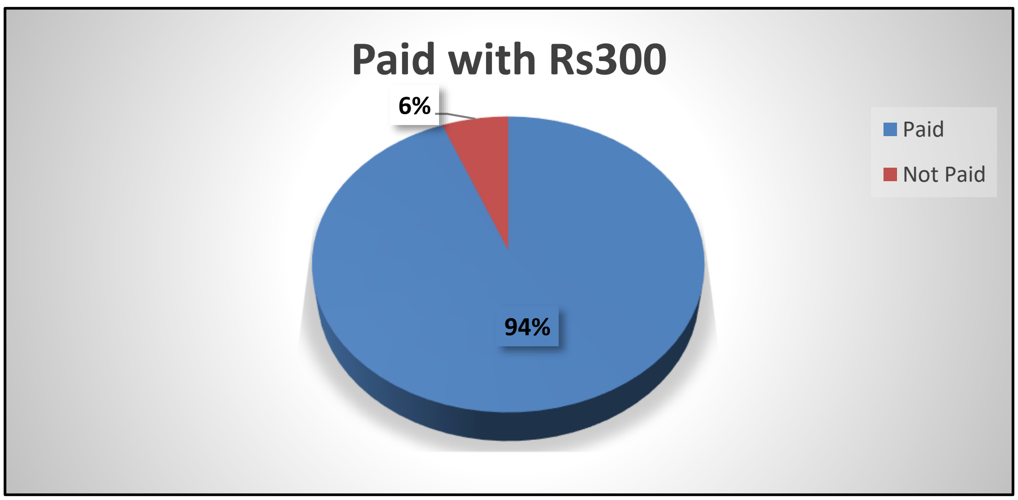
Patient were asked whether they have been given Rs 300 cash from hospital at the time of discharge or not. Among 200 beneficiaries 94% of beneficiaries were paid with Rs 300 and 6% of beneficiaries were not paid with 300rs.

Table 4. Proportion of patients who got/did not get Rs300 for transportation from hospital

(N=200)

S.no.	Characteristics	N=200	n(%)
1	Paid	188	188(94%)
2	Not paid	12	12(6%)

Figure no 3: Beneficiaries paid with Rs 300



Overall OOPE of beneficiaries in all the domains taken together was 26.5%. Proportion of beneficiaries who incurred OOPE on transportation was 23.5% but reimbursement was done for their transportation money. Out of 26.5% , only 3% beneficiaries incurred OOPE in diagnostic tests.

Table 5. Proportion of beneficiaries of PMJAY who incurred out of pocket expenditure in the month of Feb, March and May 2019

(N=200)

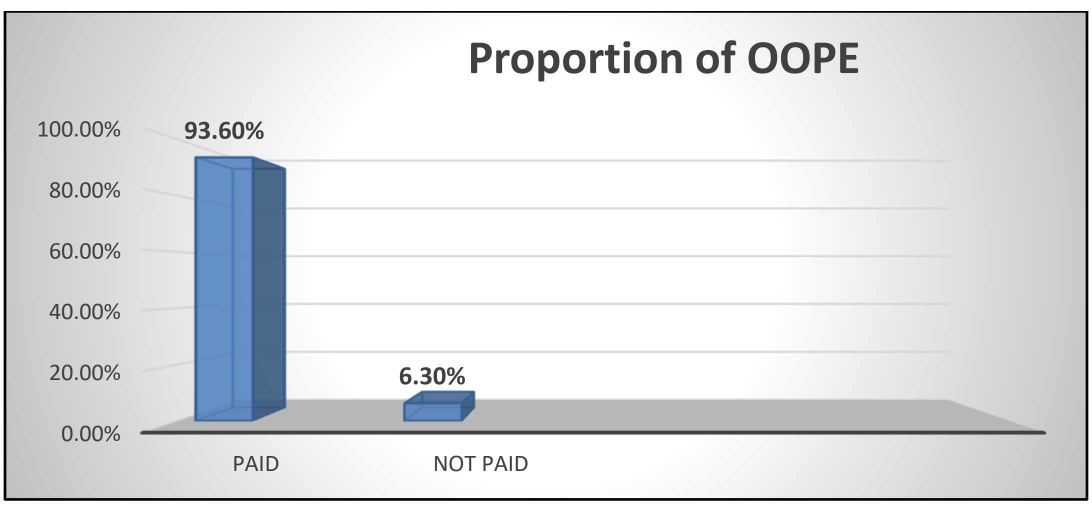
S.no.	Characteristics	N=53	n(%)
1	OOPE on hospital stay	0	**0**
2	OOPE on drugs and consumables	0	0
3	OOPE on diagnostic tests	6	6(11.3%)
4	OOPE on transport	47	47(88.6%)

There are 47 beneficiaries who has paid for transportation and out of 47 beneficiaries only 3 beneficiaries had not paid with Rs 300.Out of 23.5%, 6.3% beneficiaries were those who did not get reimbursement. These 6.3% considered as actual OOPE under PMJAY.

Table 6. Proportion of patients paid for transportation and got/did not get Rs300

S.no	Characteristics	N=47	n (%)
1	Paid for transportation and got Rs 300	44	44(93.6%)
2	Paid for transportation and did not get Rs 300	3	3(6.3%)

Figure 4: Patient who got paid and not get paid with Rs 300



Extent of OOPE:

The median (range) of overall expenditure was 160 (20-1200). Median(range) OOPE for transportation wasRs450(70-1000).Patients who spent money on transport and did not get paid Rs. 300 for transportation from hospital are considered as OOPE for transport. Median (range) OOPE of diagnostic tests done by beneficiaries was Rs 500(100-1000). Except transportation and diagnostics tests no OOPE done on any other domains which are hospital stay and drugs.

Table 7. Extent of out of pocket expenditure among beneficaries of PMJAY in Valsad district, Gujarat N=47

S.no.	**Characteristics**	N	**Median(Range)**
1	**Overall OOPE**	**9**	**Rs160(20-1200)**
2	OOPE on transportation who are not given 300 rs	3	Rs450(70-1000)
3	OOPE on diagnostic tests	6	Rs 500(100-1000)

Source of expenditure:

Out of 53 beneficiaries, 56.6% spent money from their own savings and 43.3% borrowed money from their friends or relatives

Table 8. Source of expenditure, if any

S.no.	Characteristics	N=53	n(%)
1	From existing savings	30	30(56.6%)
2	From borrowing from friends /relatives	23	23(43.3%)

Discussion

The study describes the OOP expenditure among PMJAY beneficiaries. The proportion of PMJAY beneficiaries incurring OOPE was 26.5%. Out of which only 9.3% PMJAY beneficiaries incurred OOPE. The median (range) of incurred OOPE was Rs 160(20-1200). 56.6% of beneficiaries spent money from their own saving and 43.3% beneficiaries borrowed money from their friends or relatives for the above expenditure.

As Ayushman Bharat is new scheme so not many studies have been done in this scheme. A study has been conducted by Prinja S et.al all over India to see the impact of publicly financed health schemes on healthcare utilization in 2016 which showed that 30% of state evaluated health insurance schemes has showed a decline in OOP expenditure among households who are enrolled while 70% of studies has shown no impact in OOP expenditure reduction.[10]

A cross sectional was done by Gupt A, in Solan district of Himachal Pradesh in 2013 showed that RSBY has decreased the extent of OOPE among beneficiaries and nil OOPE of beneficiaries on in house and out house drugs and rs 15 for in house or out house investigations.[11]In our study the proportion of beneficiaries incurring OOPE 6.3% and median(range) OOPE was Rs450(70-1000) in transport domain and 3% of beneficiaries incurred OOPE in diagnostics tests domain.

Suggestions:

Ayushman Bharat is one of largest public health insurance scheme in India yet. Lots of beneficiaries are getting the benefit of this scheme. As per the project still some of beneficiaries are having OOPE in transportation and diagnostic investigations. Government should ensure the transportation of beneficiaries or it should be ensured that people are getting Rs.300 after discharge as transportation expenses. Private hospitals should be reviewed frequently to ensure the smooth working of scheme and to ensure that beneficiaries should not have any OOPE.

Conclusion

In our study overall proportion of beneficiaries incurring OOPE was 9.3% and median (range) was Rs160(20-1200).Health seeking behavior has been improved among beneficiaries. Beneficiaries know about the scheme and its benefits.

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Appendices:

Section 1:	Identification details of the patient:	
S.no	**Characteristics**	**Possible response**
1	Age in years:	………years
2	Type of family	1 Nuclear family
		2 Joint family
3	Occupation of patient	1 Unemployed
		2 Government service
		3 Unskilled laborer
		4 Own business
		5 Agriculture
		6 Other (specify)
4	Educational qualification of patient	1 Never attended
		2 Middle level
		3 Secondary Level
		4 Higher secondary
		5 Diploma / Graduate and above
5	Caste	1 General
		2 OBC
		3 Schedule caste
		4 Schedule tribe
6	Monthly Income of family	Rs……………………..

	Section B : Ayushman Bharat	
S.no	**Characteristics**	**Possible response**
7	Have you heard about Ayushman Bharat?	1 Yes 2 No If Yes go to next question If No, skip to Q.11
8	From where did you make your card?	1 PHC/CHC 2 VCE 3 CSC
9	Do you know under this scheme free health services are provided?	1 Yes 2 No 9 NA If Yes go to next question
10	Do you have PMJAY card ?	1 Yes 2 No
11	In which type of hospital did you go?	1 Public 2 Private 3 Trust hospital 4 Other
12	What services have you availed?	Packages under PMJAY
13	**Have you paid anything for your hospital stay?**	1 Yes 2 No If No skip to Q.16
14	If Yes then how much?	Rs……………….
15	**Have you paid anything for drugs?**	1 Yes 2 No If No then skip to Q. 18
16	If Yes then how much?	Rs……………….
17	**Have you paid anything for transportation from home to health facility?**	1 Yes 2 No If No then skip to Q. 20
18	If Yes then how much?	Rs……………….
19	**Have you paid for transportation from facility to home?**	1 Yes 2 No If No then skip to Q. 22
20	If Yes then how much?	Rs……………….
21	**Did you get Rs 300 for transportation from hospital?**	1 Yes 2 No I

22	**Have you paid anything for investigations?**	1 Yes 2 No If no then skip next question
23	If Yes then how much?	Rs……………….

SECTION:3

SOURCE OF ABOVE EXPENDITURE

S.No.	Characteristics	Possible response
24	From existing savings	1 Yes
		2 No
		9 NA
25	From borrowings from friends and relatives	1 Yes
		2 No
		9 NA
26	From mortgage of assets	1 Yes
		2 No
		9 NA
27	From borrowings from commercial loan	1 Yes
		2 No
		9 NA
28	From sale of assets	1 Yes
		2 No
		9 NA