



To study knowledge, attitude and actual practices regarding Mahatma Jyotiba Phule Jan Arogya Yojana at tertiary care hospital of Maharashtra- A cross sectional study

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Abstract

MJPJAY is a state sponsored publically funded health insurance scheme (PFHI) launched by Govt. of Maharashtra. It provides free quality critical care for low income families. At tertiary care hospital, specialist is the first point of care. Therefore knowledge & awareness among specialist about MJPJAY is essential for its proper implementation.

To describe current state of knowledge, beliefs and practices about MJPJAY among specialty doctors & to suggest measures for increasing benefits of MJPJAY at tertiary care hospital.

This is a Cross sectional descriptive study – a KAP survey model conducted at tertiary care hospital of Maharashtra. 100 randomly selected clinicians enrolling beneficiary under MJPJAY were targeted. Written informed consent was obtained for participation in the study. The specialists were requested to answer all set of questions on the spot in a standardized 45 item questionnaire. Suggestions were invited for maximizing the benefits of the scheme. The data was analyzed using Fischer Exact test & Chi square test as appropriate at significance level of 0.05.

Significant difference was observed in knowledge of faculty & resident doctors about MJPJAY. Despite of good insurance scheme, rigid rules discourage patient enrollment under MJPJAY with additional burden of investigations & documentation. 77% specialists suggested that insurance scheme should cover all illnesses rather than specific diseases. The package for treatment should be increased. Incentive is must for enrollment in the scheme along with training sessions every six months to one year.

Keywords: *Mahatma Jyotiba Phule Jan Arogya Yojana, preauthorization, claim settlement, medical specialties, surgical specialties, publically funded health insurance scheme, treatment update, discharge update.*

Introduction

India is one of the few countries which have public health spending of 1-1.2 per cent of GDP resulting in three quarters of the expense being

met from out of pocket (OOP) spending by individual households^[1-4]. This overreliance on OOP health spending causes significant financial burden on families who may resort to distressing

financing options such as sale of assets or borrowing at exorbitant rate of interest to cope with the cost of health care, while a fourth of the population goes untreated on account of financial constraints^[5,6,7]. About 40 to 60 million people in India become impoverished every year and more than 13% -15% of households experience catastrophic payments^[2,5,8,9]. This goes up to 30% if indirect expenditure due to companion cost of accompanying person is considered^[1]. Insufficient or poor quality of public facilities around the country drives people towards seeking private care that obviously comes at a significantly higher price. Thus specialized care is beyond the reach of common man.

Health insurance can provide financial protection and can reduce catastrophic out-of-pocket expenditure on health care, but only 10% of the Indians have some form of health insurance, mostly inadequate^[10]. Introduction of several government subsidized insurance schemes was a welcome development. Maharashtra is one of the progressive states in India in all respects. The state is subsidizing the health insurance premiums under Mahatma Jyotiba Phule Jan Arogya Yojana (MJPJAY) to overcome financial barriers to utilization of tertiary care and provide financial risk protection to deprived households against health expenditure. Rajiv Gandhi Jeevandayee Arogya Yojana (RGJAY) was launched with ambitious objective of catering to the needs of both the BPL and the above poverty line (APL) families & brought a substantial population under the insurance cover. It has been implemented throughout the state of Maharashtra since 2012 to provide free quality critical care for LOW INCOME families^[11,12]. The scheme is renamed as Mahatma Jyotiba Phule Jan Arogya Yojana from 1st April 2017. 971 medical procedures are covered under empanelled hospitals. The percentage of persons below Poverty line 24.22% in rural areas and 9.12% in urban areas 17.35% as a whole^[1]. The current health insurance coverage expected to be anywhere between 15% and 25%.

The MJPJAY scheme has been functioning in Maharashtra for more than four years. The government is investing a large amount of state funds in it. However, several reports and studies have pointed to serious issues such as continued OOP expenditures and poor implementation of insurance schemes^[14,15].

At tertiary care hospital, specialist is the first point of care. Therefore knowledge, attitude & awareness about MJPJAY among specialist is essential for its proper implementation. Present study is an attempt to understand the functioning of the scheme at ground level and barriers while delivering services under the scheme.

Objectives

1. To describe current state of knowledge, beliefs and practices about MJPJAY among specialty doctors at tertiary care hospital.
2. To find out the barriers and technical difficulties faced by specialists in implementation of MJPJAY at tertiary care hospital.
3. To suggest measures for better implementation/ smooth functioning of MJPJAY at tertiary care hospital.

Methods

This study is a cross sectional descriptive study- A Knowledge, Attitude and Practice type survey to assess awareness, beliefs, barriers and actual practices regarding Mahatma Jyotiba Phule Jan Arogya Yojana among clinicians of tertiary care hospital^[16]. Hundred clinicians directly involved in enrollment of the beneficiary under Mahatma Jyotiba Phule Jan Arogya Yojana & given informed consent for participate in the study were enrolled using computer generated randomization list. Specialists and resident doctors from pre and paraclinical departments not directly involved in providing services under MJPJAY & those not willing to participate in the study were excluded from the study. The doctors were personally visited to respective departments. Written informed consent was obtained for participation in

the study. The participants had liberty to withdraw anytime during the study period. Primary data was collected using a predesigned and pretested standardized 45 item questionnaire. The participants were requested to answer all set of questions on the spot, subsequently collected after completion. First 5 questions were regarding demographic characters. The remaining set of questions was divided into 3 sections. Fifteen specific questions to assess Knowledge and awareness about MJPJAY, fifteen statements describing their beliefs regarding implementation of MJPJAY, ten questions to assess practices and barriers in providing benefits of MJPJAY to eligible families. The questions were assessed for ease of comprehension, relevance to the intended topic, effectiveness in providing useful information and the degree to which the questions were understood and interpreted by different individuals. The questionnaire was validated by panel of experts having experience in survey type research. Reliability analysis was performed and the Cronbach's alpha coefficient was 0.85^[17]. The final draft of the questionnaire was tested on 20 randomly selected doctors those were not included in the study. Secondary data was collected from MJPJAY website (www.jeevandayee.gov.in) and policy documents including Memorandum of Understanding (MOU) draft. The principal investigator was responsible for the privacy, confidentiality and archival of the data.

The attitude section was assessed with **Likert type scale-**

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always
Completely disagree	Disagree	Neutral	Agree	Completely agree

A sample size of 100 respondents was targeted as calculated using statistical software open Epi version 3.01 (www.OpenEpi.com).

The response rate was calculated. The participants were sub categorized depending upon their clinical experience (Faculty / Resident) & specialty (Surgical / Medical). The data was entered and tabulated into MS Excel and analyzed using

Graph Pad Quick Calcs 2018 software (www.graphpad.com). Fischer Exact test was utilized to see association between variables at significance level of 0.05 (Confidence Interval - 95%).

The trial was registered prospectively to clinical trial registry (CTRI NO.-CTRI/2018/05/014104).

Results

Total 128 questionnaires were distributed, of which 123 were returned back, a response rate of 96.09% was achieved. Seven doctors were not willing to participate in the study. Questionnaires with missing data were discarded. Thus 100 questionnaires were included in the study. Comparison was made between faculty & residents as well as medical & surgical specialties. Table 1 describes the demographic characters of the groups.

The opinion of specialists about MJPJAY- 97.5% doctors opined that it is a good insurance scheme for poor & needy provided it is implemented properly. 77% specialists were of the opinion that health insurance scheme should be comprehensive & cover all illnesses rather than few identified diseases. 79% respondents agree that majority of cases of government hospitals can be registered under the scheme & 69% accepted that hospital will incur huge losses if cases are not registered to MJPJAY. 69% doctors opined that in MJPJAY there is additional burden on hospital for mandatory investigations & documentation. Photographs should not be made mandatory as evidence of treatment & available hospital record should be considered valid for government hospitals. Dedicated persons must be appointed for proper implementation of the scheme but outsourcing is not required (68% responses). Incentive is highly desirable according to 87.5% doctors. The existing package cost is inadequate for given disease (53% agree & 29% disagree).

The responses to questions assessing knowledge regarding MJPJAY are presented in Table 2. Significant difference in knowledge of faculty & residents was observed about data to be provided

for preauthorization, time of surgery (before or after preauthorization) & cashless nature of the scheme ($p < 0.05$). The suggested frequency of training for updating knowledge of resident doctors about MJPJAY was every six months to one year as per 53% specialists.

Responses to questions about actual practices of MJPJAY at tertiary care hospital are presented in Table 3. Only 12% specialists verify whether the newly admitted patient is beneficiary of MJPJAY, in 88% cases this practice was not followed at the time of admission. The preauthorization request is signed by trainee on behalf of experts (59% sign by residents & 41% by faculty). Significant difference in follow up of claim status of enrolled beneficiary was observed between medical & surgical specialties. Only 39% of medical specialties follow the claim status of the case whether claim paid, pending or rejected as against 61% in surgical specialties ($p = 0.0094$). Regarding referral to other empaneled hospital, 59%

specialists do not refer the patient to other empanelled hospital of MJPJAY.

Table 4 describes the response to statements about attitude of specialists regarding MJPJAY. 51% participants opined that many rules in MJPJAY are rigid leading to inconvenience to beneficiary as well as treating doctors whereas 28% disagree with the statement. 51% participants agree that private entities like third party administrators (TPA) & private hospitals perpetuate the interest of private industry whereas 14% disagree with the statement.

Table 5 shows factors influencing enrollment of beneficiary under MJPJAY at tertiary care hospital. Non availability of medicine & diagnostic facilities affect enrollment practices under MJPJAY (86%). The beneficiary is registered only if he is not affording according to 55% respondents. The beneficiary count will definitely increase if diagnostic facilities are made available round the clock.

Table 1: Demographic Data

Serial No.	Demographic Character	Medical Speciality	Surgical Speciality	P Value
1	Age (Years)	32.38 (1.41)	31.94 (1.15)	0.8088
2	Gender - Male Female	29% 10%	37% 24%	0.1965
3	Designation- Faculty Resident	17% 22%	22% 39%	0.530
4	Qualification- DM/ MCh MD/ MS MBBS	05% 11% 22%	01% 22% 39%	0.059
5	Experience (Years)	7.44 (1.98)	7.08 (1.62)	0.3087

Data expressed as mean (SEM), analyzed using students unpaired t test or as percentage % &

analyzed using two tailed Fischer's test/Chi square test as appropriate.

Table 2- Knowledge: Responses to questions assessing knowledge regarding MJPJAY

Question	Correct Response n %	Incorrect Response n %	P Value
The beneficiaries of MJPJAY are households with- Orange/Yellow Ration Card, Annapurna or Antyodaya card, Farmers with white ration card	42%	58%	0.0642
The correct sequence of events in MJPJAY – Claim submission, Registration, Preauthorization approval, Treatment update	28%	72%	0.1772
Time of payment of claim amount to the hospital is before /after completion of treatment	75%	25%	0.4823
Treatment of MJPJAY cases is cross verified by experts- True/ False	73%	27%	0.822
Patient under MJPJAY should get the same treatment as non MJPJAY- True/ False	82%	18%	0.7903

Data provided for preauthorization - Clinical details signed by specialist, Diagnostic investigations, On bed photo	78%	22%	* 0.0270
Surgery should be performed before/after preauthorization	49%	51%	* 0.0001
MJPJAY beneficiary will go to hospital and come out without making any payment to the hospital subject to the procedures covered under the scheme. - True/ False	82%	18%	* 0.0356

*The difference between faculty & residents is statistically significant as analyzes by Fischer’s Exact test

Table 3 Practice: Responses to questions about actual practices of MJPJAY

Question	Correct Response n %	Incorrect Response n %	P Value
What percentage of indoor admissions of your department are registered under MJPJAY?	45%	55%	0.0987
Do you verify whether admitted patient is beneficiary of MJPJAY?	12%	88%	* 0.0192
Do you sign preauthorization request?	41%	59%	* 0.0001
I try to update treatment or surgery online on the same day/ at the time of discharge?	48%	52%	0.1015
Do you follow online discharge procedure for MJPJAY case for?	82%	18%	0.4240
When do you call patient for follow up in MJPJAY	01%	99%	1.000
Do you refer the case to another empanelled hospital if beds are not available in hospital for MJPJAY patient?	41%	59%	** 0.0116
Do you follow the claim status of patient after discharge?	67%	33%	** 0.0094
I procure drugs/ surgical items for MJPJAY case from hospital only/ prescribe to patient from outside?	55%	45%	0.0676
Preauthorization request is sent for all emergency cases after ETI within 72 hours	79%	21%	0.8021

*The difference between faculty & residents is statistically significant as analyzes by Fischer’s Exact test

**The difference between medical & surgical speciality is statistically significant as analyzes by Fischer’s Exact test

Table 4: Attitude: Likert scale showing responses to statements about MJPJAY

Statement/Response	1 Completely disagree	2 Disagree	3 Neutral	4 Agree	5 Completely agree
Many rules are unnecessarily rigid in MJPJAY leading to inconvenience to patient as well as treating specialist	03%	25%	21%	26%	25%
Unlike MJPJAY health insurance scheme should cover all illnesses rather than few identified diseases	05%	10%	08%	50%	27%
The scheme has private entities like TPAs & private hospitals which perpetuate the interest of private health industry	01%	13%	30%	42%	14%
The package rates in MJPJAY are inadequate	01%	28%	18%	37%	16%
Photographs should not be made mandatory as evidence of treatment in MJPJAY	14%	23%	13%	27%	13%
	Never	Rarely	Sometimes	Often	Always
Responsibility of specialist for MJPJAY patient ends with discharge	12%	47%	16%	18%	07%
Separate OPD & unit should be dedicated for proper implementation of the scheme	05%	09%	18%	43%	25%
The beneficiary count in MJPJAY will increase if diagnostic facilities are made available	05%	07%	14%	57%	28%
Majority of patients coming to Govt. hospital can be registered in MJPJAY	01%	10%	10%	60%	19%
The hospital will incur huge losses if patients are not enrolled or claim not settled in MJPJAY	03%	28%	26%	25%	18%

Table 5-Factors influencing enrollment

Statement/Response	Never	Rarely	Sometimes	Often	Always
Non availability of medicines or consumables influences my patient enrollment in MJPJAY	06%	08%	44%	23%	19%
Practices and suggestions of my seniors prevent me from enrolling case under MJPJAY	53%	26%	09%	06%	06%
I register the case in MJPJAY only when he is not affording to purchase items from outside	36%	09%	34%	12%	09%
MJPJAY puts additional burden on the treating doctors as well as financial burden on the hospital for mandatory investigations	05%	26%	28%	24%	17%

Discussion

The present study provides a critical outlook on the MJPJAY, a Government Sponsored Health Insurance Schemes and attempts to highlight some of the key problem areas through a literature review.

MJPJAY comes as a kind of relief to many beneficiaries who are accustomed to pay out of their pockets. Had there been no insurance scheme for the poor, the proportion of households facing financial catastrophe would be much greater and many of them would have forgone treatment altogether^[2,13,14]. For public hospitals, good amount of revenue has been generated through cases which were otherwise done free before the scheme. In our study 97.5% of specialists opined that it is a good insurance scheme; it's a boon for poor & needy if implemented properly. But it has a specific target population, concentrates only on tertiary level hospitalizations, and does not provide comprehensive health care making it limited in scope. There is a need of expansion of the number of surgeries to be included in this scheme^[10,11,13].

MJPJAY is not a voluntary scheme, the beneficiary is passively enrolled as the Maharashtra government pays the premium for eligible households, and the beneficiaries do not have to contribute. Therefore the awareness about MJPJAY in the community is found to be less than 12% among hospitalized beneficiaries^[14]. Many patients come to know about the scheme only after admission in the hospital. This information about cashless feature of the scheme was given to them either by doctors or by other patients in the ward. But this information often

comes late in the stage of treatment, as a consequence, patient may have already spent considerable amount in investigation and consultations. It is the doctor who makes the choice about which patient is to be informed about the scheme rather than it being treated as an entitlement for the patient. As documented in previous studies, our study highlights the lack of awareness about MJPJAY and training among doctors themselves especially in public hospitals^[14]. 88% of the doctors do not verify whether admitted patient is beneficiary of MJPJAY. The reason offered was that most other specialties were already being provided at subsidized cost in the public hospital. Only 2.9% of the cases were from the 131 procedures reserved for the public hospital in MJPJAY. Trainings and workshops to sensitize the doctors about the scheme by TPAs was not taking place regularly as envisioned and when meetings were held, RGJAY was not considered a priority^[14]. The temporary postings of post-graduate doctors further accentuate the problem.

Utilization of the scheme has been extensively limited. Merely 2.45% of total eligible families across Maharashtra are enrolled under the scheme with Mumbai contributing 36.8 % of total preauthorization^[14]. About 68.9% of the cases in the public hospitals were registered only from Mumbai. Merely 12% of the hospitals are empanelled from the least urbanized districts, creating a gap in terms of availability of the network hospitals. Such a situation can burden the public hospitals in Mumbai^[14] It also reflects the failure of the scheme to reach out to the rural and backward areas ignoring the primary and

secondary public healthcare sector. This can be linked to the inadequate Information, Education and Communication (IEC) activities carried out through the scheme. The districts, which have been empanelled from phase I showed almost 50%, fall in the preauthorization in the second phase due to sheer neglect of phase I districts in terms of continued IEC activities, as IEC cannot be a one-time activity. Aarogyamitras posted at PHCs in phase I, were removed as a cost cutting measure^[14]. This highlights the poor attention given to IEC activities and the lack of interest of TPA/Insurer who stand to benefit from limited IEC, as it would control utilization of the scheme. This would in turn maximize their profit from premiums received. Therefore awareness campaigns targeting the eligible households need to be carried out.

The package rates offered by the scheme are lower as compared to the market price. The package rates are constant since the launch of the scheme as against the insurance premium which is almost doubled from initial rupees 333 per family per year in 2012. But the package rates fixed for the procedures are not revised on regular basis. Therefore some private hospitals are in general reluctant to participate in the scheme or even withdraw from the scheme despite empanelment.

Issues with Documentation Process & Cumbersome Patient Journey –The doctors in public hospitals complained about the lengthy documentation and procedural maze under the scheme. It seems rather unfair and impractical to have people (especially daily wage earners) go through a highly cumbersome procedure. The rejection of pre-authorizations by insurers is due to trivial reasons & procedure not being properly followed by the empanelled hospital and hence, when such pre-auth is rejected, the patient ends up being denied benefit of the scheme. The patients in public hospitals opted out of the scheme for low cost surgeries to avoid the delays and a cumbersome system^[14]. The processing of claims requires submission of extensive documentation and evidence by the concerned hospital. Missing

any of these documents leads to claim remaining pending until the said documents or evidence is not submitted. Majority of the cases of rejections are because of incomplete submission of documents, which can be easily rectified. Such claims are kept pending and then if they are not cleared in time they get rejected. When genuine cases are rejected for frivolous & minor reasons or for lack of the most basic documentation; it takes away from the ethos of the scheme, the benefit for the poor. At the same time, while involving the personnel from the public health system, the existing workload should be taken into consideration. Mechanisms should be formed to address the overburdening of these staff members due to the scheme related activities. The next barrier is the non-availability of specialists and equipment at the public hospital. Often the patients are referred to private facilities for diagnostic tests, the cost of which is to be reimbursed on production of bills. The patients have to then pay for these tests to start with, under a cashless scheme.

Lacunae were observed in monitoring mechanisms at various levels of the scheme, hardly any of these mechanisms seems to be functional and the way they are executed is not clear^[14]. In the earlier phases, RGJAY society (Presently designated as SHAS-state health assurance society) played a role in approval of pre-authorizations. However this is not the case anymore and the RGJAY Society only monitors rejected preauthorization and claims; and in genuine cases, tries to convince TPA to approve the case. Our study also revealed lack of communication between the top authorities who are the decision makers and the ground level staff when it comes to actual implementation of the scheme's components. The lack of clarity in terms of operationalization of various processes in the scheme results in a gap in its functionality. Moreover, some of the above mentioned gaps are between the guidelines and the MOU.

The MJPJAY scheme is an example of complex partnerships between public and private

stakeholders for providing tertiary level services. Although the financial intermediaries' purchases care from both public and private providers, private sector ends up getting higher revenues as it invariably dominates the network of empaneled providers across schemes. 84% of the hospitals empanelled under the scheme belonged to the private sector. About 74% of claims raised were from private hospitals while only 26% were from public hospitals. About 69.8% of the preauthorization have been raised in the private sector. The orange ration cardholders more commonly used services of private hospitals. 75% of the total beneficiaries were orange card holders, while yellow cardholders seem to use the scheme more through public hospitals. TPAs play a very important role of an intermediary between the hospital, Society and National Insurance Company. This multiple stakeholder partnership is influenced by the vested interests of each party. The data shows the government is spending large sums of money on the scheme, which is benefitting the private sector. The private sector selectively prioritized paying clients rather than those under the scheme. This was detrimental to the scheme as it resulted in waiting lists for surgeries and procedures for RGJAY patients^[14]. There was purposive selection of certain specialties and procedures by the private sector to cater to high-end packages in the scheme, gain more profit and be projected as specialists for the same. Also OOP spending in private hospitals for diagnostics and medications was more than twice compared with public hospitals the reasons for this were mostly related to administrative lacunae. Conducting health camps additional burden for public hospitals whereas for the empanelled private hospital, this was used as an opportunity for self-promotion to attract paying patients. TPAs have failed their responsibility of organizing and monitoring health camps. Insurers had an incentive to increase awareness and enrollment, which were profitable for them. As against the public hospitals, there is no provision of incentive for the scheme related

additional work for the specialists. Providing the same will definitely improve the functioning of the scheme according to 87.5% of specialist those are actually involved in MJPJAY related activities.

One of the attractive features of MJPJAY is adopting cashless method over reimbursement of claim. Despite the scheme being cashless, patients incur OOP and they may be often underreported. Nearly 63% of all studied beneficiaries and 88% of BPL beneficiaries incurred OOP expenditure while availing the scheme^[15]. It was also noted that few of the patients reported that they are satisfied despite of the OOPs incurred. Most of the patients coming to the government hospital fall into the free category BPL, senior citizen, MLC, National program, pregnancy, neonates, government employees etc. Families of these subjects do not co-operate for enrolling under RGJAY because they feel the amount available may be used for other situations where they may have to undergo paid treatment.

Scope of improvement in scheme-

Our study provides few suggestions for better implementation of the scheme.

Creating awareness and register beneficiaries in the scheme should be through the network of peripheral public health centers including PHCs, CHCs, Rural hospitals, etc. NGOs can be involved for IEC activities.

Common illnesses should also be included in the list of cashless procedures.

Investigations required are too many and sometimes not required for actual management of the cases.

An intraoperative photo actually cause distraction from actual procedure and reduces interest of participating doctors in the scheme.

Patients coming to hospital especially in case of emergency do not carry their ration card, so they cannot be enrolled under the scheme for cashless treatment. Even if enrolled as an emergency, the enrolment lapses if the ration card related formalities are not completed in 72 hours. This is difficult because patients coming to tertiary care

hospitals come for distant places. So the 72 hour limit should be scrapped.

Most patients are referred to the scheme post admission from either OPD or IPD where the patient has already incurred some cost. This is enough to raise concerns about the financial protection promises made under it.

The scheme has not been able to address the persistent issues with the health care system such as the rural urban disparity; Equal weight age should be given for strengthening the primary health centers and district hospitals. There is a need for stringent mechanisms to evaluate the schemes & its benefits to the population. There should be no provision of public funds to private hospitals without an adequate regulatory framework.

Conclusion

The finding of this study is an eye opener to know the staffs stand with regard to their knowledge, their expectation and technical difficulties faces by them while implementing MJPJAY. Though the scheme provides some relief to the poor there should be Universal Health Insurance Scheme (UHS) which has its coverage from its current focus on BPL to covering entire population and cover preventive, promotive and curative aspects of health. Premium should be based on ability to pay and linked to collection of direct general tax revenue.

There is a need of information dissemination to increase registration of more number of cases. Precise and brief guidelines for resident doctor should be laid down for efficient conduct of registration and claim process. It is apparent that there is a gap in what is stated in the guidelines and what happens in practice. In order to bridge the gap, the ground level difficulties faced by the scheme staff who is directly involved in implementing the scheme need to be acknowledged while drafting the rules. There is a need to understand and address the ground level complexities of operationalizing the scheme.

Government and insurance companies should try to decrease protocols of insurance, reduction in the number of mandatory investigations for eligibility and claims under this scheme. The processes should be thorough but they should not be cumbersome. The procedure rates fixed for the procedures should be revises on regular basis

There are also issues raised in government hospitals because of extra burden on doctors due to RGJAY scheme procedures.

When the guidelines are prepared by the public sector and the private sector is expected to act on it, adequate monitoring mechanisms should be in place.

Limitations

The study is based on a relatively small sample size in public hospital. Therefore generalizability of the findings may be limited. A metacentric study with participation of private hospital will through more light on implementation of MJPJAY to pass on the benefit to real beneficiaries.

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