

A Critical Evaluation of Doctor's Attitude Towards Bharatiya Jan Aushadhi Pariyojana

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Abstract

The pharmaceutical landscape in India is marked by a significant distinction between branded medicines manufactured by multinational companies or established Indian manufacturers and branded generics that, although containing the same active ingredients, are not actively promoted.

In response to the need for affordable medication, the Indian government launched the Pradhan Mantri Bhartiya Jan Aushadhi Pariyojana (PMBJP) to provide high-quality generic medicines at reduced prices through dedicated outlets known as Janaushadhi Kendras. Furthermore, the Government of India introduced a legislative framework requiring doctors to prescribe generic medicines, aligning with the Medical Council of India's recommendations to promote the rational use of drugs. This study aims to evaluate the knowledge, attitudes, and beliefs of physicians regarding Jan Aushadhi medicines, and to identify the factors that influence their acceptance and prescription of these generics. Conducted through qualitative research involving focus group discussions with 50 doctors from government hospitals in Mumbai and Thane, the study utilized open-ended structured questionnaires to gather primary data. The research design was exploratory and descriptive, with data analyzed using Excel and visualized through bar diagrams and pie charts. Findings revealed that while physicians acknowledge the potential of generic medicines to reduce healthcare costs, their confidence in prescribing these drugs hinges on the assurance of quality and therapeutic effectiveness. The study highlights the necessity for a robust legal framework to ensure uniform quality in generic drug testing and the availability of some research data or studies or clinical trial and adverse event data to support independent decision-making. Additionally, physicians suggested the government should mandate the prescription of generic medicines and implement a comprehensive public awareness campaign to foster their acceptance.

The study underscores the critical need for increased awareness and confidence among medical practitioners to achieve broader utilization of generic medicines in India, ultimately aiming to make healthcare more affordable and accessible.

PHARMACEUTICAL INDUSTRY

The Indian pharmaceutical industry holds the third position globally in terms of pharmaceutical production by volume and is renowned for its production of generic

medicines and cost-effective vaccines. In 2020-21, the sector contributed approximately 1.32% to India's Gross Value Added (at 2011-12 constant prices). The total turnover of the pharmaceutical sector in the fiscal year 2021-22 was Rs. 3,44,125 crore (USD 42.34 billion).

The Indian Pharmaceuticals industry plays a prominent role in the global pharmaceuticals industry. The Indian pharma industry ranks 3rd globally in pharmaceutical production by volume. India's exports of pharmaceutical products rose to 2.37 times in April- February 2022-23. The pharmaceutical industry in India is currently valued at \$50 Bn and is expected to reach \$65 Bn by 2024 and to \$130 Bn by 2030.

Key segments of the Indian Pharmaceutical Industry include generic drugs, over-the-counter medicines, bulk drugs, vaccines, contract research and manufacturing, biosimilars, and biologics. India is a global leader in the supply of DPT, BCG, and Measles vaccines, accounting for 60% of global vaccine production. It contributes significantly to the WHO demand for Diphtheria, Tetanus, and Pertussis (DPT) and Bacillus Calmette-Guérin (BCG) vaccines, and is the primary supplier for the measles vaccine.

The country boasts of 500 Active Pharmaceutical Ingredient (API) manufacturers, contributing about 8% to the global API Industry. India is the largest supplier of generic medicines, manufacturing approximately 60,000 different generic brands across 60 therapeutic categories, which accounts for 20% of the global supply of generics. India's provision of affordable HIV treatment is a notable success story in medicine.

Indian medicines are preferred worldwide due to their high quality and low cost, earning India the reputation of being the "pharmacy of the world."

India is a major exporter of Pharmaceuticals, with over 200+ countries served by Indian pharma exports. India supplies over 50% of Africa's requirement for generics, ~40% of generic demand in the US and ~25% of all medicine in the UK.

The nation is the largest provider of generic medicines globally, occupying a 20% share in global supply by volume, and is the leading vaccine manufacturer globally. India also has the highest number of US-FDA compliant Pharma plants outside of USA and is home to more than 3,000 pharma companies with a strong network of over 10,500 manufacturing facilities as well as a highly skilled resource pool.

In India, "branded medicines" typically refer to products manufactured and promoted by multinational pharmaceutical companies (MNCs) or established Indian manufacturers. On the other hand, branded generics, although containing the same active ingredients, are often not actively advertised or promoted by the manufacturers themselves.

It's important to recognize that substituting branded medicines with generics can raise concerns about quality and safety, which remains an ongoing issue in the pharmaceutical industry, concerning doctors, patients, and pharmacists.

The pharmacy stores are authorized to sell the prescription drugs as almost all medicines sold in India have brand names, including generic medicines with brands. Doctors who have traced the pricing of branded vs generic drugs have warned that, the margins for branded generic medicines are sometimes higher than the margins for branded medicines even when procured from the same company. Also, around 40% of the estimated 60,000 drug formulations sold in India are fixed-dose combinations or FDCs from a range of multiple pharmacological ingredients which are only sold through brand names. In a country like India, there is a need for government intervention to make medicines affordable.

To address these concerns, the Pradhan Mantri Bhartiya Jan Aushadhi Pariyojana (PMBJP) was launched by the Department of Pharmaceuticals, Ministry of Chemicals & Fertilizers, and Government of India. The PMBJP aims to ensure the availability of high-quality generic medicines at affordable prices for all. This initiative includes the establishment of dedicated outlets called Janaushadhi Kendras, which provide generic medicines to the public. The PMBJP's vision is to reduce the healthcare expenses of every Indian citizen by offering quality generic medicines at affordable prices.

The Government of India (GOI) introduced a legislative framework that would require doctors to prescribe generic medicines, which would be cheaper than their equivalent branded drugs to the patients. This is a welcome initiative though not a new one.

The Medical Council of India, in an amendment to the code of conduct for doctors in October 2016, has recommended that every physician should prescribe drugs with generic names legible and he or she shall ensure that there is a rational prescription which promotes the use of generic drugs.^[2] In future, the Government of India may bring a legal framework under which doctors will have to prescribe generic medicines to patients [1]

The Medical Council of India has already notified an amendment in Clause 1.5 of the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002. The clause now reads: "Every physician should prescribe drugs with generic names legibly and preferably in capital letters, and he/she shall ensure that there is a

rational prescription and use of drugs". The words "legibly and preferably in capital letters" were not there originally. Even few Physicians proposed that the government should make it mandatory for generic medicines to be prescribed by doctors and launch a robust public awareness campaign to encourage their use in India. There was an acceptance that, using generic medicine would significantly lower healthcare expenses. The physicians believed that generic bioavailability and bioequivalence were important factors to consider when deciding whether or not to prescribe generics. Clinical trial data and serious adverse event (SAE) data or some research based studies, should also be made available to the medical community so that transparent and independent decisions can be made.

The objective of this study to learn about Physician's knowledge, attitudes, and beliefs about Jan Aushadhi medicines, at the same time to understand the problems in ensuring the acceptance of generic medicines and utilization. The aim of the study is to identify factors that could enhance physician acceptance.

The study included qualitative research with focus group conversations with physicians from various fields of medicine with 50 doctors in Mumbai utilizing a questionnaire.

Experts recommend that the government establish a legal framework to ensure the consistent quality and therapeutic effectiveness of generic drug testing. Such measures would increase doctors' confidence in prescribing generic drugs to patients.⁶

OBJECTIVE

- 1) To analyze the awareness of Pradhan Mantri Jan Aushadhi Medicines among the doctors or Medicinal practitioners
- 2) To analyze the doctor's attitude towards the use of Jan aushadhi or Generic medicines.
- 3) To understand the doctor's adaptability of prescribing or promoting Jan Aushadhi Medicines.

SCOPE OF THE STUDY

RESEARCH METHODOLOGY

Research Design – Exploratory

Research Type – Descriptive

Data collection – Qualitative & Quantitative

Sources of data: Primary & Secondary.

Sources of Secondary data: Research articles, Papers, Books & Periodicals, Journals, websites, Newspaper articles.

Primary source data collection:

Method of data collection: Open ended structured questionnaire though personal interviews with doctors working with Government hospital

Universe: -- Doctors from Government hospital in Mumbai and Thane

Sample Size: 50 doctors

Sampling Technique: Convenient Sampling

Geographical area: Mumbai, Thane, Andheri, Andheri

Method employed for data analysis: Through Excel, Bar Diagram & Pie Chart etc.

LITERATURE REVIEW

Generic Medicines in the Indian Pharmaceutical Scenario

This article thoughtfully tackles the complicated topic of generic drugs in India, underlining the importance of policy, education, and regulation in making healthcare more affordable. It poses essential questions on how India can manage its pharmaceutical sector growth while ensuring that everyone has access to affordable, high-quality medicines.

There's a notable gap in trust when it comes to generics. Both doctors and patients are often skeptical about the quality and effectiveness of these drugs, influenced by the powerful marketing of branded drugs. The article calls for better education for both healthcare providers and the public to build confidence in generic medications.

The article wraps up with some strategies to improve the acceptance and availability of generic drugs. Suggestions include stronger prescription guidelines, better price controls, more government spending on essential drugs, and enhanced public education about the benefits of generics.

Prospects and Challenges of Generic Medicines adoption in India

The article offers a thorough and well-organized look into the complex issues and opportunities in India's generic medicine market. It highlights the crucial need for big changes to better promote generic drugs. These changes are important not only to reduce healthcare costs but also to make sure people can get the medicines they need. The study considers both the viewpoints of consumers and doctors, providing useful information that could help guide policy makers and industry leaders in making decisions that encourage more widespread use of generic medicines.

In-Vitro Comparative Study and Quality Analysis of Different Marketed Brand of Metformin Hcl Tablets Available in India with Brand Available In Jan Aushadhi Stores

The article presents a comprehensive analysis of the quality standards of various brands of Metformin hydrochloride tablets available in Hyderabad, India. The research aimed to compare these commercially available brands with a generic brand sold in Jan Aushadhi stores.

The researchers did several tests on the tablets to check things like their size, shape, how easily they break apart, how well they dissolve, and whether they contain the right amount of active ingredient. The results showed that the cheaper, generic tablets from Jan Aushadhi stores are just as good as the other brands, even though they cost about 70% less.

In summary, the paper is well-researched and presents a clear, evidence-based argument in favor of generic medications. It contributes valuable insights to the field of pharmaceutical sciences, particularly in the context of developing affordable healthcare solutions.

MedsGen: A Comprehensive Platform for Generic Medicine Identification and Access

The article discusses "MedsGen," an innovative online platform developed to enhance the accessibility and affordability of generic medicines. MedsGen provides

comprehensive information on generic alternatives to prescribed medications through a user-friendly web and Android application. Key features include real-time suggestions for generic medicines, cart management, and a nearby drugstore locator. The overall intention is to bridge the gap between costly brand-name drugs and more affordable generic options, empowering patients to make cost-effective healthcare decisions.

Generic Medicine Recommender System

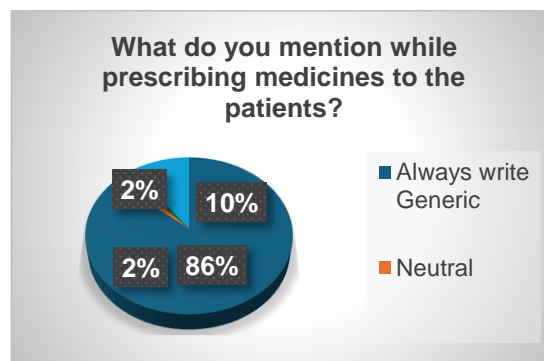
The document explores the development of an online system designed to recommend generic medications that have the same constituents as branded medications prescribed by doctors. The article identifies a gap in healthcare where patients often pay more for branded medicines despite the availability of cheaper, identical generic alternatives. This system is proposed to reduce unnecessary healthcare expenditures by making patients and healthcare providers aware of affordable medicine options.

However, its success will depend on the quality of its data sources, its ability to integrate smoothly into existing healthcare practices, and the acceptance of its technology by the end users. The idea is promising and could be a significant step forward in making healthcare more affordable if these challenges are addressed.

The system has its own limitations. The effectiveness of the recommendations heavily depends on the quality and comprehensiveness of the data scraped from the web. Inadequate or incorrect data could lead to poor recommendations.

DATA ANALYSIS

What do you mention while prescribing medicines to the patients?



86% participants confirmed that they "always write Generic"

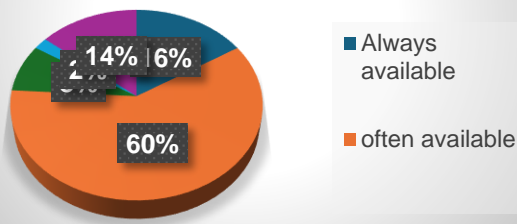
10% participants states that they write "Both (Brand name and Generic"

2% were neutral

2% write brand name.

2) Do the Government /CIVI BMC Hospital provide medicines that are free of cost and covers all type of medicines that you prescribe

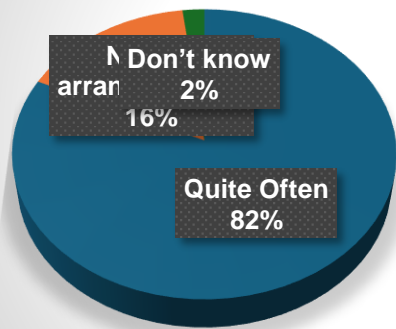
Do the Government /CIVI BMC Hosptial provide medicines that are free of cost and covers all type of medicines that you prescribe



16% responded that Hospital "Always available" provides the medicines prescribed by doctor at free of cost
60% responded that free of cost medicines are "Often available"
14% responded "Sometimes available"
8% responded "Only essential medicines available"
2% responded "Don't know"

3) If the medicines are not available in House do you prescribe medicine from outside.

If the medicines are not available in House medicine from outside.



82% respondents states = Quite often
16% respondents replied = No. we arrange locally
2% replied "Don't Know"

4) The medicines available In House are branded on Generic

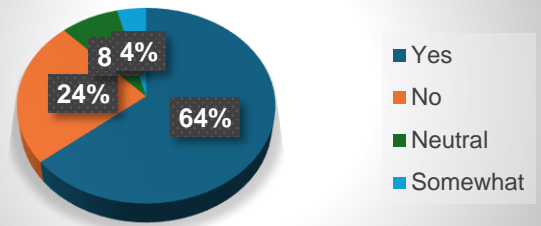
The medicines available In House are branded on Generic



76% respondents replied that medicines distributed or provided in hospital are both branded and generic.
14% respondents states "Generic"
8% replied branded
2% replied Don't Know

5) Are you aware of Pradhan Manti Bhartiya Jan Aushadi Paiyojana

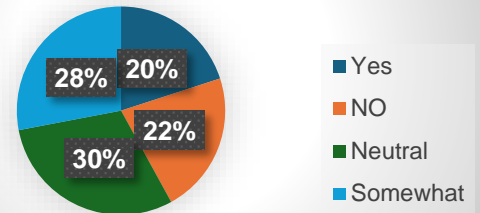
Are you aware of PMBJY



64% replied "Yes"
24% replied as "NO"
8% were Neutral
4% replied as somewhat

6) According to you is there any awareness among the patients in case

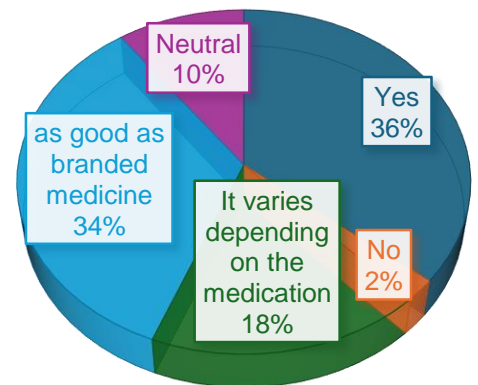
According to you is there any awareness among the patients in case



30% respondent replied as Neutral
22% replied as NO
28% replied as "Somewhat"
20% replied as "Yes"

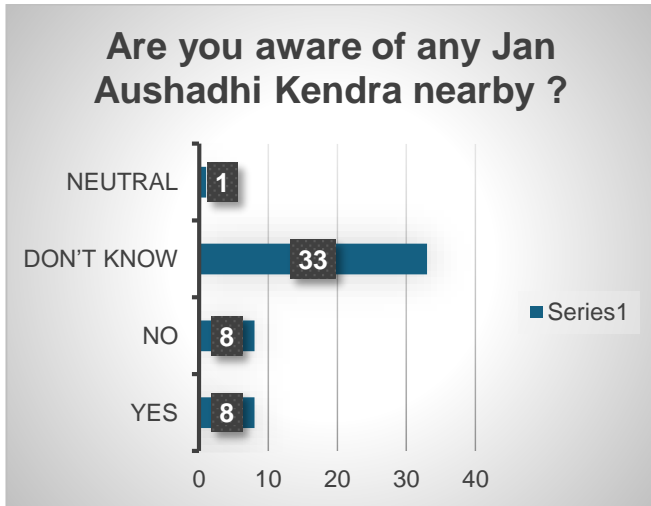
7. Would you say there's a significant difference in the quality between branded and generic medicines?

IS THERE SIGNIFICANT DIFFERENCE IN THE QUALITY BETWEEN BRANDED AND GENERIC MEDICINES?



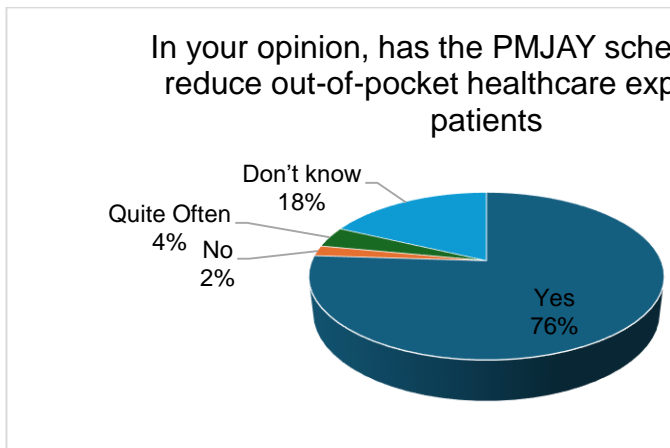
36% replied as "Yes"
34% replied its "as good as branded Medicines"
18% states "it varies depending on the medication"
10% were neutral
2% replied as "NO"

8) Is there JAK nearby? Are you aware of any Jan Aushadhi Kendra nearby?



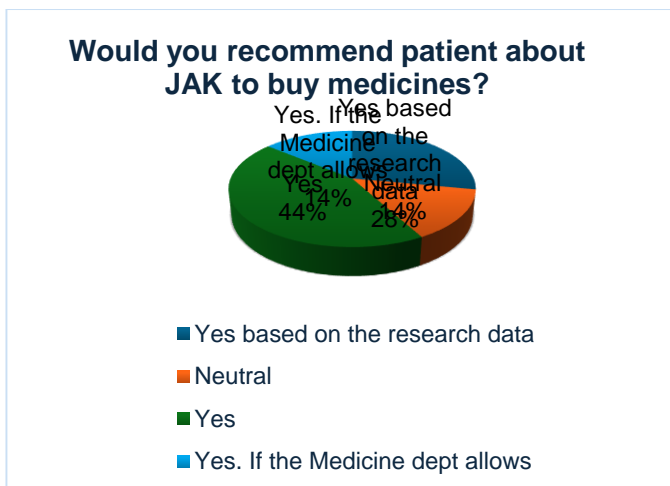
33 respondents replied as Don't Know. 8 respondents replied as "Yes". Another 8 respondents replied as "NO" and 1 respondent was "neutral"

9) In your opinion, has the PMJAY scheme helped reduce out-of-pocket healthcare expenses for patients



76% replied "Yes". 18% respondent replied as "Don't Know", 4% reverted as "Quite often" and 2% replied as "NO"

10) Would you recommend patient about JAK to buy medicines?



44% respondent replied as "Yes". 28% respondent replied "Yes based on the research data" 14% replied "Neutral" and 14% replied as "Yes if the Medicine department allows"

FINDINGS

1) Regarding the prescription habit of the doctors' 86% doctors reported that they write prescription using Generic Name. 10% confirmed that they write prescription in both generic and branded medicines. 2% prescribe or write prescription in brand name and 2% respondent were neutral.

The hospital visited are Government hospital, BMC controlled hospitals and as per the guidelines, the doctors associated with these hospital writes prescription in Generic Medicines.

Despite these guidelines, some doctors continue to prescribe both generic and branded medicines due to concerns about the efficacy of generics. This is particularly notable in railway hospitals, where branded medicines are provided free of charge to patients.

2) Since government hospitals distribute medicines free of cost, the availability of a comprehensive range of medicines is a crucial factor. According to the survey, 60% of doctors reported that medicines are "often available" in these hospitals. Additionally, 16% of respondents stated that the hospitals "always" cover all types of medicines. However, 14% mentioned that medicines are "sometimes available," while 8% indicated that "only essential medicines are available." Lastly, 2% of respondents were uncertain, answering "don't know."

When medicines are not available at the hospital, patients often need to purchase them from nearby pharmacies. In these cases, pharmacists might promote branded medicines due to higher profit margins, which could lead patients either to avoid purchasing the medication or to opt for other generic medicines that might be more expensive than Jan Aushadhi medicines.

3) With regards to the "Medicines that doctors prescribe are not available in hospital at free of cost, do you prescribe medicines from outside", 82% respondents replied that "Quite Often", 16% respondents replied as "No, we arrange locally", 2% replied "Don't know"

4) In Government hospital with colleges likes J J hospital, KEM hospital, SION hospital etc provide medicines but its basic or essential medicines and that too most of the time Out of sock. To bridge this gap, patients had to buy the medicines from the nearby pharmacies if the medicines are unavailable in the hospital. The exceptional is only Mental hospital

(Thane), Railway Hospitals, BMS hospital, where the medicines are to be procured or made available by the hospital medicine team only.

In case of Railway hospital at Byculla, if the medicines prescribed by doctors are unavailable, then patients submit the request for the medicine and the hospital purchase /procurement cell arranges that medicines through Local Purchases.

- 5) With regards to the “Medicines available in the hospital are branded or generic”, 76% replied “Both” 14% respondents replied as “Generic”, 8% respondents replied as “Branded” while 2% replied as “Don’t know”

The medicines available in the Government hospital like, Cooper, KEM, J J, Bhabha hospital are Branded as well as Generic Medicines.

Railway hospital at Byculla, patients receive “Branded Medicines” at free of cost and hence doctors are not much aware of Jan Aushadhi as the medicines are only written or arranged by the Medical department only

- 6) When asked about their awareness of PMJAY, 64% of doctors responded that they are aware of PMJAY medicines, 24% said they are unaware, 8% were neutral, and 4% were somewhat aware.

Although there is some awareness among doctors about generic medicines, it is insufficient, and there is a need to increase this awareness further. Doctors in government or BMC hospitals prescribe only the medicines available in their hospitals. While a few doctors are aware of Jan Aushadhi medicines, they often view them merely as generic medicines and are not well-informed about the government scheme promoting affordable medicines by opening more independent pharmacies.

- 7) With regards to the question “When you send a prescription outside, does patient ask for generic and are patient aware of generic medicine”, 30% respondents replied as “Neutral”. 28% replied as “Somewhat”. 22% replied as “NO” and 20% replied as “Yes”

As most of the patients visited are from Low-class family who cannot afford medicines, are not much aware of the generic medicines. Even don’t know the difference whether its generic medicines or Jan Aushadhi Medicines. The patients are only concern about the free medicines that are available or distributed by hospital at free of cost. If the medicines are not available due to the out of stock situation, patients buy from outside and asked for the medicines that are affordable or Sasta or generic medicines.

- 8) With regards to the difference in the quality of branded and generic medicines, 36% respondent replied “Yes”, 34% respondents replied that “ its as good as branded medicines”, 18% respondent relied

that “ it varies depending on the medication” , 10% were Neutral, and 2% replied as NO”

Though the doctors prescribe the generic medicines, doctors still believe that branded medicines has more efficacy than the generic medicines and it different. Even in case of critical care medicines, doctors believes the Branded medicines because it is supported by some studies.

- 9) With regards to the doctors awareness of JAK nearby the hospital they operate, 66% of the respondents replied that they “Don’t know” about the Jan Aushadhi Kendra nearby. 16% respondents replied “NO”. Only 16% respondents are aware of the existence of “Jan Aushadhi Kendra” nearby hospitals and 2% were neutral.

Majority of the respondent “Don’t Know” if there is JAK nearby. It may further lead to restriction to promote Jan Ashadhi scheme or medicines by doctors to patients as patients buys medicines from the nearby chemist and doesn’t search for JAK.

- 10)When asked the question about the “ PMJAY scheme help to reduce out-of-pocket healthcare expenses for patients, 76% responded “ Yes” , 18% responded as “ Don’t know” . 4% replied “ Quite Often” and 2% responded “NO”

The substantial group of respondents agreed that PMJAY scheme helps to reduce the “Out of Pocket” expenses. Under the scheme the medicines are available at very lower prices compared to branded medicines

- 11) With regards to the questions of “Recommending Jan Aushadhi Medicines to the patients”, 44% respondent did agree that they can recommend it. 24% responded that they can recommend these medicines based on the research data or some published articles. 14% responded that they can recommend if the hospital administration allows them to promote or recommend the outsider medicines. And 14% were neutral.

DISCUSSION

The discussion with the group of physicians showed

- Participants expressed concern about the lack of clinical trial data and its availability in the public domain specifically in case of Jan Aushadhi Medicines.
- In BMC-funded or government hospitals, doctors prescribe and the medicine department distribute medicines that are available for distribution. A list of these medicines is circulated to OPD doctors to ensure they are aware of the available options.
- At the Mental Hospital in Thane, medicines are strictly prescribed and dispensed by the hospital. Even if a medicine is out of stock, doctors must prescribe alternative medicines available within the hospital

and are not permitted to prescribe any outside medications. Additionally, there is no external pharmacy available nearby. It also impact the recovery of the patients specifically in case of CNS category, as there is frequent switch in the medicines due to non-availability of medicines.

- A majority of participants expressed interest in the availability of some studies of the Jan Aushadhi molecules compared to branded drugs, seeking these data to prescribe or promote these drugs with confidence.
- Few segment of doctors are still concern about the quality of the medicines and are ready to recommend these medicines or scheme subject to availability of some solid research paper or data to support the effectiveness or efficacy of the medicines.
- There was a consensus among participants regarding the need for governmental regulatory bodies to control the prices of the drugs which are used in critical care as well as essential medicines.
- Though few participant find generic medicines effective, the group of participants are still doubtful about the quality of medicines.
- The essential medicines are OOS in major government hospital and it would be beneficial to have JAK near the hospitals so that medicines can made available at lower prices
- Most of the people visiting the hospital are from lower-income groups and are often unaware of government schemes or the availability of these medicines. Therefore, it would be advisable to organize awareness campaigns or establish independent outlets to ensure these medicines are accessible to them.

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CONCLUSION

After a brief discussion with government doctors, it is feasible to establish Jan Aushadhi Kendras within hospitals or nearby areas. Since most government hospitals provide medicines free of cost, it is essential to promote these medicines at both the hospital and doctor levels.

The medicines should be made available or distributed by the medicine department of the government hospital at no cost. Additionally, PMBI should explore appropriate ways to participate in tenders organized by BMC, government hospitals, and Railway hospitals. As most medicines distributed in government hospitals are sourced through tenders, it is crucial for distributors or PMBI to have a process in place to participate in these bidding processes. This will ensure that Jan Aushadhi medicines can be made available through the tendering process in government hospitals such as BMC.

While doctors are aware of generic medicines, there is a need to increase awareness specifically about Jan Aushadhi Medicines. PMBI should organize more campaigns to promote Jan Aushadhi Medicines among doctors.

There is also a need to fast-track the process of having independent Jan Aushadhi outlets inside the hospital which also has medical colleges, as there is lack of outlets Doctors lack confidence in the efficacy of Generic and Jan Aushadhi Medicines. Therefore, more research and data are needed to demonstrate the effectiveness and efficacy of Jan Aushadhi Medicines.

There is a big taboo about the generic medicines. The people and doctors think that its available at low prices so these medicines are not so effective. This can be avoided by arranging campaigns about the Jan Aushadhi medicines and arrange some efficacy data about the products.