

RESEARCH ARTICLE

Knowledge, attitude, and practices towards Jan Aushadhi scheme

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ABSTRACT


Background: Increased health-care expenses are a major concern in a country like ours where economic conditions are on the lower side. The Government of India to control the increased health-care expenses launched the Jan Aushadhi scheme in April 2008 by providing low-cost generic medicine. However, the results have not been as expected. **Aims and Objectives:** The current study was designed to have insight into this problem by studying knowledge, attitude, and practices (KAP) among doctors and patients. **Materials and Methods:** This study was conducted in Government Medical College, Jammu and surrounding hospitals where the doctors and patients were provided with a prevalidated questionnaire comprising total 42 questions based on KAP. A total of 104 participants (48 doctors and 56 patients) and their responses were recorded and presented as number percent. **Results:** All the participating physicians were aware of the Pradhan Mantri Jan Aushadhi scheme and availability of its stores. 83.3% of doctors knew that the Jan Aushadhi medicines are cheaper than other brand products, whereas 25% of doctors believed that generic medicines are slow to act. Almost all doctors (83.3%) agreed that the economic condition of the patient should be the prescribing criteria for generic medicine. 16.66% of doctors said that they prescribe Jan Aushadhi generic medicines. 75% of patients were unaware of Jan Aushadhi and all patients agreed that branded medicines are expensive and wanted cheaper alternatives. Most of the patients (87.5%) believed that Jan Aushadhi medicine is one such alternative. **Conclusion:** We conclude that some of the doctors are still not convinced about the efficacy and promptness of Jan Aushadhi generic medicines. Maximum doctors do not prescribe generic medicines. Hence, the doctors should be encouraged to use more of Jan Aushadhi generic medicines and patients should also be educated about this scheme.

KEY WORDS: Knowledge; Attitude; Practice; Jan Aushadhi Generic Medicine; Brand Medicine

INTRODUCTION

Increased health-care expenses remain a major concern worldwide, especially in underdeveloped and developing countries where majority of the people are unable to meet them and India is no exception. According to one of the estimates, 70% of Indian people spend their 10-20% of total

income as health expenses and adds up to their financial difficulties. The WHO survey performed in the year 2011 documented that 3.2% of Indians live below poverty line and lack of the health insurance further compounds to the above situation.^[1,2] At the top of the above scenario, the Indian market has number of same drug formulations with different brand names. According to one of the reports, 1 lakh brand medicines are registered and made of 1000 active pharmaceutical ingredients. This has resulted because of mushrooming of large number of pharmaceutical industries as India is ranked 3rd largest in volume and terms who brand the same medicines by different brand names. This results in competition by adopting different marketing strategies between different pharmaceutical houses for the promotion

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of their brands and further escalating the cost of medicines. Although there has been increase in number of medicines flooding the market in their generic names to overcome the cost factor. However, it has largely failed to make impact on economic pressure on health care as most of the branded medicines are manufactured by multinational companies and large Indian companies and are strongly supported by the prescribing physicians.^[3-5]

To overcome this problem inflicting immense economic impact on poor population, the Indian Government had launched the Jan Aushadhi campaign in April 2008 by opening government -controlled centers in various states to provide quality generic medicines at lower prices to their counterpart branded ones to make them easily affordable to a common man.^[6]

Currently, our country has more than 850 Pradhan Mantri Bhartiya Jan Aushadhi Kendra's functional spreading over 28 states/union territories. As on January 31, 2017, the product basket contains >1100 items (1000 medicines and 154 surgical and consumables). At present, there are over 250 Jan Aushadhi drug stores across the country. Jan Aushadhi centers in these states provide generic medicines of 230 different kinds of drug formulations. However, the intended intentions of the government have not still met with total success as still the patients feel hesitant to buy the generic medicines from these centers and even doctors are doing no good as some of them are reluctant to prescribe them.^[7]

To have insight into this problem, the current study was conceived by subjecting stakeholders such as doctors and patients to a detailed questionnaire to access the knowledge, attitude, and practices (KAP) toward Jan Aushadhi scheme. Hence, the outcome of the current trial could suggest remedial measures.

MATERIALS AND METHODS

The current study was conducted in Government Medical College, Jammu and surrounding hospitals. This study was approved by the Institutional Ethics Committee vide order number IEC/thesis/research/I54-C/2015/232 dated November 4, 2015. A self-made questionnaire comprising different questions based on KAP toward Jan Aushadhi were randomly distributed among study participants comprising doctors and patients in the medical Outpatient Department of Government Medical College, Jammu and surrounding hospitals. The questionnaire designed for doctors comprised total 27 questions (11 questions on knowledge, 12 on attitude, and 4 on practice). Similarly, the questionnaire designed for patients comprised total 15 questions based on attitude and practice. Therefore, a total of 42 questions were asked to the study participants. Out of 104 participants, 48 were doctors

and 56 were patients. The respondents answers were taken as Yes and No and were graded accordingly.

Statistical Analysis

Analysis was performed and the data were expressed in *n* (%).

RESULTS

Out of the total 104 participants, majority of the respondents were males (71.15%), between the age group of 20 and 30 years (54.80%) (Table 1).

About (66.66%) doctors thought that Jan Aushadhi medicines are equally efficacious as brand medicine and all of them believed that Jan Aushadhi medicines are equally safe. Most of the doctors (68.75%) said that generic medicine should be used in same dosage form as brand medicine. Maximum prescribers (85.41%) agreed that Jan Aushadhi medicines supply cheap medicine compared with other branded medicines (Table 2).

Majority of the doctors (83.33%) did not agree that brand medicines are manufactured with better facilities in comparison to generic medicines. 66.66% of doctors said that Jan Aushadhi generic medicines are effective and 75% did not believe that they are slow in action. Maximum physicians (91.66%) felt that therapeutic failures are not with Jan Aushadhi medicines and about 85.41% of doctors did not agree that the marketing strategies of pharmaceutical houses adversely affect prescribing of Jan Aushadhi medicines. All doctors agreed to the fact that Jan Aushadhi medical store should be available in every hospital and awareness regarding its use must be encouraged while 91.66% agreed that government should come up with stringent laws for its use (Table 3).

About 83.3% of doctors did not prescribe Jan Aushadhi medicines and 93.75% did not make the patients aware of the Jan Aushadhi scheme and their effects. 66.66% thought that Jan Aushadhi medicines are not less advantageous, whereas

Table 1: Demographic profile of the participants (n=104)

Parameters	<i>n</i> (%)
Gender	
Male	74 (71.15)
Female	30 (28.84)
Occupation	
Doctors	48 (46.15)
Patients	56 (53.84)
Age (in years)	
20-30	57 (54.80)
31-40	33 (31.73)
41-50	12 (11.53)
>50	02 (1.92)

Table 2: Knowledge of doctors toward Jan Aushadhi (n=48)

Questions	n (%)	
	Yes	No
Do Jan Aushadhi refer to generic medicine or brand medicine?	48 (100)	0
Do you know about the Pradhan Mantri Jan Aushadhi scheme Government of India?	48 (100)	0
Are Jan Aushadi medicines available in your state?	48 (100)	0
Do you know about any Jan Aushadhi medical store in your vicinity?	48 (100)	0
Do generic medicines supplied by Jan Aushadhi stores have anything to do with patent or innovator intellectual property right?	0	48 (100)
Do you think that Jan Aushadhi generic medicines are equally efficacious as brand medicines?	32 (66.66)	16 (33.33)
Do you think that Jan Aushadhi generic medicines are equally safer as brand medicines?	48 (100)	0
Should Generic medicine be used in same dosage form as brand medicines?	33 (68.75)	15 (31.25)
Are you aware of the law that is passed by Government of India regarding usage of generic medicine?	48 (100)	0
Do generic medicines follow FDA guidelines as branded medicines?	32 (66.66)	16 (33.33)
Are medicines supplied by Jan Aushadhi outlets cheap compared with other branded medicines?	41 (85.41)	7 (14.58)

FDA: Food and Drug Administration

Table 3: Attitude of doctors toward Jan Aushadhi scheme (n=48)

Questions	n (%)	
	Yes	No
Do you think that the brand medicines are manufactured with better facilities in comparison to generic medicine supplied by Jan Aushadhi stores?	8 (16.66)	40 (83.33)
Do you think that Jan Aushadi generic medicines are as effective as brand medicines?	32 (66.66)	16 (33.33)
Do you think that Jan Aushadi medicines are slow to act than brand medicines?	12 (25)	36 (75)
Do you find Jan Aushadhi medicines cost less as compared to branded medicines?	41 (85.41)	7 (14.53)
Do you think that therapeutic failures are more with Jan Aushadi medicines as compared to brand medicine?	4 (8.33)	44 (91.66)
Do you advocate providing incentives to doctors to write Jan Aushadhi medicine?	18 (37.5)	30 (62.5)
Do you think that economic condition of a patient should be considered while prescribing a medicine?	40 (83.33)	8 (16.66)
Do you think that the marketing strategies of pharmaceutical houses adversely effect the prescribing of Jan Aushadhi medicines?	7 (14.58)	41 (85.41)
Do you think that the chemist change or supplement Jan Aushadhi generic medicine with branded medicines?	0	48 (100)
Do you think that Jan Aushadhi medicine store should be available in every hospital?	48 (100)	0
Do you think awareness regarding Jan Aushadhi medicine should be encouraged more among doctors?	48 (100)	0
Do you think that the government should come up with tough laws advocating use of Jan Aushadhi medicines?	44 (91.66)	4 (8.33)

91.66% said that switching from brand to generic medicine will have no effect on the treatment outcome (Table 4).

Most of the patients (75%) were unaware of the term Jan Aushadhi, whereas 82.14% did not know about its availability in any medical store. When asked about the cost factor, almost all patients agreed that brand drugs are costlier and 64.28% of them felt that medicines with less price were not preferred by their doctor. About 87.5% of patients believed in saving health-related expenditures using Jan Aushadhi medicines. Maximum patients wanted to get more awareness, availability of one such store in each hospital, and strict laws for implementation of Jan Aushadhi medicine and its scheme (Table 5).

DISCUSSION

The current study has demonstrated that all the prescribers were aware of the term Jan Aushadhi scheme, its availability

Table 4: Practice toward Jan Aushadhi among doctors (n=48)

Questions	n (%)	
	Yes	No
Do you prescribe Jan Aushadi medicines?	8 (16.66)	40 (83.3)
Do you find Jan Aushadi medicines less advantageous than brand medicines?	16 (33.33)	32 (66.66)
Do you make patients aware of Jan Aushadi medicine scheme and its effects?	3 (6.25)	45 (93.75)
Do you think that if you switch a patient from brand medicine to Jan Aushadhi generic medicine will change the outcome of the treatment?	4 (8.33)	44 (91.66)

and that it referred to the generic medicines. 66.66% of the prescribers had the knowledge that the Jan Aushadhi generic medicines are equally efficacious than brand medicines and almost the same percentage (68.75%) agreed that the

Table 5: Attitude and practice of patients toward Jan Aushadhi (n=56)

Questions	n (%)	
	Yes	No
Are you aware of the term Jan Aushadhi?	14 (25)	42 (75)
Do you know about any medical store in your vicinity where Jan Aushadhi medicines are available?	10 (17.85)	46 (82.14)
Would you like to know more about such medical stores?	49 (87.5)	7 (12.5)
Do you think brand drugs are costlier?	56 (100)	0
Would you like to know about other cheaper alternatives of medicines to brand medicines?	56 (100)	0
Have you ever asked your doctor about Jan Aushadhi medicine?	10 (17.85)	46 (82.14)
Do you think that your doctor gives preference to medicines with less price?	20 (35.71)	36 (64.28)
Has your doctor ever asked you to switch from branded to Jan Aushadhi generic medicine?	0	56 (100)
Would you prefer to buy branded medicine over Jan Aushadhi if cost of generic and branded medicine is same?	16 (28.57)	40 (71.42)
Do you think that using Jan Aushadhi medicine will help you to save health cost expenditure?	49 (87.5)	7 (12.5)
Has the chemist ever emphasized you to switch or change from brand medicine to generic medicine supplied by Jan Aushadhi outlet	0	56 (100)
Would you like to get more awareness regarding the use of Jan Aushadhi medicine from your doctor?	56 (100)	0
Would you like to have a Jan Aushadhi store in your hospital?	56 (100)	0
Would you like the Government to come up with more strict laws for implementation of Jan Aushadhi medicine scheme?	49 (87.5)	7 (12.5)
Would you like to get more information on Jan Aushadhi through media, newspapers, magazines, etc.,	56 (100)	0

same dose of the generic medicine should be used. It was surprising that only 85.41% of the physicians had knowledge that Jan Aushadhi generic medicines are cheap. Almost all the physicians agreed that generic medicines have nothing to do with patent or innovators property right and considered generic medicines to be equally safe brand medicines. About 66.66% of doctors agreed that generic medicines also follow the Food and Drug Administration (FDA) guidelines and more awareness should be encouraged regarding its use.

Analysis of the attitude of the doctors toward Jan Aushadhi scheme revealed that 16.66% had this notion that branded medicines are better than Jan Aushadhi generic medicine. 25% of felt generic medicines are slow to act, whereas only 8.33% had this view that failures are more common them. All doctors agreed that Jan Aushadhi stores should be made available in every hospital, whereas 83.33% of physicians thought that economic condition of the patient should always be considered before prescribing.

On assessing the doctors perception toward Jan Aushadhi, 83.3% did not prescribe generic medicine and maximum of 93.75% did not make the patient aware of this scheme. About 66.66% of doctors found them advantageous, whereas 91.66% believed that switching a patient from brand medicine to Jan Aushadhi generic medicine will have no negative effect on the treatment outcome.

While the results obtained from the questionnaires given to the patients revealed that majority (75%) of them are not aware of the Jan Aushadhi scheme nor are they (82.14%) aware of any Jan Aushadhi medical store in their vicinity. All patients knew that branded medicines are expensive and

wanted alternative cheaper medicines to be provided to them. About 17.85% of patients only asked the doctors about the Jan Aushadhi generic medicine. Majority of the patients (87.5%) felt that Jan Aushadhi medicines are as effective as brand medicines and they also agreed that Jan Aushadhi medicine will cut down the health expenditure. Almost all patients wanted that such medical stores should be opened in their hospital and more information should be provided through media, newspapers, etc., and maximum patients (87.5%) emphasized that the government should come up with more strict laws for implementation of the Jan Aushadhi scheme.

Gupta et al., 2015 observed that only 45.2% of the doctors were aware of Jan Aushadhi and 75.3% agreed that generics are safe and effective as brand medicines which are almost similar to observations of our study. 83.6% of physicians said that there should be a generic medicine store in every hospital and 89% agreed that there should be more awareness among doctors and patients which are almost concurrent to our results. 71.2% of doctors believed that switching the patient from branded to generic medicine will not change the outcome of the therapy which was almost similar to our results. As per the practices are concerned, observations made by Gupta et al., 2015 have shown that 63% of doctors prescribe Jan Aushadhi generic medicine which are contrary to our results.^[1]

Another study done by Ahire et al., 2013 demonstrated that most of the patients (60.86%) knew that generic medicines have same effect and follow the FDA guidelines as branded medicine. Majority of the participants (86.95%) were never asked to switch from branded to generic medicines and also about the cost constraint by their doctor. While most of the

patients (82.60%) agreed that using generic medicine will help them to save health expenses and they would like to have more information about its availability. The results being similar to observations made in our study.^[8]

Patil *et al.*, 2016 observed that most of the physicians were in the age group of 31-40 years which is similar to our study and about 69.10% were aware of the generic medicine. 76.92% of physicians had a positive attitude for Government role and also felt that there was a significant price difference between generic medicine and brand medicine.^[9]

In concurrence to our results, Kembhavi *et al.*, 2014 demonstrated that 75% of doctors agreed that generic medicines are as effective and of better quality. 61.67% of doctors said that more awareness and education about prices of generic medicines should be made among doctors. 95% said that generic medicines were more affordable than brand medicine which is almost similar to our observation (83.33%). In contrary to our findings, Kembhavi *et al.*, 2014 showed that only 50% of doctors in their study had knowledge regarding the definition of generic medicine and only 31.67% agreed that generic medicine produces fewer side effects than brand medicines.^[2]

Kesselheim *et al.*, 2008 have demonstrated in their meta-analysis study that generic medicines are equally efficacious as in our study where 66.66% of physicians also felt the same.^[10] Similarly, Araszkievicz *et al.*, 2008 have shown that switching to generic medicine is not related to its poorer efficacy or safety.^[11] Lopes Gde, 2013 has also observed that generic medicines decrease the health-related cost expenditures.^[12]

A systematic review on perception of generic medicines among general population and doctors by Colgan *et al.*, 2015 observed that 28.04% of people said that generic medicines are of low quality, less efficacy, and more side effects than brand medicines. Even the doctors (28.54%) agreed that generic medicines are less safe, of poor quality (28.04%), and with more side effects. They observed that there were lots of misconceptions about the safety and efficacy among the respondents.^[13]

As per Patel and Paras, 2016, most of the doctors in their study said that generic medicine are not effective as brand medicines and generic medicines take longer to act which is totally opposite to the outcome of our study. Another observation made by Patel and Paras, 2016 was that majority of the practitioners said that generic medicines are an important tool in reducing the overall health expenditure. Only 27% of practitioners had heard about Jan Aushadhi generic medicine store and most of them were not aware about of the ongoing schemes to access affordable medicines. 40% of doctors agreed that such schemes could be helpful, whereas 46% did not agree to this.^[14]

Similar to our observations, Das *et al.*, 2017 in their research observed that 90% of patients believed that generic medicines are as effective as brand medicines and only 10% of patients said that side effects are more with generic medicines, and considered them to be much cheaper than brand medicines which are concurrence to our study.^[15]

CONCLUSION

The current study results have demonstrated that still some of the doctors are not convinced of the efficacy and promptness of the action of Jan Aushadhi generic medicines. Majority of the doctors (83.3%) do not prescribe generic medicines and 93.3% do not make the patient aware of the Jan Aushadhi schemes. Patients are aware that this scheme will cut down their health expenditure cost. All patients felt that doctors should make them aware of such schemes. Hence, we conclude from the outcome of this study that doctors should be encouraged to use more of Jan Aushadhi generic medicines and also make patients aware of this scheme.

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