



ECONOMIC ANALYSIS BETWEEN JAN AUSHADHI AND CONVENTIONAL PHARMACY MEDICINES IN REGARDING ECONOMIC BURDEN ON GERIATRIC POPULATION

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ABSTRACT

Background: Economic analysis has been identified as one of the comparative analyses of alternative courses of action in terms of both their costs and their consequences for improving the quality of life of patients. Medications include a substantial amount of out-of-pocket expenses in Indian households. To address this issue, the government of India launched the Jan aushadhi scheme to provide cheap generic medicines to patients and there is much discussion regarding the significance of promoting the use of low-cost generic drugs alternatives over brand name drugs. While generic medications have been noted to be comparable to brand-name medications in their ability to treat conditions or concentration of drug reaches its target of action has occurred. The purpose of the study was to do a significantly cost-benefit analysis for patients by giving information about the Jan-Aushadhi scheme to provide low-cost generic medicines to the patients. **Conclusion:** The results from reviews concluded that shown a very noteworthy difference in prices between branded and generic drugs and also the clinical pharmacist interventions are associated with a reduction of economic burden in the geriatric population to improve clinical outcomes and overcome the misinterpretation of the efficacy of generic drugs and branded drugs.

KEYWORDS: Generic drugs, Branded drugs, economic evaluation, misinterpretation, clinical outcome.

INTRODUCTION

The trend of victimization medications to treat diseases has been increasing worldwide since the acceptance of the latest drugs as a scientific and reliable mode of treatment.^[1] Drug-connected issues and negative clinical outcomes associated with medicines have a big clinical and economic burden on aged polypharmacy patients. The population is at high risk.^[2] Prescriptions with branded medicines by health professionals are assumed to be one of the key causes of the high worth of medicine.^[3] Adverse drug reactions cause very important morbidity and mortality across the planet, they additionally increase the health care worth to the hospitals as a result of the patient.^[8]

Economic analysis has been known as a result of the comparative analysis of various courses of action in terms of each their prices and their consequences.^[11] Analytically, the planet of letter involves analysis and analysis of outcomes (clinical, economic, or humanistic), worth consequences and price comparison identification

of alternatives, decision-making, considering restricted budget.^[4]

Recent studies news the prevalence of DRP in aged patients' victimization of eight or additional medications found that eighty-seven of the analyzed patients had a minimum of one DRP.^[2] Continuous quality improvement is integral to our world efforts to strengthen the social science and quality of life all together in health care sectors and every one patient population.^[10] The unethical promotional practices by the pharmaceutical companies to induce additional prescriptions from the doctors build the medication unaffordable to the person as this adds to the value of the medicine.^[3]

Cost-effectiveness analysis will check whether or not branded pharmaceuticals are valued with their therapeutic advantages and whether or not a drug represents a smart price for the value the drug firm sets.^[5] Throughout the past few decades, clinical pharmacy services have developed around the world.^[6]

pharmaceutical interventions (PIs) will stop patient hurt associated with prescribing errors. varied tools are developed to facilitate the detection and therefore the reduction of inappropriate prescriptions.^[12] Clinical pharmacy interventions reduced preventable adverse drug events and prescribing errors, thereby yielding savings associated with cost.^[6] Rational use of essential medication plays a necessary role in decreasing morbidity, mortality, and rising quality of life.^[7] In India, entirely some studies explored the economic burden of ADRs publically sector hospitals. A PvPi center (pharmacovigilance program) has been actively concerned in Jawaharlal Institute of Postgraduate Medical Education and analysis (JIPMER), tertiary care teaching 2005.^[5] A landmark economic study unassailable the desired health care savings of medication management services provided by pharmacists.^[9]

However, the economic analysis of pharmacy services needs positive distinctive concerns.^[9] The International Society for Pharmacoeconomics and Outcomes Analysis (ISPOR) Health Science Policy Council prompted and therefore the ISPOR Board of administrators approved the formation of a Task Force to critically examine the foremost very important problems associated with Quality Improvement in Cost-effectiveness analysis.^[10] A series of systematic reviews conclude that masterful pharmacy services usually give positive economic advantages, though there's high variability in each clinical outcome and therefore the later cost-effectiveness analysis.^[2]

A comparative analysis of generic medicines out there below JAS with branded medicines of constant formulation out there within the market was performed in one article.^[11] Generic medications are out there at extremely low worth compared to the full medication and their bioequivalence is held dear to branded drugs.^[13]

Branded medications are original pharmaceutical products that are developed by the pharmaceutical companies wherever as a result of the generic medication are the duplicate of the branded medication that are getting used once their end the patient.^[3] Taking generic medication is assumed to as a price effective live to limit health care expenditures on the pharmaceutical merchants that is taken into thought to decrease the value burden of a patient. The usage of generic medication rather than branded medication may prone the expenditure whereas not poignant the quality of the treatment provided to the patient at low-cost costs.^[12]

Also, the relevant information was identified through searches of MEDLINE, Current Contents/clinical medicine, and EMBASE for English language articles and English abstracts of articles in other languages along with some search items. The previous study was conducted on the medicines belonging to the different classes such as NSAIDs, Antacids, Anti-hypertensives,

Anti-diabetics, Antibiotics were compared for the cost between the high cost and low-cost drugs. The comparison is done using Indian Drug Review brochures of pharmaceuticals and pharmacies and Jan aushadhi list 2017. Also, the involvement of pharmacists in medication review can also help to decrease the economic burden in patients.

pharmacist Interventions PI's are Conducted by Clinical Pharmacists in Studies following are the Reviewed points to be noted.

- Adjusted dosages for urinary organ and internal organ clearance
- Advised the initiation, conclusion, or alteration of therapies
- Advised therapeutic drug watching
- Detected and prevented medicine and chemical science interactions
- Detected and prevented prescribing and transcription errors Detected, followed au courrant, and prevented adverse drug events
- Provided drug data to physicians, nurses, and patients
- Conducted drug-use analysis
- Evaluated drug history
- Followed au courrant microbic laboratory check results and antibiogram
- enforced and half-track use of tips for proper use of drugs- enforced formulary
- Inquired regarding and recommended patients on admission and discharge medication
- Optimized dosing and material
- Participated in medico rounds
- Substituted medication in line with formulary, allergies, contraindications, or costs
- Switched administration route

DISCUSSION

Drugs play an important role in protecting, maintaining, and restoring patients' health. The provision of appropriate medicines of assured quality and adequate quantities at low prices in available stores.^[11] Pharmacoeconomics is the description and analysis of the costs of drug therapy in healthcare delivery systems.^[4] Cost-benefit analyses must consider the health benefits of clinical pharmacy interventions in addition to costs. The standard procedure of economic analysis can be performed by following CHEER's checklist. The percentage difference is almost 70% between the mean costs of branded and generic medicines. Almost all the drugs produced in India are generic medicines under different brand names. The prices of them may vary and are not controlled by the doctors. MRP is decided and permitted by the government.^[3] Even in developing countries, substantial savings could be achieved by switching private sector purchases from branded drugs.

JAS is an important initiative of the Government of India and targets a wide range of medical conditions commonly seen in the population Also, patients have poor or no knowledge of the price variations among

branded and generic medicines, and leave the choice of the medicine to the doctor.^[1]

This study evaluated the potential impact on patient health by Pharmacist interventions generated by the pharmacists and show the usefulness of supporting tools. Among the Pharmacist, Interventions are suggested to physicians.^[12] ADRs also show a direct impact on society in terms of morbidity, mortality, and economic burden.^[8] The analysis showed that if MRF (medication-related factors) was implemented in clinical practice, higher savings could be achieved. There were decreasing marginal costs of the intervention with the length of the follow-up and with the number of patients in the program.^[2]

CONCLUSION

The results from reviews concluded that shown a very noteworthy difference in prices between branded and generic drugs and also that clinical pharmacist interventions are associated with a reduction of economic burden in the geriatric population to improve clinical outcomes and overcome the misinterpretation of the efficacy of generic drugs and branded drugs. The increasing cost of the health care system and the growing advancement of the health sector have made the development of Pharmacoeconomics mandatory. The findings and application of Pharmacoeconomics in the healthcare sector will prove to be beneficial not only to the practitioners but also to the patients themselves. Hence to increase awareness and knowledge about the efficacy and effectiveness of generic drugs and branded drugs. Facts revealed after the completion of this study are indicative that the obligation for cost reduction, from the viewpoint of drug selection, lies with the doctors by prescribing the cheapest available drug, and including the generic names of the drug shows that while the JAS price is among the lowest in the market, there are cheaper branded medicines available in the market for a commonly prescribed drug.

Suggestion after the review of this article is to implement the analysis of cost by using the unit dose cost and the total length of stay of the patient including the frequency of using drugs.

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