



Comparative Study of Paracetamol Tablets and Suspension: Government Vs Janaushadhi Kendra Vs Branded.

*Akash S. Pagar**, *Dr. Rajendra M. Kawde*, *Angad B. Newre*, *Akshay S. Gavali*.

Nandkumar Shinde College of Pharmacy, Vaijapur

ABSTRACT:-

A comparative study of Paracetamol tablets and suspension from different sources, including government-provided medication, Janaushadhi Kendra products, and branded options, can provide valuable insights into their efficacy, cost-effectiveness, and quality. The abstract of such a study might highlight findings related to factors like:

Efficacy: Evaluate the effectiveness of Paracetamol in tablets and suspension from the three sources in terms of pain relief and fever reduction.

Cost-Effectiveness: Analyze the cost differences between government-supplied, Janaushadhi Kendra, and branded Paracetamol products, considering the price per dose.

Quality and Safety: Examine the quality and safety standards of these products, including factors like manufacturing practices and the presence of contaminants.

Patient Preference: Investigate patient preferences and satisfaction with each source, considering taste, ease of administration, and perceived effectiveness.

Accessibility: Discuss the availability and accessibility of these products in different regions and their impact on patient choice.

Regulatory Compliance: Assess whether the products from each source adhere to regulatory standards and guidelines.

The study's abstract should provide a concise summary of the key findings, helping readers understand the advantages and disadvantages of each source for Paracetamol tablets and suspension.

Keywords:- Paracetamol, Government, Janaushadhi seva Kendra, Branded, lenol, Panadol, Calpol, and Acetaminophen.

Introduction:-

Paracetamol, also known as acetaminophen, is a widely used over-the-counter pain reliever and fever reducer. It's available in various forms, including tablets and suspension, and is commonly used for alleviating mild to moderate pain and reducing fever. This study seeks to provide a comprehensive comparison of these Paracetamol options in the context of government-supplied, Janaushadhi Kendra offerings, and branded products.

Government-Supplied Medication:

Government healthcare programs often provide essential medications to the public, including Paracetamol. This segment evaluates the availability, quality, and cost-effectiveness of government-supplied Paracetamol products.

Janaushadhi Kendra Offerings:

Janaushadhi Kendras, as part of the Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP), aim to make quality generic medicines accessible to the masses. This study examines the quality, pricing, and accessibility of Paracetamol products available through these centers.

Branded Products:

Branded pharmaceutical companies offer a wide range of Paracetamol products. This section will delve into the cost, quality, and branding influence on patient preferences for these options.

Key points for the comparative study may include:

Price comparison among the three categories.

Quality and safety standards.

Accessibility in various regions.

Patient feedback and preferences.

Potential variations in efficacy.

Factors affecting trust and perception of these products.

Such a study can assist in making informed decisions about choosing between these Paracetamol options, balancing cost-effectiveness and quality, and promoting accessibility to healthcare for all segments of the population.

Comparative Evaluation of Different Paracetamol Brands:-

Paracetamol is a common over-the-counter pain reliever and fever reducer. There are many brands that manufacture paracetamol under different trade names, depending on your location. Some common brand names for paracetamol include Tylenol, Panadol, Calpol, and Acetaminophen. It's important to follow the recommended dosage and usage instructions for the specific brand you choose, and consult a healthcare professional if you have any questions or concerns.

Comparative evaluation of different paracetamol brands typically involves assessing various factors to determine which brand is most suitable for your needs. Here are some factors to consider:

Active Ingredient: Ensure the paracetamol brands contain the same active ingredient (acetaminophen) and the same dosage.

Price: Compare the cost of different brands. Sometimes generic or store brands can be more affordable without compromising quality.

Brand Reputation: Established brands with a good reputation may provide more consistency in quality and safety.

Formulation: Check if the paracetamol comes in various forms such as tablets, capsules, syrups, or effervescent tablets. Choose the one that suits your preferences.

Packaging: Consider the packaging. Some brands offer more user-friendly or environmentally friendly packaging.

Allergens and Additives: Check for any allergens or unnecessary additives in the product, especially if you have allergies or sensitivities.

Efficacy: Personal preference and effectiveness can vary. You might want to try different brands to see which one works best for you.

FDA Approval: Ensure the product is approved by the relevant regulatory authority in your region for safety and efficacy.

Customer Reviews: Look for feedback from other users, but keep in mind that individual experiences can vary.

Consult a Healthcare Professional: If you have specific health concerns or are taking other medications, it's wise to consult a healthcare professional for guidance on which brand is best for you.

Remember that what works best for one person may not work the same way for another, so it's often a matter of personal preference and individual reactions.

Indian Government Paracetamol Tablet:-

Paracetamol, also known as acetaminophen, is a common over-the-counter medication used to relieve pain and reduce fever. It is not produced by the Indian government, but rather by various pharmaceutical companies in India. Here are some details about Paracetamol tablets in India:

Generic Name: Paracetamol (or Acetaminophen)

Brand Names: Paracetamol is available under various brand names in India, such as Crocin, Calpol, Dolo, and many others.

Dosage Forms: Paracetamol is commonly available in tablet form, but it is also available as syrup, suspension, and in combination with other drugs in various formulations.

Indications: Paracetamol is primarily used to relieve mild to moderate pain and reduce fever. It is commonly used for headaches, body aches, and as an antipyretic.

Dosage: The recommended dosage varies depending on age and weight. It is important to follow the instructions on the product label or as advised by a healthcare professional.

Availability: Paracetamol tablets are readily available in most pharmacies and drug stores across India. They can be purchased without a prescription in many cases.

Safety: When taken at the recommended doses, Paracetamol is generally safe. However, exceeding the recommended dose can lead to liver damage. It's essential to adhere to the dosing guidelines and avoid consuming alcohol while taking Paracetamol.

Regulation: The manufacture and sale of pharmaceuticals in India, including Paracetamol, are regulated by the Drugs Controller General of India (DCGI) under the Ministry of Health and Family Welfare.

Manufacturers: Several pharmaceutical companies in India produce Paracetamol tablets. Some of the prominent manufacturers include Sun Pharmaceutical Industries, Zydus Cadila, and Cipla, among others.

Cost: Paracetamol is relatively affordable and cost-effective, making it widely accessible to the Indian population.

Please note that it's essential to use Paracetamol responsibly and as directed by a healthcare professional to ensure its safe and effective use. If you have specific questions or need information about a particular brand or formulation, it's advisable to consult a healthcare provider or pharmacist for guidance.

Janaushadhi seva Kendra Paracetamol Tablet:-

Janaushadhi Seva Kendra is an initiative by the Indian government to provide affordable generic medicines to the public. Paracetamol, also known as acetaminophen, is a commonly used medication available at these centers. Here are some details about Paracetamol tablets:

Generic Name: Paracetamol (acetaminophen)

Brand Names: Paracetamol is available under various brand names, but Janaushadhi centers typically offer the generic version, which is cost-effective.

Uses: Paracetamol is used to relieve pain and reduce fever. It is commonly used for headaches, minor aches, and pains, as well as to manage fever.

Dosage: The dosage of Paracetamol can vary depending on age and weight. It's crucial to follow the recommended dosage instructions on the packaging or as advised by a healthcare professional.

Availability: Paracetamol is available in various forms, including tablets, syrups, and suppositories. Janaushadhi centers typically offer Paracetamol tablets, which are easy to use and convenient.

Affordability: One of the key advantages of obtaining Paracetamol from a Janaushadhi Seva Kendra is its affordability. Generic medications are often significantly cheaper than their branded counterparts, making healthcare more accessible to the masses.

Keep in mind that while Paracetamol is generally safe when used as directed, it's essential to follow the recommended dosages and consult a healthcare professional if you have specific health concerns or conditions before using any medication.

Branded Paracetamol Tablet:-

Branded Paracetamol tablets, also known as acetaminophen in some regions, are over-the-counter (OTC) medications commonly used to relieve pain and reduce fever. They are available under various brand names, and the specific details may vary depending on the manufacturer and country. Here are some common features and details you might find on the packaging of branded Paracetamol tablets:

Brand Name: The specific brand name of the Paracetamol tablet, such as Tylenol, Panadol, or other regional names.

Active Ingredient: Paracetamol (or acetaminophen) is the active ingredient. It's crucial to note the dosage of paracetamol per tablet, typically in milligrams (mg).

Dosage Strength: The tablets come in different strengths, such as 500 mg, 650 mg, or 1000 mg, allowing users to choose the appropriate dose based on their needs.

Formulation: Paracetamol tablets can be available in various formulations, including regular tablets, extended-release tablets, or chewable tablets. The formulation affects how the medication is absorbed and how long it lasts in the body.

Pack Size: The number of tablets in each package or bottle, typically ranging from 10 to 100 or more.

Usage Instructions: Instructions on how to take the tablets, including the recommended dosage, frequency, and any special considerations like taking with food or water.

Indications: Information about what the medication is used for, such as pain relief, fever reduction, or specific conditions like headache, muscle aches, or cold and flu symptoms.

Warnings and Precautions: This section provides important information, including warnings about potential side effects, interactions with other medications, and precautions for specific groups like pregnant or breastfeeding women.

Expiry Date: The date until which the tablets are considered safe and effective. Expired medication should not be used.

Storage Instructions: Guidance on how to store the tablets properly, typically in a cool, dry place, away from direct sunlight and out of the reach of children.

Manufacturer Information: Details about the pharmaceutical company that produces the medication, including contact information.

Price and Barcodes: The retail price of the product and barcodes for scanning at the point of sale.

Please note that the specific details and branding can vary depending on your location and the manufacturer. Always read and follow the instructions on the packaging and consult a healthcare professional if you have questions or concerns about using these tablets.

Acknowledgement:-

A comparative study of Paracetamol tablets and suspension in the context of government-supplied medications, Janaushadhi Kendra (generic medicines), and branded options can involve various aspects. Here's a general discussion of these factors:

1. Cost and Affordability:

Government: Government-supplied Paracetamol tablets and suspension are often more affordable due to subsidies and public healthcare initiatives.

Janaushadhi Kendra: Generic medicines offered at Janaushadhi Kendras are known for their cost-effectiveness, making them an affordable alternative.

Branded: Branded medications are typically more expensive due to the costs associated with marketing and research.

2. Quality and Safety:

Government: Medications supplied by the government are expected to meet certain quality standards and safety regulations.

Janaushadhi Kendra: Generic medicines at Janaushadhi Kendras are also regulated and are required to meet quality standards.

Branded: Branded medicines often come with a reputation for quality and safety, but they can be more rigorously tested and regulated.

3. Availability:

Government: Availability of government-supplied medications may vary depending on local healthcare infrastructure.

Janaushadhi Kendra: Janaushadhi Kendras aim to provide widespread access to generic medicines, but availability can still vary.

Branded: Branded medicines are widely available, but their accessibility may be limited in rural or remote areas.

4. Efficacy and Dosage:

Government: Government-supplied medicines are expected to be effective and available in standard dosages.

Janaushadhi Kendra: Generic medicines aim for similar efficacy as branded versions but may differ slightly in formulations.

Branded: Branded medicines have well-documented efficacy and standardized dosages.

5. Patient Trust:

Government: Some patients trust government-supplied medicines due to their association with public healthcare.

Janaushadhi Kendra: Trust in generic medicines may vary, but they are becoming more widely accepted due to cost savings.

Branded: Branded medicines often enjoy a higher level of trust due to established reputations.

Ultimately, the choice between government-supplied Paracetamol, Janaushadhi Kendra generic options, and branded products will depend on factors like affordability, availability, patient preference, and trust in the source. It's essential to consult with a healthcare professional to make the best decision based on individual health needs.

Conclusion:-

A comparative study of Paracetamol tablets and suspension available through government sources, Janaushadhi Kendra, and branded products may lead to the following conclusions:

Cost-effectiveness:

Government sources and Janaushadhi Kendra generally offer more cost-effective options compared to branded products, making them more accessible for the general public.

Quality and Efficacy:

Branded products may have a reputation for quality and consistency, but government sources and Janaushadhi Kendra also aim to provide safe and effective medications. Quality may vary among generic products, so it's essential to ensure they meet regulatory standards.

Accessibility:

Government sources and Janaushadhi Kendra play a crucial role in ensuring wider availability of essential medications, especially in rural areas where branded products may not be as accessible.

Regulatory Compliance:

Branded products are subject to strict regulatory oversight, while government sources and Janaushadhi Kendra aim to adhere to regulatory standards. Consumers should verify the quality of medications from these sources.

Consumer Preference:

Consumer preferences may vary; some may trust branded products, while others may opt for more affordable options from government sources or Janaushadhi Kendra.

Availability and Convenience:

Branded products are readily available in many pharmacies, while government-sourced medications might require a visit to specific outlets or healthcare facilities.

In conclusion, the choice between Paracetamol tablets or suspension from government sources, Janaushadhi Kendra, or branded products depends on factors like cost, quality, accessibility, regulatory compliance, and individual preferences. It's crucial for consumers to make informed decisions based on their specific needs and circumstances.

Reference:-

- 1) COMPARATIVE EVALUATION OF DIFFERENT PARACETAMOL ... <https://www.slideshare.net/ShikhaPopali1/comparative-evaluation-of-different-paracetamol-brands>.
- 2) https://www.researchgate.net/publication/354220564_Present_scenario_of_generic_medicines_in_India_A_comparative_study.
- 3) Aggarwal B, Gurnani M. Branded versus Generic Medicines - Cost-Saving and Life-Saving : A Review of the Difference. 30 August 2013.
- 4) Agarwal G. 89 percent of all prescriptions dispensed with a generic drug – Generics True need of the hour. ETHealthWorld. April 21, 2021.
- 5) Ministry of Health and Family Welfare, Government of India. Sale of Generic Drugs in the country.
- 6) Pradhanmantri Bhartiya Janaushadhi Pariyojna. Therapeutic group wise list of products. [5] Davaindia. About generic retail chain pharmacy.
- 7) Tata 1mg. Price of Davaindia generic medicines and their branded versions. Author's Short biography.
- 8) BP C. H. The Facts about Generic and Branded Drugs. Research and Reviews: Journal of Pharmacy and Pharmaceutical Sciences; 2016. [Google Scholar].
- 9) Todkar S., Tiwari S. A., Ghongane B. A study of knowledge, attitude and practice of generic drugs among general practitioners of Pune region. Journal of Medical Science And clinical Research. 2017;7 [Google Scholar].
- 10) Organization WH. Glossary of globalization. trade and health terms 2012; 2014. [Google Scholar].
- 11) Stewart K., Alrasheedy A., Hassali A., et al. Patient knowledge, perceptions, and acceptance of generic medicines: a comprehensive review of the current literature. Patient Intelligence. 2014;6 doi: 10.2147/pi.s46737. [CrossRef] [Google Scholar].
- 12) Hassali M. A., Shafie A. A., Saleem F., et al. Community pharmacist's perceptions towards the quality of locally manufactured generic medicines: a descriptive study from Malaysia. Journal of Applied Pharmaceutical Science. 2012;2(1):p. 56. [Google Scholar].
- 13) Alemayehu C., Mitchell G., Nikles J., Aseffa A., Clavarino A. Views and perceptions about locally manufactured medicines in Ethiopia: a qualitative study of physicians, patients and regulatory authorities. BMC health services research. 2018;18(1):p. 624. doi: 10.1186/s12913-018-3410-5. [PMC free article] [PubMed] [CrossRef] [Google Scholar].
- 14) Dunne S., Shannon B., Dunne C., Cullen W. A review of the differences and similarities between generic drugs and their originator counterparts, including economic benefits associated with usage of generic medicines, using Ireland as a case study. BMC Pharmacology and Toxicology. 2013;14(1) doi: 10.1186/2050-6511-14-1. [PMC free article] [PubMed] [CrossRef] [Google Scholar].
- 15) El-Dahiyat F., Kayyali R. Evaluating patients' perceptions regarding generic medicines in Jordan. Journal of pharmaceutical policy and practice. 2013;6(1) doi: 10.1186/2052-3211-6-3. [PMC free article] [PubMed] [CrossRef] [Google Scholar].

- 16) Colgan S., Faasse K., Martin L. R., Stephens M. H., Grey A., Petrie K. J. Perceptions of generic medication in the general population, doctors and pharmacists: a systematic review. *BMJ open*. 2015;5(12):p. e008915. doi: 10.1136/bmjopen-2015-008915. [PMC free article] [PubMed] [CrossRef] [Google Scholar].
- 17) Tobin M. R., Laing R. Generic medicine: Boston University students' perceptions and surprising lack of knowledge. *Journal of Generic Medicines*. 2015;11(3-4):136–145. doi: 10.1177/1741134315596012. [CrossRef] [Google Scholar].
- 18). King D. R., Kanavos P. Encouraging the use of generic medicines: implications for transition economies. *Croatian medical journal*. 2002;43(4):462–469. [PubMed] [Google Scholar].
- 19). Bashaar M., Hassali M. A., Saleem F. Community pharmacists' attitudes toward the quality and price of locally manufactured generic medicines in Kabul, Afghanistan. *Journal of pharmaceutical policy and practice*. 2015;8(1):p. 16. doi: 10.1186/s40545-015-0037-3. [PMC free article] [PubMed] [CrossRef] [Google Scholar].
- 20). Fraeyman J., Peeters L., Van Hal G., Beutels P., De Meyer G. R., De Loof H. Consumer choice between common generic and brand medicines in a country with a small generic market. *Journal of managed care & specialty pharmacy*. 2015;21(4):288–296. doi: 10.18553/jmcp.2015.21.4.288. [PMC free article] [PubMed] [CrossRef] [Google Scholar].
- 21). Tesfamariam S., Anand I. S., Kaleab G., et al. Self-medication with over the counter drugs, prevalence of risky practice and its associated factors in pharmacy outlets of Asmara, Eritrea. *BMC Public Health*. 2019;19(1):p. 159. doi: 10.1186/s12889-019-6470-5. [PMC free article] [PubMed] [CrossRef] [Google Scholar].
- 22) Karmakar P., Kibria M. G. *In-vitro* comparative evaluation of quality control parameters between paracetamol and paracetamol/caffeine tablets available in Bangladesh. *International Current Pharmaceutical Journal*. 2012;1(5):103–109. doi: 10.3329/icpj.v1i5.10282. [CrossRef] [Google Scholar].