

BIOSIMILARS AND PUBLIC HEALTH: A CRITICAL ANALYSIS**Chhavi Jain¹ and Dr. Haider Ali²**¹Research Scholar, ILSR, Mangalayatan University, Aligarh²HOD ILSR, Mangalayatan University, Aligarh**ABSTRACT**

Biosimilars is one of the most important development in modern healthcare offering safe, effective, and more affordable alternatives to original biologic medicines. These products are designed to be very similar to their reference drugs in terms of safety, purity, and therapeutic effectiveness, but are usually available at a low cost. Their introduction has significantly transformed the landscape of healthcare by addressing two major challenges: the high cost of biologics and the limited accessibility of advanced therapies in many parts of the world.

The availability of biosimilars has widely patient access to treatments for life-threatening and chronic conditions such as cancer, diabetes, and autoimmune disorders, which often remain out of reach due to financial obstacles. By reducing expenditure on expensive biologics, biosimilars also allow governments, healthcare providers, and insurance systems to extend coverage to a large number of population, thereby improving equity in healthcare delivery beyond cost and accessibility. Biosimilars play a crucial role in promoting competition within the pharmaceutical industry. This competition not only helps in reducing prices but also encourages innovation, improved treatment options and maintain sustainability in healthcare systems.

This research paper explores contribution of biosimilars to public health by analyzing in affordability, accessibility, and policy frameworks and also highlights the need for regulatory support and patient awareness to expands the benefits of biosimilars. Overall, the study explore that biosimilars are not merely substitutes for biologics but strategic tools for advancing public health and ensuring sustainable access to life saving medicines.

Keywords – Biosimilars; Public Health; Affordability; Regulation; Access to Medicines

INTRODUCTION

Healthcare systems globally faces two main problems: Continuously increasing cost of medicines and unequal access to modern treatments. Biologic medicines, which are made from living organisms, have brought important role in the progress in treatment of diseases such as cancer, diabetes, and autoimmune disorders. Even though high cost makes them affordable only to a limited group of patients, especially in developing countries. To address this gap, biosimilars—drugs are very similar to already approved biologics have become an important option.

Biosimilars are designed to increase the safety, quality, and effectiveness of original biologic medicines but are available at very low price. Their entry into the market has not only make advanced therapies more affordable but has also reduced the financial burden on public health systems. This allows governments and insurance providers to extend treatment to a wider population by improving fairness in healthcare. biosimilars also encourage healthy competition in the pharmaceutical industry, which may lead to innovation and better sustainability.

However, there are many challenges in adopting biosimilars. Issues such as strict regulatory requirements, limited awareness among doctors and patients, and doubts about their equivalence with reference biologics remain. It is necessary to remove the barriers is necessary for biosimilars to achieve their public health potential.

This study focuses on the importance of biosimilars in improving public health. This paper examines their role in increasing affordability and accessibility to life saving medicines and it also consider policy and innovation challenges that shape their future use.

1. To analyze the role of biosimilars in improving affordability and accessibility of life-saving medicines within public health systems.
2. To examine the policy and regulatory challenges that affect the adoption and acceptance of biosimilars.
3. To evaluate the impact of biosimilars on healthcare sustainability and equity, with a focus on their contribution to reducing treatment gaps.

HYPOTHESIS

The introduction of biosimilars significantly improves public health outcomes by enhancing the affordability and accessibility of life saving medicines. However, their full potential is limited by regulatory challenges, lack of awareness, and market resistance, which must be addressed to achieve sustainable and equitable healthcare.

METHODOLOGY- This study adopts a doctrinal and analytical research method, based on secondary sources such as books, journal articles, government reports, and WHO/WTO publications.

FINDINGS

1. LOWER TREATMENT COSTS

The entry of biosimilars has reduced the overall cost of medical treatment because they are sold at lower prices than original biologics. Advanced therapies can afford by patients very easily while healthcare systems face very less financial burden.

2. BETTER ACCESS TO MEDICINES

Biosimilars have allowed more cancer, diabetes, and autoimmune diseases patients, to receive treatment. Many people who could not afford costly biologics earlier are now able to access life saving medicines.

3. SUPPORT FOR PUBLIC HEALTH SYSTEMS

With out a large financial budget, with biosimilars, governments and insurance providers can help in treatment of large number of patients. This analysis shows their role in making healthcare delivery fairer and more sustainable.

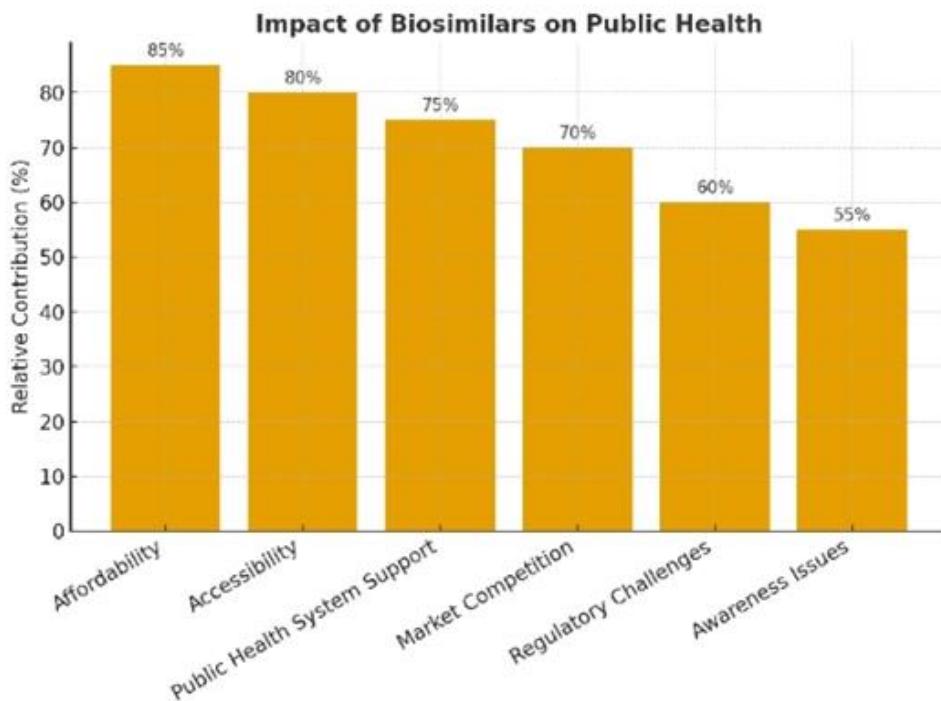
4. ENCOURAGING COMPETITION AND PROGRESS

Biosimilars has increased competition in the drug market not only helps in lowering prices but also motivates companies to bring new and improved medicines.

5. CHALLENGES IN USE

Even with their advantages, biosimilars face challenges such as tough regulatory rules, lack of awareness among doctors and patients, and doubts about their safety compared to the original biologics.

DISCUSSION



The findings of this study highlight the vital role of biosimilars play in enhancing public health. Firstly, they reduce treatment costs, thereby reducing the financial burden on both patients and healthcare systems.¹ This affordability directly improves accessibility as large number of patients suffering from chronic and life-

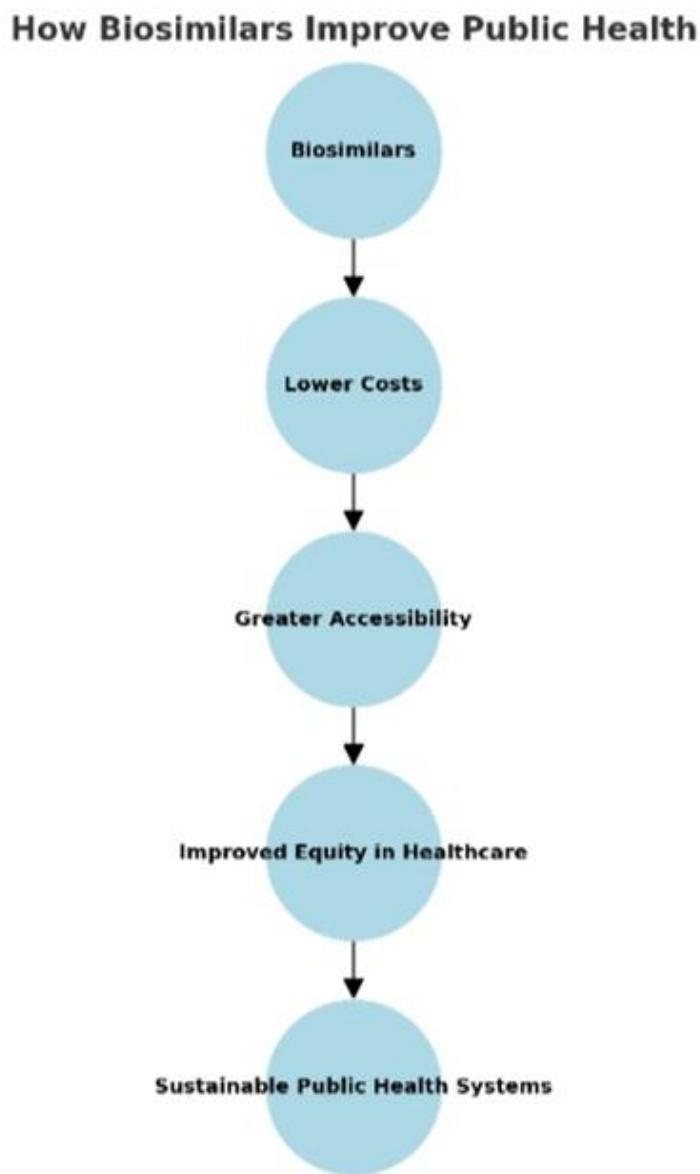
¹ Biosimilars help reduce treatment costs compared to original biologics.

threatening diseases are able to obtain life saving medicines which were previously unaffordable by needy persons.¹

Moreover, biosimilars contribute in strengthening public health systems by enabling governments and insurance providers to extend medical coverage without substantially increasing budgets.² the entry of biosimilars has also stimulated market competition which not only helps in reducing prices but also promotes pharmaceutical innovation.³

However, the study also indicates persistent challenges. Regulatory hurdles such as complex approval procedures and awareness issues including skepticism among doctors and patients continue to limit the widespread adoption of biosimilars.⁴ Overcoming from these barriers is crucial to unlock their full potential for public health.

The flowchart given below summarizes the benefits and challenges of biosimilars in terms of their relative contribution to public health



Here's the flowchart showing the pathway of how biosimilars contribute to public health:

¹ Wider access to medicines improves equity in healthcare delivery.

² Governments and insurers can treat more patients without heavy budget increases.

³ Competition from biosimilars encourages innovation and sustainability.

⁴ Regulatory complexities and lack of awareness remain key challenges.

How Biosimilars Improve Public Health

Biosimilars →

Lower Costs →

Greater Accessibility →

Improved Equity in Healthcare →

Sustainable Public Health Systems

How Biosimilars Improve Public Health

1. Biosimilars – Introduction of biosimilars provides alternatives to expensive biologics.¹
2. Lower Costs – They are priced lesser than reference drugs, reducing the overall cost of treatment.²
3. Greater Accessibility – Affordable pricing allows more patients in developing countries to access life-saving medicines.³
4. Improved Equity in Healthcare – Wider access ensures fairer distribution of medical resources across different social and economic groups.⁴
5. Sustainable Public Health Systems – By lowering expenditure, biosimilars enable governments and insures to treat more patients within limited finance, strengthening healthcare systems in the long run.⁵

6. CONCLUSION

This study shows that biosimilars are an important step in improving public health as they make advanced treatments more affordable and easier to access. On very less price than original biologic medicines, biosimilars reduce the financial burden on patients, healthcare providers and governments allows a larger number of people benefited from modern therapies. They also create competition in the pharmaceutical market helps to lower prices to further encourages the development of better medicines.

However, the research also points out that the wider use of biosimilars faces challenges. Complicated regulatory requirements, lack of awareness among doctors, and doubts from patients limit their acceptance. Unless these barriers are addressed. the full public health benefits of biosimilars may not be achieved.

Concluded, biosimilars are not only alternatives of expensive biologics but also a long-term solution for building stronger and fairer healthcare systems. With proper policies, supportive regulations and greater awareness, biosimilars can play a major role in ensuring affordable, accessible and sustainable healthcare for all.

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¹ Biosimilars provide safe and effective alternatives to costly biologics.

² Lower costs directly reduce the economic burden on patients and healthcare systems.

³ Increased affordability enhances access for patients suffering from chronic and life-threatening conditions.

⁴ Equal access promotes justice and fairness in healthcare delivery.

⁵ Sustainability is achieved by covering more patients without drastically increasing healthcare expenditure.

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