



IJPPR

INTERNATIONAL JOURNAL OF PHARMACY & PHARMACEUTICAL RESEARCH
An official Publication of Human Journals

ISSN 2349-7203



THE EFFECT OF VACCINE ON GLOBALIZATION (HEALTH AND ECONOMICALLY): MAIN ROLE OF VACCINE IN WORLD TO IMPROVING HEALTH AND ECONOMY

Sambhaji B Patil, Shivani J Patil, Snehal S Patil, Shweta S Patil, Atul R. Chopade

Dept. of Pharmacology, Rajarambapu College of Pharmacy, Kasegaon 415404.

Maharashtra, India.

ABSTRACT

Globalization is likely affecting many aspects of public health and the world's economy. Immunization is a global issue that helps develop immunity and plays an important role in the world's economy. The rising country manufactures as major players in vaccine supply and the appearance of new communicable disease threats all of these forces can affect positively as well as negatively. The development and availability of vaccine both factors are mainly affected by the economic system of some developing and developed countries. Vaccination has made a global issue and therefore these all factors are directly or indirectly affecting the global economic system. Vaccination has greatly reduced the burden of infectious disease. Such disease as like HIV within for border categories, to link its spread, impact, and changes of the post –cold war world and to the rapidly increasing literature of “globalization.”

Keywords: - globalization, vaccine, health, macroeconomic, global market.

INTRODUCTION

The simplest of globalization means "the interconnectedness of capital production ideas, economic, and cultural life." there are many studies on the consequence of globalization on the availability of pharmaceutical products. This paper focuses specifically on the positive and globalization has on the development of a vaccine to prevent communicable diseases with their economic and health effect globally. The impact of globalization includes economic, health and communicable diseases.

Globalization and public health; according to Caroline Thomas disease is a transitional phenomenon which pays no need to territorial state boundaries', yet it rarely features in the discussion of international phenomenon relations. The pattern of HIV communicable disease; the impact of globalization includes the economic, as the complex mix of growing and affluence and greater inequality allows. To take an example related to HIV, it is clear that globalization's impact upon sexuality is increasingly co modified whether through advertising or prostitution which a nineteenth-century is cross-linked to economic dissociation and change.

Role of the vaccine on human health:

The vaccine is the biological products which act by reinforcing by the immunological defense of the body against foreign particle. Vaccine imparts active immunity act as an antigen which induces the production of specific antibodies by the recipient himself.

An additional three million deaths per year; an additional three million death per year could be prevented by better use of the existing vaccine. The world health organization estimates that there were 10.5 million deaths in 2002 among children under age five years, from the disease for which licensed vaccines are available malaria, tuberculosis, and AIDS. Account for another five million deaths per year that are potentially preventable by vaccination. The eradication of smallpox the success of the polio eradication initiative in reducing polio global incidence by 99.9 percent. The achievement of the expanded programme on immunization, and the recent 39 percent decrease in the number of measles deaths worldwide all illustrate the benefits of vaccination. In 2018, 116 million children were immunized against TT, diphtheria, and pertussis. As a direct result of immunization, the world is closer than ever to eradicating polio with only three polio remaining polio-endemic countries. Pakistan, Nigeria,

and Afghanistan. Deaths from measles a major child killer declined by 80 percent worldwide between 2000 and 2017 preventing an estimated 21.1 million deaths. And as of March 2019. All but 13 countries have eliminated maternal and neonatal tetanus a disease with a fatality rate of 70 to 700 percent among newborns.

Role of international health regulation:

The world health assembly approved international health regulation in May 2005 to take effect in 2007 these regulations identify that infectious disease does not respect national boundaries' and thus include broader obligations for countries to take actions at borders and airport in the face of public health emergencies.

Economical growth:

Promote economical growth Poor health has been shown to health can promote social development and economic growth. Health is Fundamental to economic growth for developing countries and vaccination form the bedrock of their Public health program. The annual return on investment in vaccination has been calculated to be in the range of 12% to 18%. But the economic benefits of improved health continue to be largely underestimated.

The first starting of globalization came to and ends with the beginning of the First World War. Vaccination has the potential to contribute substantially to improving population health and thereby economic growth. Projected introduction of new vaccine and supplementary immunization activities account US 170 billion about 60% of estimated economic benefits of decades of vaccine, with remain attributable to the scale-up in coverage of vaccine introduced before 2011. Supplementary immunization activities against measles represented the largest contributor to our estimates of the overall averted costs of illness representing around US 130 billion. the second, third and fourth-largest drivers of the cost illness appeared to be H. Influenza types b. S. Pneumonia and hepatitis B respectively. Most of these averted costs were represented by the productivity saved as the result of reduced mortality of the 73 countries including for analysis.

The vaccine market:

The economic position for vaccine development within the private arena is bleaker than that for drugs. Vaccines typically are low-margin, single- or limited-use products that are often

associated with high exposure to marketing risks—that is, uncertain demand. Previous attempts to predict demand have suffered from an inability to assess exactly when a given country would incorporate a new product into its immunization program and the evolution of coverage over time. Effective demand depends on financing and on immunization programs' ability to absorb a new product. Even a delay of a few months in attaining target coverage in several large countries could greatly change the global deliver pictures. Moreover, past attempts at defining demand have looked at the potential developing-country uptake in a vacuum, failing to take into consideration the effects of the wealthier-country behavior. The worldwide vaccine market, \$9 billion in sales, is only a small percentage of the global pharmaceutical market, with sales of \$550 billion.¹⁹ However, vaccines constitute a fast-growing segment, increasing 26 percent between 1999 and 2003 (Exhibit 1).²⁰ The key players in the vaccine market have traditionally been multinational companies: Sanofi-Pasteur, Glaxo SmithKline, Merck, Wyeth, and Chiron account for more than 75 percent of vaccine revenues, with 70 percent of revenues from the United States and Europe and 30 percent from the rest of the world combined. In terms of volume, the picture is quite different. In 2004 the United Nations Children's Fund (UNICEF), the largest procurer of vaccines by volume, bought around 2.8 billion doses of vaccines for developing countries—about 40 percent of global volume—for a total value of approximately US\$370 million, which represents 4 percent of global sales.²¹ Vaccine supply has been fragile.

Support of globalization to the vaccine market:

Spreading of pathogen flow: The movement of patients of influenza and tuberculosis means the transport of pathogens from one place to another place. Global trade another old vector of disease poses other health risks from the spread of pests.

Increased information flowing: computer, telecommunication, and e-media are giving the shape of modern globalization. Increase the speed to spread knowledge and information. Globalization is a super route to spreading quickly information.

Rising financial flow: (FDI) foreign direct investment plays an important role because having reorganized production across national boundaries and due to these processes creating a genuinely global labor market that increases economic inequality and insecurity to many people.

Migrations of people are the defining feature of globalization and creating greater opportunities. High developed countries border remain open to the best and brightest.

SUMMARY

Health is an important factor in improving the economic growth of national, regional, and global levels. The vaccine companies and vaccination program targeted at a population of different ages can contribute substantially to economic growth by keeping people healthy throughout their lives. There is almost a need for commitment to vaccination not only health vaccination can make an efficient contribution to their global economic growth. The main relation of vaccine and globalization having highly richest countries are made highly rich and poor is poor.

REFERENCES

1. J.Delbruck, "Globalization of Law, Politics, and Markets – Implication of domestic Law –A European Perspective", *Indiana Journal of Global Legal Studies I, no.1(1993):9-36*.
2. D.Woodward et al., "Globalization, Global Public Goods, and Health, Services: Global, Regional and Country Perspectives,ed.C.Viera and N.Drager (Washington: Pan American Health Organization,2002)
3. B.Bloom, D.Canning, and M Weston, "The value of vaccination", *World Economics 6,no.3 (2005):15-39*.
4. Julie B. Milstien, Miloud Kaddar, and Marie Paule Kieny, *The Impact of Globalization on Vaccine Development and Availability, HEALTH AFFAIRS ~ Volume 25, Number 4*
5. Rébecca Steward, Judith Bueno de Mesquita, *Neglected diseases: A human rights analysis, (Special topics in social, economic and behavioral research report series; no. 6) "TDR/SDR/SEB/ST/07*.
6. DENNIS ALTMAN, La Trobe University, Melbourne, *Globalization, political economy, and HIV/AIDS Theory and Society 28: 559^584, 1999B 1999 Kluwer Academic Publishers. Printed in the Netherlands*
7. K. D. Tripathi, "Essentials of Medical Pharmacology," 5th Edition, Jaypee Brothers Medical Publishers (P) LTD, New Delhi, 2003.
8. Postma M, Carroll S, Brandão A. The societal impact of direct and indirect protection from lifespan vaccination. *J Market Access Health Policy. 2015;3 26962,*
9. Deogaonkar R, Hutubessy R, van der Putten I, Evers S, Jit M. Systematic review of studies evaluating the broader economic impact of vaccination in low and middle-income countries. *BMC Public Health. 2012;12:878.*

Figure 1. - Health and economical role of vaccine

