

# UNICEF

## Topic B: Improving vaccination access internationally.

### INTRODUCTION

The United Nations International Children's Fund (UNICEF) was established in December of 1946, with the purpose of protecting and defending the rights of every child. UNICEF's work is based on five concepts, which are: survival and development of children, education and gender equality, childhood and HIV/AIDS, children protection and promoting policies, and alliances. For 70 years, across 190 countries and territories, UNICEF has defended the right of every child regardless of gender, race, religion, economic background and much more.

According to the World Health Organization (WHO) immunization is a process in which, typically by the administration of a vaccine, a person is made immune or resistant to an infectious disease. This causes stimulation in the body's immune system and, as a consequence, protects the person against these type

of conditions. This is very meaningful since it can control and even eliminate life-threatening diseases. It is estimated that this tool has averted between 2 and 3 million deaths per year. (WHO, n.d.)

According to Global Access, global access means that the knowledge and information that projects generate should be spread; and that the developments achieved with this knowledge should be delivered at an affordable price to the people that need them the most. This is related to this topic since vaccinations, even though they are not new, are not available for everyone because of several factors that can alter the delivery of such towards everyone that needs them. (Global Access, n.d.)

Vaccination access has been a challenge since its creation in 1798, when a piece of work by Edward Jenner (physician and scientist) completely changed the methods used to fight against smallpox. During the 20th century, vaccination started having the biggest impact

on public health; since it drastically reduced the disease and mortality rates by smallpox. From those days

until now, vaccination has not always been available for everyone because of several complications that represent a tremendous challenge to the international community.

The countries that are affected by this issue are the Syrian Arab Republic, Central African Republic, Guinea, Nigeria, Somalia, Chad, South Sudan and Equatorial Guinea. The affected regions by this issue are the Region of the Americas, the Western Pacific Region, South-East Asia Region, and the African Region. Armed conflicts, under-investment in national immunization programmes, vaccine stock-outs and disease outbreaks are some of the reasons why these countries, specially in such regions, are failing in providing vaccines services and disrupting health systems. About 40% of immunized infants live in fragile or humanitarian settings. (UNICEF, n.d and WHO, n.d)

Immunization is considered one of the most effective public health interventions. Because of immunization, the world is closer to eradicate polio, a crippling and potentially deadly disease; the three endemic countries that remain are Afghanistan, Nigeria and Pakistan. As of 2018, only 14 countries remain from eliminating

maternal and neonatal tetanus, that has a fatality rate between 70% to 100%. (UNICEF, n.d.)

71 countries have yet to achieve the Global Vaccine Action Plan (GVAP). GVAP was established by 194 Member States in May 2012, with a deadline of 2020 ; its main goal is to prevent the death of millions of people by ensuring access to vaccines. 19.9 million children didn't receive the recommended doses of diphtheria, tetanus and pertussis vaccine (DTP) in 2017; the administration of this vaccine can be used as an indicator of how well countries are providing health services. 20.8 million children have also failed to receive a single dose of measles-containing vaccine. (UNICEF, n.d.)

The vaccination coverage in 2017 was the next one: the countries that had coverage of 95-100% where USA, Canada, Mexico, Brazil, Russia, Australia, Saudi Arabia, China, Sweden, Norway, among other nations. The countries that had coverage of 80-94% where Argentina, Bolivia, Perú, Colombia, India, Kenya, and so on. The countries that had coverage of 70-79% where Mali, Iraq, Yemen, Afghanistan, and so forth. The countries that had coverage of 60-69% where Angola,

Guinea, Central African Republic, Syrian Arab Republic, Ukraine and Papua New Guinea. The countries that achieved a 0-59% where Nigeria, Chad, South Sudan and Somalia. (UNICEF, n.d)

The UN has helped in countries like Pakistan, Afghanistan, Nigeria, Burkina Faso, Central African Republic, Chad, Mali, Niger, Angola, the Democratic Republic of the Congo, Ethiopia, India, Indonesia, South Africa. Among others, these countries are some of the ones that need the most help. The UN continues to provide assistance by engaging communities to create vaccine demand, keeping vaccines available through the cold chain, facilitating the introduction to new vaccines, investing in new vaccines and technology, and much more. (WHO, n.d.)

## HISTORICAL BACKGROUND

Vaccination access has always been a challenge, since, at first, there were not enough vaccines and solutions for diseases. Nevertheless, nowadays, it still represents a big challenge due that there are not enough services in rural areas or in developing countries. The international community has agreed that such matter

should be attended immediately.

In 1798, it was published a work by Edward Jenner that completely changed the way to fight against smallpox. In such document, he established a deep investigation based in observation where people who grew up with cattle had a reflexion action against human smallpox. After this discover, Edward Jenner is now known as the "father of vaccination".

During the 20th century, vaccinations started having the biggest impact on public health; since it drastically reduced the disease and mortality rates of smallpox. With the exception of potable water access, there has never been another preventive or therapeutic way; not even antibiotics have had the necessary impact reducing mortality rates all around the world.

Vaccination was adopted as a public health tool relatively rapidly in Europe and the USA, although not everyone in the community was in favour, especially after following the Vaccination Act in 1871 made in United Kingdom. Such Act caused controversy because it established Vaccination Officers, and made it possible to have a defendant in a court of law representing

someone else.

Universal vaccination programmes have reduced the load of infectious diseases present worldwide, throughout developing and developed countries. In the 1960s and 1970s,

these reductions precede to having optimism that the international community was winning the battle against infectious diseases. Sadly, even though these advances have shown great benefits of most childhood vaccinations, it is scientifically unquestioned that vaccination report rates are distant from 100% in diverse countries.

UNICEF, along with WHO (World Health Organization), delivered reports of three doses of diphtheria, tetanus, and pertussis (DTP3). Researchers used this information and determined that by using a statistical framework based on Gaussian process regression and a newly developed vaccine, the index would be at a safe level about 90% in the future.

The World Health Organization advocates to routine vaccination in order to avoid illness, death and disability

from diseases including tetanus, polio, pertussis, measles, and hepatitis B. The biggest gap in vaccination is with children that have been fully vaccinated and secured as much as possible from dangerous diseases. According to the analysis made by the Vaccine Alliance (n.d.), only 7% of infants in the developing countries are completely immunized.

Between 1980 and 2010, Mediterranean countries such as Spain, France, Monaco, Italy, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Albania, Greece, Turkey, Syria, Lebanon, Israel, Egypt, Libya, Tunisia, and Algeria were expected to accomplish an anticipated safe level. Nevertheless the reports also have shown that there are locations such as sub-Saharan Africa, the Indian subcontinent, and southeast Asia that have a low vaccine performance indices.

Healthcare Milestones:

During the 1960s, it was estimated that most of the deaths and severe illnesses were caused because of common infectious diseases that can be preventable by applying vaccines during childhood. Approximately one-third of African children, with less than 5 years old,

die because of untreated infectious diseases. Because of this, in 1974, WHO established the Expanded Programme on Vaccination (EPI); it accomplished to increase vaccination coverage from less than 5% to more than 80% in developing countries.

“As smallpox vaccine was the first vaccine to be deployed widely in man, it was appropriate that smallpox was the first human infectious disease to be eradicated by vaccination, a milestone achieved in 1979” (Greenwood, 2014)

Since 1980, there has been an increase in the richness of casual diseases. Viruses and bacteria represented 70% of the 215 diseases in the latest data file and caused 88% of outbreaks overtime. However, there was a virus that registered more than 15 million cases globally since 1980, this virus is called viral gastroenteritis.

In 2000, 189 Member States of the United Nations adopted the Millennium Declaration which resulted in the Millennium Development Goals (MDGs). The 8 established MDGs focused on promoting gender equality, and eradicating diseases, hunger, poverty, and

illiteracy; all of these were expected to be applied in an international range. Each one of them is related to vaccines. For example, MDG 4 “Reduce child mortality” focuses on making immunisation more accessible, especially in developing countries. Also, MDG 6 “Combat HIV/AIDS, Malaria and other diseases” is based on assuring vaccination to adults and children.

In 2001, the Measles Initiative is launched along with the American Red Cross, UNICEF, the United Nations Foundation and the US Centres for Disease Control and Prevention. And by October 2007 the global measles deaths had fallen by 68%.

By 2003, the Commission on Intellectual Property Rights, Innovation and Public Health is created. Intellectual property rights are important for departure relevant to public health and are one factor in predisposing access to medicines. It focuses on the common aspects between intellectual property rights, innovation and public health.

In 2005, the Commission on Social Determinants of Health is created in order to support countries and global health partners in addressing social factors

leading to ill-health and inequities.

Implemented strategies for the vaccination access internationally:

Committing to immunization as a priority and recognize how important it is for the well being of the society and public health. Countries have shown a commitment to immunization by establishing ambitious, but realizable, targets by implementing the adequate financial and human resources to programs in order to achieve these goals.

Protecting more people in a changing world; the principal idea is to ensure that every child has at least four contacts with immunization services.

Immunization services are used to increase immunization to other age groups in an effort to maximize the brunt. The aim is to ensure that countries have an evidence base and capacity to classify the need and establish priorities, for the addition of new vaccines and technologies.

Targeted plans are needed to provide access to

immunization during crisis, outbreaks and in conflict zones. These plans should also focus on communication and arrangement for the implementation of vaccine stockpiles, since they are the key for such success.

#### CURRENT RELEVANCE

Immunization saves many lives every year and it is recognized as a successful and cost-effective method to fight disease. The health of the world's population is of great importance in our current society. Without a healthy society, global issues would increase dramatically. It is of great importance to maintain high health standards because healthier communities are key to effectiveness and development of them. Because the improvement of life quality is directly related to health, improving access to vaccinations would be of great help to achieve not only better health, but to decrease child mortality and achieve a better quality of life.

The topic is of great importance since it is directly related to the future and wellbeing of the next generations around the world. If vaccination access is improved, the overall health of future societies will be superior. The way that the situation has been handled

recently, is through the promotion of programmes that are taking action to solve this matter. Before these programmes work at their full capacity (because work has been done by them already), they are being prioritized by governments and recognized by society. This is done in order to get funding for them, so that they continue working and expand to other places where they are needed.

The World Health Organization, which is part of the UN and it manages issues related to health, in its meeting of 2012, adopted initiatives to work with countries and partners in an effort to increase vaccination coverage. In another meeting, on May of 2017, the Global Vaccine Action Plan (GVAP), was made with the participation of 194 countries. It is a plan which tries to reduce the amount of deaths by giving more equitable access to vaccines by

2020. This resolution urges governments to endorse immunization programmes that are, up to date, with the policies that meet the GVAP. This policies are to help reach a better solution.

Recently, some actions have been carried out in order to

improve vaccination access internationally. Some recent ones include the World Immunization Week, which happens every year during the last week of April. Its aims include the promotion of vaccines to help people of all ages to fight diseases. The programme tries to highlight the importance of immunization and to show how investing in this kind of programmes will bring benefits to society.

Data is key in knowing the effectiveness of immunization, in this case, vaccines, as a method to improve health. It was calculated by WHO (n.d.), that between 2010 and 2015, 10 million deaths were prevented thanks to vaccines. It is estimated that around 1.5 million lives could be saved if the coverage of vaccines was capable of improving. The global coverage of vaccinations is 85%, but the number has not increased in the past years. Although the coverage is high, much is left to do; now more than ever, since the increasing rate has diminished.

Recently, the United Nations has made programmes that are promoting an ampliation to the coverage of vaccines. It has helped with the creation of them and their endorsement. The UN has been key in the support

of these programmes and backing up the creation of new ones. It holds multiple meetings where the improvement of the issue is discussed, such as the ones from the World Health Organization.

Among the countries continually affected by the issue, it is included: USA, Australia, Canada, Germany, Austria, Belgium, Iceland, Luxembourg, the Netherlands, Spain, Sweden, France, Pakistan, Afghanistan, Nigeria, Burkina Faso, Central African Republic, Chad, Mali, Niger, Angola, the Democratic Republic of the Congo, Ethiopia, India, Indonesia, South Africa. These countries have trouble with immunization against diseases, because their governmental programs lack of sufficient resources that can satisfy the entire population.

#### INTERNATIONAL ACTIONS

To help reach a solution, organizations not necessarily related to the UN, have helped too. They all have a goal in common, which is to spread the word on vaccination and to help as many people get vaccinated; whether it is in their home country, or in other countries who need it most. Actions from the following organizations have made an impact on the improvement of the issue,

proving that with help from people around the world, the possibility of finding a viable solution is high.

**Gavi**, is an organization launched in the year 2000, in Switzerland. It was created with the help of the Gates Foundation. They strongly believe in immunization as the best investment for humanity's future. Since its establishment, it has helped over 700 million children across the world to get immunized, and prevented the death of over 10 million children. It focuses mainly on developing countries. Among its notorious actions, it increases the equitable use of vaccines in developing nations (Gavi, n.d). They do this by reducing the costs of vaccination.

**The Vaccines For Children (VFC)** is a program funded by the government of the United States of America. It provides vaccination for children who might otherwise not be vaccinated because of their inability to pay for them. They get their vaccines at a discount from partners, and distribute them among local health agencies. These agencies then distribute them among eligible children.

**Bill & Melinda Gates Foundation** is an organization

owned by Bill Gates. The organization has many objectives for different issues and people all around the world. One of their objectives includes the vaccination of children. They are more specifically interested to continue with the eradication of polio, since it could prevent the death of over 11 million children. Their strategy is to contribute with the goals of the Decade of Vaccines, so that already existing vaccines reach countries that need it most, while also supporting the development of new vaccines.

**The Immunization Action Coalition (IAC)** was founded in 1994 and has since been supported by the Centers for Disease Control and Prevention (CDC). This organization has the development of new immunization methods as an objective, among with the distribution of them. It is also important for them to ensure they are delivered safely and that they are effective.

**Wellcome**, is an organization that wants to minimise the threat of drug-resistant diseases, to help with the salvation of millions of affected lives and assisting the scientists working on the medical progress for the diseases. One of their strategies includes the development of vaccines to combat microbial

resistance.

Immunization of society is a topic of great importance, since it is one way to reduce death from diseases. An easy and effective method to do this, is through vaccination. And with the help from these organizations, progress has been significant. While they are not working directly with the UN, they all have similar objectives that, translated into actions, brings us closer to a solution of the issue.

#### UN ACTIONS

In 2012, the World Health Assembly endorsed the Global Vaccine Action Plan (GVAP). This is a commitment between 194 countries to ensure that no one misses vital vaccination by 2020. The goals to close the immunization gap include: rubella elimination; measles mortality reduction; immunization against diphtheria, tetanus and pertussis; maternal and neonatal tetanus elimination; polio eradication; and the use of new or underutilized vaccines. (WHO, 2016 and 2018)

The highest report of children immunized was in 2017, with 116.2 million, along with 113 countries introducing

new vaccines and more than 20 million additional children being vaccinated. The percentage of infants vaccinated in 2016 with 3 doses containing diphtheria, tetanus and pertussis was 85%; and 98 countries had meetings with a National Immunization Technical Advisory Group (NITAG). Nevertheless, 19.9 million did not receive life-saving vaccination and, because of low coverage, several WHO regions were struck with large measles and diphtheria outbreaks. (WHO, 2018)

In 2017 there was a resolution to strengthen the GVAP, since the progress towards the targets was off track. The resolution urged Member States to strengthen the governance and leadership of national immunization programs and to improve monitoring and surveillance systems all across the world. (WHO, 2017)

UNICEF works with partners in government, NGOs and other UN agencies to provide immunization. Their immunization plan includes: vaccinating children in every community by tailoring new approaches, the cold chain by harnessing solar power, mobile technology and telemetrics as a way of ensuring vaccines reach all without losing their effectiveness, vaccine supply by facilitating the introduction to new vaccines, and

innovation by the investment toward new vaccines, diagnostic and health technologies. (UNICEF, n.d.)

Half of the world's children are reached every year with live-saving vaccines. Because of the advances, thanks to UN programs, the following aspects have been achieved:

Million children were saved by measles immunization between 2010–2017, in all but 13 countries maternal and neonatal tetanus has been eliminated until 2019, 1 billion will be protected against yellow fever in Africa by 2026, and polio cases were recorded in only 2 countries in 2018. (UNICEF, n.d.)

Although there have been great advances, there are still things that need improving, which include: 40% unvaccinated children live in fragile or humanitarian settings like conflict affected countries, 1.5 million deaths could be avoided by the improvement in global immunization coverage, and vaccine hesitancy was declared one of the top 10 threads to public health in 2019. (UNICEF, n.d.)

## POINTS TO DISCUSS

Trends  
Vaccination trends  
Currently state  
How does this affects worldwidely?  
Modern problems upon vaccination  
International obstacles  
Parenting healthcare  
Trending modes  
System management of international access  
Countries involved  
Politics upon  
Early vaccination  
Regulation  
Health strategies upon vaccination  
International statute of access  
Data and statics  
Rights  
What makes vaccination a right?  
How has it been violated?  
Ethics  
Issues and exercise of rights  
Moral right

Effectiveness and intervention  
Vaccination Mandates  
Policies  
Tools  
Healthcare system

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