

|  |  |
| --- | --- |
| Student Name |  |
| Student ID |  |
| Assessment Title |  |
| Course/Program |  |
| Lecturer/Tutor |  |
| Date Submitted |  |
| **OFFICE USE ONLY**  Date Received |  |

**NOT FOR USE WITH TURNITIN SUBMISSIONS**

**KEEP A COPY**

Please be sure to make a copy of your work. If you have submitted assessment work electronically make sure you have a backup copy.

**PLAGIARISM AND COLLUSION**

**Plagiarism:** using another person’s ideas, designs, words or works without appropriate acknowledgement.

**Collusion:** another person assisting in the production of an assessment submission without the express requirement, or consent or knowledge of the assessor.

**CONSEQUENCES OF PLAGIARISM AND COLLUSION**

The penalties associated with plagiarism and collusion are designed to impose sanctions on offenders that reflect the seriousness of the University’s commitment to academic integrity.  Penalties may include the requirement to revising and resubmitting assessment work, receiving a result of zero for the assessment work, failing the course, expulsion and/or receiving a financial penalty.

|  |
| --- |
| I declare that all material in this assessment is my own work except where there is clear acknowledgement and reference to the work of others. I have read the [Academic Honesty and Assessment Obligations for Coursework Students Policy and Academic Dishonesty Procedures](http://www.adelaide.edu.au/policies/230/) (http://www.adelaide.edu.au/policies/230/).  I give permission for my assessment work to be reproduced and submitted to other academic staff for the purposes of assessment and to be copied, submitted and retained in a form suitable for electronic checking of plagiarism.  Signed……………………………………………….  Date …………………………………………… |

**ESSAY- ETHICAL ISSUES AND VACCINES**

**TABLE OF CONTENT**

[**1.** **INTRODUCTION** 3](#_Toc178804229)

[**2.** **ETHICAL ISSUES IN VACCINE CREATION** 3](#_Toc178804230)

[**2.1** **ANIMAL TESTING** 3](#_Toc178804231)

[**2.2** **VULNERABLE POPULATIONS** 4](#_Toc178804232)

[**3.** **GOVERNMENT REGULATION & ETHICAL ISSUES** 5](#_Toc178804233)

[**3.1** **MANDATING VACCINATIONS** 5](#_Toc178804234)

[**3.2** **CONSENT & AUTONOMY** 5](#_Toc178804235)

[**4.** **EQUITY AND ACCESS DISPARITIES** 6](#_Toc178804236)

[**4.1** **INTERNATIONAL VACCINE DISTRIBUTION** 6](#_Toc178804237)

[**4.2** **ETHICAL CONCERNS IN ACCESIBILITY TO VACCINES** 7](#_Toc178804238)

[**5.** **CASE STUDIES** 8](#_Toc178804239)

[**6.** **CONCLUSION** 9](#_Toc178804240)

[**7.** **REFERENCES** 10](#_Toc178804241)

# **INTRODUCTION**

Vaccines have played an important role in enhancement of public health on an international level by significantly reducing the prevalence of diseases like smallpox, polio, and measles. Although vaccines have provided significant achievement, they have also been topic of ethical debate for a long time. The discussions have ranged from ethics of animal research & exploitations of vulnerable individuals in vaccine studies to state regulations requiring obligatory vaccinations and inconsistencies in global accessibility to vaccines. There have been significant ethical debate pertaining to concerns regarding human autonomy & informed consent in vaccination delivery. Our essay will assess the ethical issues regarding vaccinations along with difficulties encountered throughout their development, the function of government legislation as well as ethical implications of inequitable accessibility to vaccines. The essay will utilize real-world case studies for putting focus on difficulties and offer feasible remedies on basis of ethical conduct.

# **ETHICAL ISSUES IN VACCINE CREATION**

## **ANIMAL TESTING**

For several decades, animal testing has served as important component of vaccine research, evaluating vaccination efficiencies safeties prior to individual trials. The Animal Testing can provide researchers the essential knowledge regarding immune responses along with potential negative impacts. Preclinical studies have often involved primates, rodents and other animals for assessing the possible effectiveness of vaccine candidates (AYSHA KARIM KIANI, 2022). But, this procedure has served serious ethical concerns, specially about the moral basis for giving harm to animals in terms of human healthfulness.

An important argument against animal experiments related to vaccine development is the speciesism principle. This principle gives priority to individual well-being over any other species without any authentic or sufficient explanations for it. Critics content that animals are also sentiment beings like humans who can feel pain or any suffering (Caplan, 2020). Therefore, they should not be given exposure to harmful activities. In addition, animal testing ends up with death of test subjects which raises significant concerns for animal rights supporters.

On the other hand, advocates of animal testing think that it is essential for improvements in human wellness since the alternative- direct testation on individuals would be considered damaging and immoral. In spite this, significant attempts are being done for improving, decreasing as well as eliminating animal testing in scientific studies (3Rs). Several biotech creations like the production of organ-on-chip prototypes as well as computer simulations intent to made reductions in animal testing (Jing Li, 2023). Nevertheless, such technologies have not been able to evolve sufficiently for perfect duplication of complexities of biological beings. This makes animal testing a very important (if morally disputable) element of vaccine research.

## **VULNERABLE POPULATIONS**

The utilization of vulnerable individuals in vaccination research serves as important ethical issue. Historically speaking, low-income communities, minorities as well as individual from under-developed states have been used for clinical trial volunteers, sometimes without extensive informed consent or an understanding of scale of side-effects connected (Amy Grenham, 2017). These individuals are specifically prone to exploitations owing to socioeconomic situations, restricted accessibility to healthcare as well as lack of proper education.

The moral dilemmas related to usage of vulnerable populace in vaccine research are strongly tied to the Belmont Report’s principle of respect & justice for people. In accordance to the report, research subjects are not to be selected on basis of their easier recruitments & manipulations. In addition, the benefits of the research should be equivocally disseminated across all populations instead of only assisting ones in developed countries or regions (Hiroyuki Nagai, 2022).

In certain cases, vaccination trials were carried out in under-developed countries with no promise of full accessibility to the final vaccination. For instance, trials for distinct HIV vaccines were done in Sub-Saharan Africa; but accessibility to the effective vaccine was limited because of expense & logistical concerns. This raised significant ethical questions in regard to exploitation & the equitable allocation of scientific incentives (Lindi Mathebula, 2020). To tackle such issues, global norms like the Declaration of Helsinki required researchers to ascertain that advantages of clinical trials would be shared with communities that engage with them. Nevertheless, such standards are not always fulfilled, leading to constant ethical problems in vaccine development.

# **GOVERNMENT REGULATION & ETHICAL ISSUES**

## **MANDATING VACCINATIONS**

Governance hold of vaccines; specifically, obligatory vaccination policy is a significantly debated ethical problem. On the other hand, mandated vaccines are proved as highly efficient in handling infectious illness, development of herd immunity as well as averting outbreaks which might overwhelm the medical system. Childhood immunizations are extremely important against diseases like measles, mumps as well as rubella (MMR) as they have to get enrolled in schools in many countries. The regulations have declined the prevalence of these diseases and saved numerous lives on a significant level.

Nevertheless, mandated vaccination regimes have presented serious ethical considerations specifically with human autonomy as well as freedom of choice. Mandatory vaccine initiatives have been under criticism for violation of concept of informed consent’ it states that people should have capacity to make informed decisions in regards to their own wellness (Bardosh, 2023). Forcing individuals to get vaccinations, even with interests of public health in mind could violate their individual liberties as well as physical individuality.

The ethical controversies in regards to mandated vaccination developed amidst the covid-19 epidemic when several countries had imposed vaccine mandates on medical personnel, public workers as well as the general public (Lynette Mtimkulu-Eyde, 2022). Although the rules and regulations had been implemented for prevention of virus’s spread as well as safeguarding public health, they had to face severe backlash from individuals & groups who had stated that such measures infringed their personal rights. Such a contradiction between public health & personal autonomy is continually serving as a significant ethical problem in vaccine regulation.

## **CONSENT & AUTONOMY**

Informed consent serves as basic premise of medical ethics, specifically within context of vaccination. People have the right within concept of autonomy to incorporate decision-making regarding their own bodies as well as medical wellness; the only condition is that they are properly informed about all the risks & benefits involved (Yael Sela, 2023). Informed consent for vaccination demands that individuals are able to comprehend the potential adverse implications, the potential benefits of immune system as well as public health repercussions for declining immunization.

Nevertheless, in practice, attaining exclusive informed permission for immunizations could be challenging. In today’s world of social media, misinformation as well as fear have led to extensive hesitancy of vaccinations on a global level; individuals refuse to get vaccinations owing to incorrect concepts of its effectiveness or their own safety (Skafle, 2022). This can be specifically apparent in the MMR vaccination, wherein a flawed research study incorrectly associating the vaccine to autism persists and influences public perspective, in spite of numerous scientific evidence to the contrary.

In addition, as we had previously mentioned, immunization requirements aggravate consent issues. When vaccines are made mandatory, individuals could believe that their capacity to make sound decisions has been compromised (Yael Sela, 2023). This can raise the question of whether obligatory vaccination practices could ever be compatible with ethical concepts of autonomy. As state is continually facing the problem of public health demands with people rights, consent has remained to be fundamental problem.

# **EQUITY AND ACCESS DISPARITIES**

## **INTERNATIONAL VACCINE DISTRIBUTION**

The international distribution of vaccinations serves as an essential ethical issue in public health. High-income countries most commonly have the resources required to procure big quantities of vaccines, but the low income and middle-income states are struggling to acquire even basic immunizations. The discrepancies were especially transparent during the covid-19-time period, when developed countries acquired easy and earlier accessibility to the initial vaccinations via advanced purchase contracts. This left the under developed countries with insufficient supplies (Malekzadeh, 2023).

Identifying the ethical dilemma of inequitable vaccine distribution, the WHO (World Health Organization) has created the COVAX initiative in partnership with Gavi; the vaccine alliance and the coalition for pandemic preparedness programs. COVAX had been established for guaranteeing equitable accessibility to epidemic vaccinations, especially for low & middle-income states that otherwise would have struggled lot in a competitive international marketplace (World Health Organization, 2024). The program made attempts to provide vaccines on basis of public health instead of purchasing capacity as per the concept of international health fairness. In spite of the loft objectives, COVAX had to deal with numerous problems like production postponements, limited funding as well as logistical issues in distribution of vaccines to remote areas. In spite of initial contracts, rich states gave their own population I priority, stockpiling vaccine doses & postponing COVAX contributions.

Such an inequity in vaccine distributions has elevated international health inequities, postponing numerous vulnerable community’s timely accessibility to life-saving immunizations. The limitations may reflect deeper systemic issue in international health governance, focusing on the requirement for effective global collaboration as well as procedures to guarantee that upcoming pandemic responses would give priority to fairness & justice in vaccine availability. At last, COVAX initiative showcases the ethical obligation to tackle significant disparities in international health infrastructure as well as resources.

## **ETHICAL CONCERNS IN ACCESIBILITY TO VACCINES**

In addition to international disparities in vaccine accessibility, there are significant inequities within each country. Marginalized individuals, specifically racial & ethnic minorities, low-income people as well as rural regions may encounter elevated difficulties to vaccination accessibility. The barriers to accessibility can include practical problems like lack of medical infrastructure in remote areas as well as the interpersonal determinants of health like skepticism of medical system as well as shortage of health insurance.

The ethical concept of fairness necessitates that vaccinations be distributed evenly through each part of society making sure that vulnerable groups achieve the required protection. This concept is specifically important pertaining to public health as failure to vaccinate marginalized populace could result in pandemic affecting the whole society. A practical example of such difficulty was seen in covid-19-time period i.e. vaccine deployment in the US. The elite and metropolitan population had easier accessibility to vaccinations, while low-income communities specifically the ones in rural areas & minority groups had to face huge challenges like inadequate medical infrastructure & vaccine reluctance because of historical skepticism of medical care (Newman, 2022).

In order to address these gaps, the US government integrated concentrated outreach programs with inclusion of mobile vaccination unites & collaborations with community medical organizations. For instance, the ‘We Can Do This’ initiative sought to enhance faith in vaccinations within Hispanic & Black populace (U.S. Department of Health and Human Services, 2024). Although these efforts were done, the initiative was underfunded & poorly implemented on a frequent basis. This resulted in reduce immunization rates among the vulnerable people than in wealthier ones. The case discussed had shown practical obstacles in developing fair vaccination delivery, focusing on the importance of constant investments in outreach & infrastructure to safeguard every portion of society.

# **CASE STUDIES**

Real-world case studies can assist in explaining the ethical problems related to vaccinations whilst also showing the complexity of public health policies. An example for this is continuous debate over HPV (Human Papillomavirus) vaccination. This vaccination is considered highly effective in prevention of cervical cancer as well as other associated disorders, however this vaccination has received severe backlash from many countries (Palmer, 2014). Numerous parents have voiced their discomfort regarding the delivery of vaccination to teenagers; giving statements that such demands may violate their parental rights & criticize the morality of encouraging a vaccine for a sexually transmitted virus. The responses highlighted the dispute between private liberties and public health demands. Critics showed concern that requiring the HPV vaccine could display an unintentional support of sexual conduct among under-aged group of people, misleading debates about sexual health & ethics. This case has shown the problems encountered in marketing of vaccinations. Main problem we have seen is societal stigma, showcasing the importance of public health programs which addresses such concerns whilst maintaining equitable access to preventative medical care.

Another important case study is the international dissemination of COVID-19 vaccinations. Developed countries like the United States and the United Kingdom have the potential and capacity to procure & deliver vaccines to substantial segments of their populations in a span of few months, hence limiting the spread of virus. On the contrary, numerous low- & middle-income countries were unable to vaccinate even a minor proportion of their population. For example, numerous African states have made reports of immunization rate being less than 10% one year after the vaccinations were made accessible (Tatar, 2022). This significant disparity has raised many serious ethical concerns regarding the international justice and moral responsibility of developed countries to make sure these life-saving immunizations are fully accessible to everyone. The unequitable distribution of vaccinations has emphasized the critical requirement for structural reforms in international health governance that puts equality & justice on top priority in terms of health interventions.

The case Studies have shown the complicated ethical dilemmas that vaccine initiatives raise along with importance of taking care of both personal rights as well as international equality.

# **CONCLUSION**

At last, it has been concluded that vaccines have proven to be important in enhancement of public health, however their production & distribution may develop serious ethical problems. From animal experimentation to the misuse of vulnerable populations, these ethical issues call into question the equilibrium between advancement of medical care as well as upholding moral principles. Although animal testing is considered as necessary, but it has been severely opposed by animal rights activists. Also, the inclusivity of disadvantaged groups in clinical trials without adequate prior authorization shows long standing disequilibrium in international medical practices. Additionally, government rules like mandated vaccination measures could conflict with private liberties as we have already encountered in covid-19 timeframe. Also, unequitable access to vaccinations, especially among developed and underdeveloped countries accentuates international health inequities. Programs like COVAX was developed to resolve such problems; structural issues are still in existence.

Real-world examples, like the HPV vaccine issue and the unequal distribution of COVID-19 vaccinations, highlight the ethical challenges of immunization programs. These instances highlight the necessity for continual adjustments in public health policy that priorities both individual liberties and equality worldwide. Finally, ethical concerns in vaccine manufacture and distribution must prioritize justice, autonomy, and the larger good in order to provide more equitable and effective health treatments worldwide.

# **REFERENCES**

* Amy Grenham, T. V., 2017. Vaccine development and trials in low and lower-middle income countries: Key issues, advances and future opportunities. *Human Vaccines & Immunotherapeutics,* 13(9), p. 2192–2199..
* AYSHA KARIM KIANI, D. P. G. H., 2022. Ethical considerations regarding animal experimentation. *Journal of Preventive Medicine and Hygiene,* 63(2), pp. 255-266.
* Bardosh, K., 2023. The unintended consequences of COVID-19 vaccine policy: why mandates, passports and restrictions may cause more harm than good. *BMJ Global Health,* 7(5).
* Caplan, A. L., 2020. The ethics of the unmentionable. *Journal of Medical Ethics,* 47(10), pp. 687-688.
* Hiroyuki Nagai, E. N., 2022. The creation of the Belmont Report and its effect on ethical principles: a historical study. *Monash Bioeth Rev,* 40(2), p. 157–170..
* Jing Li, H. B. Z. W. B. X., 2023. Advancements in organs-on-chips technology for viral disease and anti-viral research. *Organs-on-a-Chip,* Volume 5.
* Lindi Mathebula, D. N., 2020. Description of vaccine clinical trials in Africa: a narrative review. *Human Vaccines & Immunotherapeutic,* 16(4), p. 972–980..
* Lynette Mtimkulu-Eyde, J. D., 2022. Mandatory COVID-19 Vaccination. *Health and Human Rights Journal,* 24(1), pp. 85-91.
* Malekzadeh, R., 2023. Analysis of ethical considerations of COVID‑19 vaccination: lessons for future. *BMC Medical Ethics,* Volume 24, p. 91.
* Newman, P. A., 2022. COVID-19 vaccine hesitancy among marginalized populations in the U.S. and Canada: Protocol for a scoping review. *PLoS One,* 17(3).
* Palmer, A. K., 2014. Human Papillomavirus Vaccination: A Case Study in Translational Science. *Clinical and Translational Science,* 7(5), pp. 420-424.
* Skafle, I., 2022. Misinformation About COVID-19 Vaccines on Social Media: Rapid Review. *Journal of Medical Internet Research,* 24(8).
* Tatar, M., 2022. COVID-19 vaccine inequality: A global perspective. *Journal of Global Health,* Volume 14.
* U.S. Department of Health and Human Services, 2024. *COVID-19 Vaccination Public Education Campaign Saved Thousands of Lives, Billions of Dollars.* [Online]   
  Available at: https://www.hhs.gov/about/news/2024/05/06/covid-19-vaccination-public-education-campaign-saved-thousands-lives-billions-dollars.html
* World Health Organization, 2024. *COVAX: Working for global equitable access to COVID-19 vaccines.* [Online]   
  Available at: https://www.who.int/initiatives/act-accelerator/covax
* Yael Sela, K. G., 2023. The Dilemma of Compulsory Vaccinations—Ethical and Legal Considerations. *Healthcare (Basel),* 11(8), p. 1140.