

Vaccination: pros and cons

Concept A: Introduction

Vaccines are powerful medicines that protect us from deadly and dangerous diseases. Vaccination is a process of introducing a vaccine into the body to produce immunity to a specific disease. It is given in the form of an injection. The dosage is normally specified by the health care provider. The vaccine stimulates our immune system so that it can recognise the disease and protect us from any future infection. Vaccinations act as a protection against infections throughout our life.

Immunization is the process where a person becomes immune or resistant to an infectious disease, by the administration of a vaccine.

- Vaccines are invented by scientists and medical experts from around the world, and it usually requires 10 to 15 years of research before the vaccine is made available to the general public.
- The only exception being the C19 vaccines which were created in the shortest possible time.

Examples

- The measles, mumps, and rubella (MMR) vaccine
- varicella (chickenpox)
- Covaxin, covid shield, moderna are C19 vaccines

In india kids are vaccinated against 11 life threatening diseases

Concept B: Vocabulary needed to discuss the topic:

- **Eradication-** It is the complete removal or elimination of something like disease.
- **Infection-** It is a condition when a germ, such as a virus or bacteria, invades an organism and may or may not cause illness.
- **Virus-** it is **an infectious agent that can only replicate within a host organism**
- **Antibodies-** a blood protein produced in response to and counteracting a specific antigen
- **Immunity-** the ability of an organism to resist a particular infection or toxin by the action of specific antibodies or sensitized white blood cells.
- **Mutation-** the action or process of mutating.
- **Vaccine Efficacy-** measures the percentage reduction of a disease in a clinical trial .

1. **Introduction**

This document describes the structure and content of the course.

2. **Objectives**

- 1. Understand the basic concepts of the course.
- 2. Apply the concepts to solve problems.
- 3. Develop the ability to work in a team.

3. **Structure**

- 1. The course is divided into three main parts: theory, practice, and assessment.
- 2. The theory part covers the basic concepts and principles of the course.
- 3. The practice part involves solving problems and working in a team.
- 4. The assessment part consists of a final exam and a group project.

4. **Assessment**

- 1. The final exam will be held at the end of the course.

5. **Conclusion**

This document provides a brief overview of the course.

For more information, please contact the course coordinator.

6. **References**

- 1. [Reference 1]
- 2. [Reference 2]
- 3. [Reference 3]

7. **Appendix**

1. **Introduction**

2. **Background**

3. **Method**

- 1. **Study Design**
- 2. **Participants**
- 3. **Intervention**

4. **Results**

- 1. **Primary Outcome**
- 2. **Secondary Outcome**
- 3. **Subgroup Analysis**

5. **Conclusion**

- 1. **Summary**

6. **References**

7. **Appendix**

8. **Supplementary Materials**

9. **Footnote**

- 1. **Footnote 1**
- 2. **Footnote 2**
- 3. **Footnote 3**

10. **Page Number**

1. **Introduction**

This document describes the system architecture and components.

2. **System Architecture**

- 1. **System Overview**
- 2. **System Components**
- 3. **System Flow**

3. **System Components**

- 1. **System Overview**
The system is designed to provide a comprehensive overview of the system architecture and components.
- 2. **System Components**
The system consists of several key components, including the user interface, the data layer, and the business logic layer.
- 3. **System Flow**
The system flow describes the sequence of operations and data flow within the system.

4. **System Flow**

- 1. **System Overview**
The system flow describes the sequence of operations and data flow within the system.

5. **Conclusion**

This document provides a detailed overview of the system architecture and components.

The system is designed to provide a comprehensive overview of the system architecture and components.

6. **Appendix**

- 1. **System Overview**
- 2. **System Components**
- 3. **System Flow**

7. **References**