VACCINES-AN OVERVIEW

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Abstract

Immunization is a way of protecting the human body against infectious diseases through vaccination. immunization prepares our bodies to fight against diseases in case we come into contact with them in future.

Babies are born with some natural immunity which they get from their mothers and through breast-feeding. This gradually wears off as the baby's own immune system stars to develop. Immunization gives a child extra protection against illnesses which can kill. While it is best to follow the ideal immunization schedule. On no account should the baby be denied vaccinations, even if she is brought late for them. but every attempt must be made to complete full immunization, before the age of 1year.

Introduction

A Vaccine is a biological preparation that provides immunity to a particular disease. A Vaccine typically contains an agent that resemble a disease causing micro organism and is often made from weakened or killed forms of the microbe, its toxins or one of its surface proteins. The agent stimulates the body's immune system to recognize the agent as a threat, destroy it, and to further recognize and destroy and of the microorganisms associated future. Vaccination is a proven tool for controlling and eliminating life threatening infectious diseases and is estimated to avert between 2 and 3 million deaths each year. Vaccines stimulate the body's own immune system to protect the person against subsequent infection or disease.

Vaccines can be,

- Prophylactic eg: to prevent or ameliorate that effects of a future infection by any natural or wild pathogen
- Therapeutic eg: Vaccines against cancers are also being investigated.

Important facts about Vaccination.

- ♣ Vaccination is one of the best ways to protect children against serious infections diseases.
- ♣ Vaccines are mostly safe.
- ♣ Children and adults that have not been immunized are at risk for developing serious infectious disease.
- ♣ Infants and young children are very vulnerable to infectious diseases.
- ♣ There are small risk associated with Vaccinations.
- ♣ People who are Vaccinized increase the chances of spreading disease to other.

Without Vaccination, the diseases that we are currently protected from will reaper and cause sickness, disability and death.

Basic principle of vaccination

The basic principle of vaccination is to stimulate the host to produce its own antibodies to the agent that causes disease.This stimulation is done by introducing attenuated strain of specific bactiria,viruses and killed bacteria.

Aim of vaccination

The aim to prevent the person from getting the disease when he/she is exposed to it for the first time in life as certain illnesses may be crippling or fatal. with natural immunity disease, risk of serious illness. disability and death are high. Immunization is a safer way to get immunity.

Vaccine's effectiveness.

Immunization do not guarantee complete protection from a disease. Sometimes, this is because the host's immune system simply does not respond adequately or at all. To determine what type of Vaccine is required and when it needs to be administrated, enter the dare of birth of Childs and the Vaccination scheduled will work out of required schedule for immunization of child. Some Vaccines on the immunization schedule are almost 100% effective for example, two does of the measles mumps and rubella Vaccine will protect 99% of people from measles and will protect about 88% of the people of mumps.

Vaccines Schedule

In order to provide best protection children are recommended to receive Vaccinations as soon as their immune system are sufficiently developed to respond to particular Vaccines, With additional 'booster' shorts often required to achieve 'full

immunity'. Besides recommendations for infant Vaccination and booster's, many specific Vaccines are recommended at other ages or for repeated injections throughout life most commonly for measles, tetanus, influenza, and pneumonia.

Pregnant women are often screened for continued resistance to rubella. The human Papilloma Virus Vaccine is currently recommended for ages 11-25, Vaccine recommendations for elderly concentrate on pneumonia and influenza, which are more deadly to that group.

Commonly Used Immunizing Agents		
Vaccines		
Live attenuated Vaccines	BCG Typhoid Oral Oral Polio Yellow Fever Measles Rubella Mumps Chicken pox Influenza Epi typhus	Bacterial Viral Rickettsial
Inactivated or Killed Vaccines	Typhoid Cholera Pertusis CS Meningitis Plague	 Bacterial
	Rabies Salk (polo) Influenza Hepatitis B Hepatitis A Japanese encephalitis	 Viral
Toxoids	Diphtheria Tetanus	 Bacterial

History of vaccination

Vaccination was used in ancient times in China, India and Persia ,and was introduced in the West in 1796 by Edward Jenner.Jenner demosrated that rubbing or scrapping the cowpox virus in to the skin produced only a local lesion but was sufficient to stimulate the production of antibodies that would defend the body against the more virulent small pox.

Immunization are for only Kids

There are numerous Vaccines that can help keep adolescents and adults, both young and old, healthy, most obvious is the flu shot, which is given annually. College students should get a meaning is Vaccine before starting to live in a dormitory, and elderly adults can benefit from Pneumonia Vaccines.

Adults also need boosters for Tetanus and pertusis. Children aren't fully immunized against pertusis until age 4, Smaller babies are at high risk, and pertusis can be transmitted to babies by adults with waning immunity.

CONCLUSSION

The success of every Immunization program is depend upon reaching and sustaining the target coverage rates. Vaccination programs are currently facing coverage gaps where target coverage's are never reached and may also see erosion of coverage owning to, for example, loss of public confidence in Vaccinations. Within the broad challenge of increasing Vaccine acceptance, there are many different circumstances depending on the disease, population demographics, culture and differences in healthcare systems. Communication and interventional strategies should therefore be tailored by Vaccine and population.

Reference

1. Who position paper No 27, 2017, world health organization, Weekly epidemiological record, No 27,2017, 92,369-392
2. Polio Vaccines: Who position paper March 2016. World health organization weekly epidemiological record.
3. Brown DW(2012) child immunization cards: essential get under utilized in national immunization programmes: open Vaccine/5:1-7
4. https://www.cdc.gov>Vaccinesafety.
5. Guess H.A. *Assessing and safety and immunogenicity of combination Vaccines, epidemiologic Reviews, 21:89-95*

6.Robert w.Sears, The vaccine book pp no;356-361