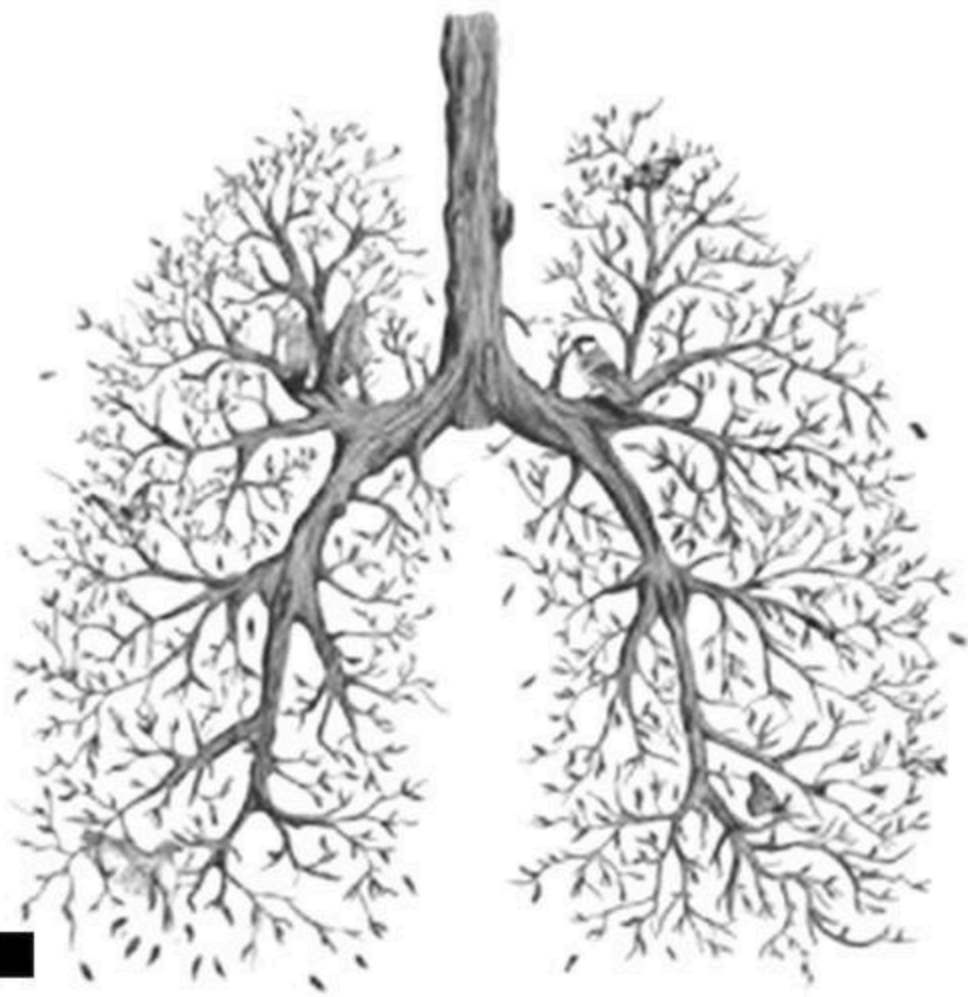


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Medical Committee
The University of Jordan

Community Medicine



Slides

Sheet

Lecture # 4

Doctor: Samr Al sharif

Date:

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ وَالصَّلَاةُ
وَالسَّلَامُ عَلَى نَبِيِّنَا مُحَمَّدٍ خَاتَمِ
الْأَنْبِيَاءِ وَسَيِّدِ الْمُرْسَلِينَ وَعَلَى آلِهِ
وَصَحْبِهِ أَجْمَعِينَ وَبَعْدُ

Poliomyelitis

- **Poliomyelitis** , often called **polio** or **infantile paralysis**, is an acute, viral, infectious disease spread from person to person, primarily via the fecal-oral route.^[1]

- Although approximately 90% of polio infections cause no symptoms at all, affected individuals can exhibit a range of symptoms if the virus enters the blood stream.^[3] In about 1% of cases, the virus enters the central nervous system, preferentially infecting and destroying motor neurons, leading to muscle weakness and acute flaccid paralysis

- The time between first exposure and first symptoms, known as the incubation period, is usually six to 20 days, with a maximum range of three to 35 days.^[19] Virus particles are excreted in the feces for several weeks following initial infection.^[19]

- The disease is transmitted primarily via the fecal-oral route, by ingesting contaminated food or water. It is occasionally transmitted via the oral-oral route. Polio is most infectious between seven and 10 days before and after the appearance of symptoms, but transmission is possible as long as the virus remains in the saliva or feces.

- Factors that increase the risk of polio infection or affect the severity of the disease include immune deficiency,^[20] malnutrition,^[21] tonsillectomy,^[22] physical activity immediately following the onset of paralysis,^[23] skeletal muscle injury due to injection of vaccines or therapeutic agents,^[24] and pregnancy.

Polio

Symptoms

- fever
- severe muscle pain or spasm
- paralysis
- headache
- some people do not look or feel sick, but can still spread the disease to others

Complications

- long-term paralysis
- inability to breathe without the help of a machine
- death

Treatment

- There is no cure for polio. The focus of modern treatment has been on providing relief of symptoms, speeding recovery and preventing complications. Supportive measures include antibiotics to prevent infections in weakened muscles, analgesics for pain, moderate exercise and a nutritious diet.^[55] Treatment of polio often requires long-term rehabilitation, including occupational therapy, physical therapy, braces, corrective shoes and, in some cases, orthopedic surgery.

Prevention

Passive immunization



Polio Vaccines

- Two types of vaccine are used throughout the world to combat polio.
- A- Oral Polio Vaccine: based on one serotype of a live but attenuated (weakened) virus.
- B- Injectable Polio vaccine : inactivated or killed virus vaccine .

- As a precaution against infection, public swimming pools were often closed in affected areas during poliomyelitis epidemics.
- Hygiene
- Good Nutrition



Measles

- spreads easily between people
 - can cause serious illness in children
 - can cause death in serious cases
- ; Measles virus is the cause of measles. This virus is a single-stranded RNA virus,
- spreads through coughing, sneezing, or just talking to an infected person

Once infected

incubation period : takes 8-12 days to get sick

Is a Person Contagious During the Incubation Period for Measles?

A person is not contagious during the measles incubation period. A person is mildly contagious when he or she first experiences symptoms, and is most contagious about four days before the onset of the measles rash. Some risk of measles transmission lasts until about four days after the rash starts.

Measles

Early Measles Symptoms

Early symptoms of [measles](#) occur several days before the measles rash begins. These can include:

High fever (up to 105°F or 40.6°C)

Hacking cough

Red, watery eyes ([pink eye](#))

Tiredness

Muscle and body aches

Irritability

Swelling of the eyelids

Runny nose

Rash that begins along the hairline and moves downward to the face, neck, body, hands, and feet

Complications

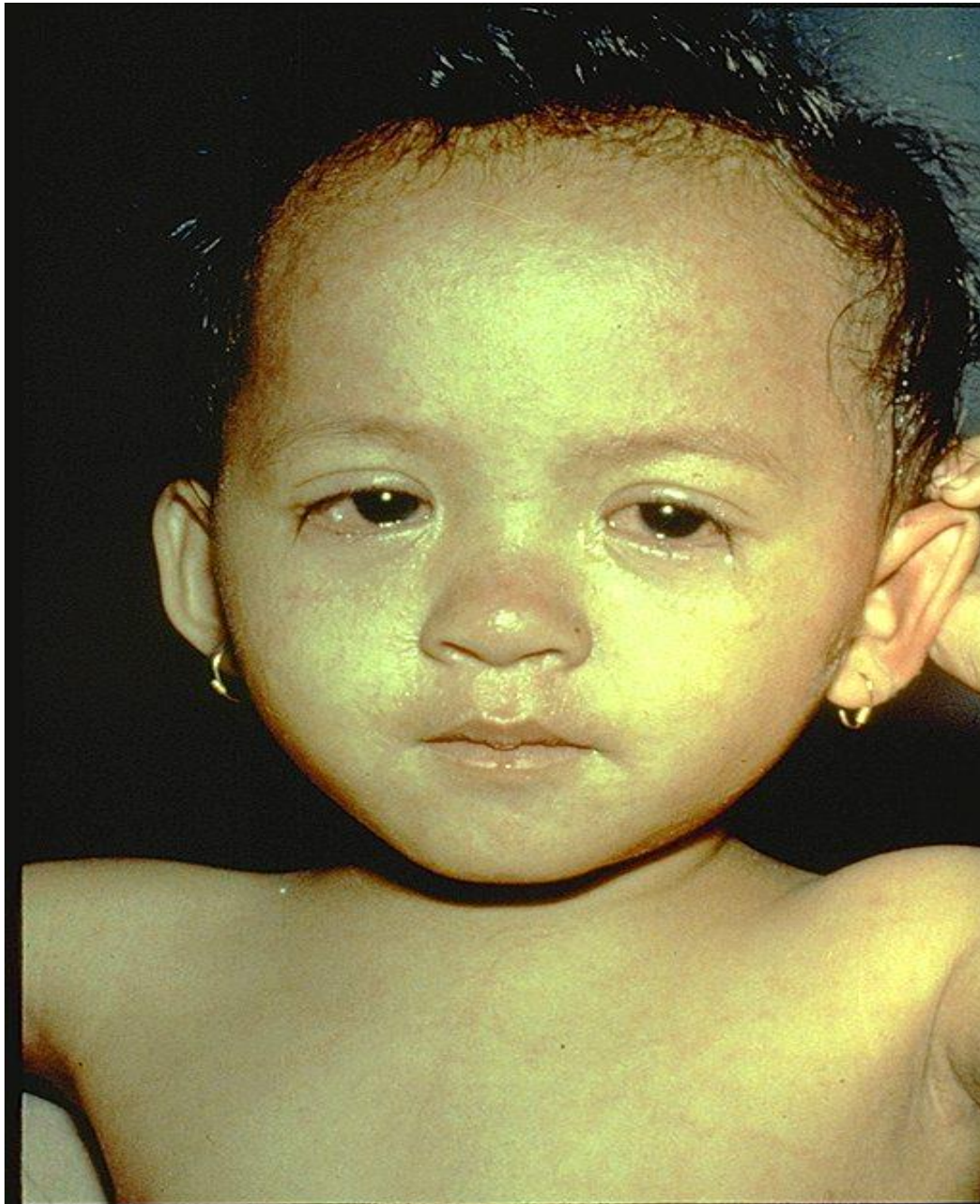
- pneumonia
- ear infections
- encephalitis : brain damage
- seizures
- death



child has a bad rash caused by measles

- eyes are red and runny
- has a runny nose and fever





10/21/2014



Expanded Program on Immunization

- WHO set Target: 90% of all children below one year be fully immunized by the year 2000.
- Immunization is an essential part of PHC
- It is a program that was started worldwide by WHO / UNICEF, called (EPI).

Immunization

- EPI (Expanded Program on Immunization) was launched in Jordan in 1979
- Jordan achieved universal child immunization in 1988.

Objectives of EPI

- 1. To reduce morbidity and mortality from six major diseases - diphtheria, pertussis, tetanus, measles, poliomyelitis and tuberculosis by immunising all children throughout the world by 1990.
- 2. To promote national self-reliance in delivering immunisation services within comprehensive health services.
- 3. To promote regional self-reliance in vaccine production and quality control.

National Jordanian Vaccination Program

Age	1 m	61 day	91 day	121 day	10 m	12 m	18-24 m	6 Year
Vaccine								
BCG	☺							
DTP		☺	☺	☺			☺	dT
Polio V.		IPV	OPV, IPV	OPV	OPV		OPV	OPV
HIB		☺	☺	☺				
HBV		☺	☺	☺				
Measles					☺			
MMR						☺	☺	

Polio eradication goal

- 14 years back the initiative of Polio eradication was launched by WHO
- Currently 19 countries of the Middle East Region are free of polio.
- Jordan is polio free since 1995

Factors affecting immunization coverage

- Parental/ guardian knowledge and awareness
- Health workers knowledge and counseling skills
- Mass media
- Interpersonal communications

Cold Chain

- Vaccines must stay cold all the way from the manufacturer to the child
- The equipment and people that keep vaccines cold from the manufacturer to child are altogether called cold chain.
- Requirements for storage and refrigeration are important info to know.
- All vaccines must be used within 8 hours after dissolution.

Evaluation of immunization programs

Target population must be identified:

- Number of births
- Number of visits in a year
- Number of children needing vaccination in a particular year (deaths, drop outs..etc).
- Immunization records should be kept at health facility
- A copy of the immunization record should be available with parents