

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

POLIOMYELITIS

BURNING ISSUE OF PAKISTAN

WHAT IS POLIO



- Contagious Viral Disease
 - Affects Mainly Young Children
 - Age 1-12 years
 - Adults with lower resistance
 - prolonged chilling
 - malnutrition
 - pregnancy
 - tonsillectomy/adenoidectomy
- usually subclinical

- Causative Agent
poliovirus I, II, III
- Route of Transmission
Oral
- Source of infection
oropharyngeal secretions and faeces
- Incubation Period
7-21 days
- End of summer n early winter

type 2 eradicated
type 3 also

Sign & symptoms

- Asymptomatic 95%
- Mild symptoms 3-4%
flu, fever, sore throat, diarrhea, headache
- non paralytic 1-2%
neck stiffness, muscle pain,
- paralytic 0.1-1%
paralysis of one or more limbs, respiratory muscles paralysis which may lead to death

MANAGEMENT

➤ DIAGNOSIS

detection of poliovirus in

oropharyngeal sample (remains only for 3-7 days)

stool sample (remains up to 4 months)

➤ TREATMENT

only symptomatic

PREVENTION

vaccination

➤ General Prevention

hygienic measures

➤ Specific Prevention

- polio vaccine
 - EPI schedule for infants and children
 - IPV
 - OPV
- adults (herd immunity)
- booster dose provide lifelong immunity

primary=safe
water supply can
prevent polio 99%
+vaccination

sec=early
diagnosis+sympto
matic treat

tertiary=rehab

WORLDWIDE

- height of the polio epidemic in 1952 in western world
- nearly 60,000 cases and more than 3,000 deaths were reported in the United States alone
- Before 1955 polio was very common
- higher incidence in developed countries
- inactivated polio vaccine (IPV) in 1955
- live oral polio vaccine (OPV) in 1960
- last case reported in US 1979
- last case in western hemisphere in 1991

- Endemic Countries Left
3 (Afghanistan, Pakistan, Nigeria)
- Children Immunized Against Polio
2.5 Billion
- Global Polio eradication campaign
“ End polio now, finish the fight”
- 99,008 Have signed on with Rotary to make history

- Still an endemic viral infection
- immunization campaign started in 1974
- officially started eradication in 1993
- only 60 rounds of vaccination were carried out in the country before 2007
- 37% increased in polio cases in 2011
- According to WHO poliovirus present in Lahore, Rawalpindi and Peshawar (sewage system)

polio in Pakistan

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Polio virus in Pakistan

- Serotype I, III
- last case of type III reported in April, 2012
- Virus type III detected in sewage in October, 2010

POLIO ENDEMIC CAUSES

- reluctance
 - religious
 - rumors (Western donors had tampered with the vaccine to spread HIV and cause sterility in Muslim males)
- poor efficacy of vaccine (50% of reported cases were vaccinated)
 - per dose vaccine efficacy is about 12.5%
- lack of access
 - killing of polio vaccinators
 - tribal areas
 - natural disasters
- Operation Neptune Spear

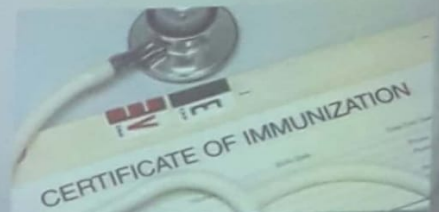
operation related
to osama bin ladin

RESTRICTIONS ON PAKISTANI TRAVELLERS



Pakistan jumps into action fearing 'polio' travel ban

- At last federal lawmakers have woken up to the global fallout from the domestic polio threat. Their reaction came a full week after the World Health Organisation (WHO) slapped Pakistan with an embarrassing penalty, forcing would-be travellers from the country to obtain proof of inoculation against the disease
- blamed the US unmanned war in Pakistan's tribal regions for polio prevalence in the country. "The government should investigate the link between polio and the American drone campaign,"



IPV & OPV

- Herd immunity
- Individual immunity
- Vaccine induced polio
- Single dose at 14 weeks
- Gradually replaced OPV by IPV
- Still 8 cases reported during current year.

OPV live
attenuated; more
effective
+ herd immunity
+ virus not
excreted in feces

IPV = stored at 2-3
degree; no live
virus

bahir se Pak = IPV
coz moving to
endemic area u
need

personal immunity