

## Intro:

Theoretical considerations - Global Program P15  
Indian Program - Gelfand.  
1st year - Roberto 1000

International ~~Group~~  
CDC - June.  
1966

>  
West Africa - Gelfand  
Introduced smallpox - Roberto

## Smallpox -

~~Unique disease, epidemic~~

Eradication - loosely used word - means reduction of cases to 0 and ~~the~~ <sup>the</sup> maintenance of this state. Enthusiasm of many re: disease diseases to launch programs of eradication. <sup>Polio</sup> While an excellent goal, must ask how feasible. (polio, the, v.d.)

Submit that of diseases today - we have the tools and resources for eradication of but one disease - smallpox.

1. Person-to-person transmission  
no insect or other vectors - malaria
2. Rarely occurs in subclinical form - if does, ? of individual  
to communicate this with facility. - malaria, tuberculosis
3. Readily detectable / diagnosable -  
modified case may sometimes cause trouble. - the malaria
4. Transmission of disease - 2 wks. malaria
5. Immunity - suppress epidemic in a village. malaria
6. 2 wk. incubation period - does not spread like a prairie fire  
containment possible

How to accomplish eradication - render immune sufficient %  
what % urban area

rural area

Indian program (ref. Gelfand) - Delhi 1 to 100 vae.

Know that a moderately large pop. necessary to permit disease  
to continue in endemic form - Iceland - pop. 100,000.  
similarly other island groups

Also - eradication achieved in no. of areas  $\bar{c}$  reasonably adequate  
programs. - Central America, North Africa.

## II Status today

Map areas.

Programs operative - where control vs. eradication.

## III Principle problems to date

1. Vaccine - virus replication principle.

Argentina story

India - not too different only 3 yrs. ago.

hyophilization has now overcome this - quality control needed

2. Personnel - limitations in Africa

Jet gun - will discuss later

3. Surveillance - No <sup>endemic</sup> country has adequate program and few either  
endemic or non-endemic is adequate.

What do we mean? Routine reporting; investigation; control.

Story of Peru and Colombia

#### 4. Assessment -

Dr. Celfand describe "ideal" system if it could function

#### 5. Adequate population coverage -

Discuss city problem - maintenance vaccination of newborn. ? Howitz comment re: Upper Amazon.

Few in population groups - isolated groups -  
rotary lancet

### III Global Eradication

1950 - PAHO - successful except Brazil - '0' concept

1959 - WHA promulgated resolution - scattered - no funds

1965 - WHA decreed smallpox a "major" WHO responsibility

D-G developed plan and budget for \$2.4 for 1<sup>st</sup> year.

1966 - WHA -

Story of debate.

Now - WHO Program -

West African Program - bilateral contribution. -

Dutch, Canadian, USSR contributions.

At last, we feel we are on the way.

largest program -

Rotary lamet - condensed -

1. Export Com. - 100% goal.
2. Defeatism vs. eradication.
3. ~~Methodology~~ <sup>Methodology</sup> → alternate
4. Surveillance - for
5. Assessment - prev.
6. ~~Virtual~~ Absence of cases - <sup>those</sup> vaccinated in 10 years. -

Emphasis on # vaccinated

Principles

1. ~~Management~~ Central coordination - WHO coordinator role -
2. Assignment of personnel
3. Surveillance
4. Assessment
5. Vaccination program - C.D. surveillance.

Mistaken dx - 1 case.  
Close contact