
English Summary

SEROLOGICAL EVALUATION OF POLIO VACCINATION IN JAMBI

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Study of evaluation of polio vaccination in the children has been carried out in Jambi, in 1982.

The objective of this study is to determine, (1) immune response to oral polio vaccine in the children immunized with a standard OPV I-II, (2) distribution of enteroviruses, (3) antibody status of the children before immunization, and (4) cold chain of polio vaccines used in the field.

Two hundred children of 2 to 36 months old were randomly sampled from the population in Kodya Jambi. One hundred children were immunized with OPV I-II, and 100 children were not immunized. Sera and rectal swabs were taken from the children, and examined by neutralisation test and isolation test respectively.

The result shows that, before the children were immunized, 55% of those children had no antibodies at all to polio viruses. After vaccination, seroconversion rates to polio virus vaccine type 1, type 2, and type 3 were 86.6%, 83.9%, and 92% respectively. Potency test shows no reduction of the vaccine potencies after it's stored and used in the field. Prevalence of enteroviruses

infections among the children, before vaccination, were 18.7% and decreased to 6% after vaccination.

It is concluded that, before vaccination, the immune status of the children under 3 years of age were very low. Their immune response to 2 doses of oral polio vaccine were very good. The distribution of enteroviruses in the study area were high before 'vaccination, and decreased sharply after vaccination. Cold chain of the vaccines, during the storage and after been used in the field, were good.

It is suggested that children under 3 years of age in the study area should be vaccinated. Two doses of oral polio vaccine is sufficient for their basic immune response.

Interference of Echo virus type 9 to the multiplication of polio virus vaccine in the intestinal tract and the development of antibodies in the children were discussed.

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CHLORINE CONTAMINATION IN KARET KUNINGAN - SOUTH JAKARTA

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Chlorine compounds are irritative and toxic through eye and skin contact and are absorbed by inhalation. The extensive use of chlorine compounds in many textile and batik-printing industries (as bleaching agent) makes these compounds present in industrial emission and may contaminate the air. The study in Karet Kuningan showed that at the study location chlorine was detectable (0,0293 ppm Cl₂) while it was undetectable at the control location. Compared with the standard in the United States and Soviet Union, the chlorine concentration at Karet Kuningan Jakarta Selatan was not exceeding the maximum allowable concentration.

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