# "Preliminary Report on the Epidemiology of Poliomyelitis in Thailand" 

by

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Poliomyelitis was known in Thailand for over 20 years when cases were diagnosed symptomatically. The number of cases in those days were few and the occurrence has no significant because the cases were always mild and the patient always recovered. Some cases had paralysis which was temporary and complete recovery attained after a few months. The picture of polionyelitis draw less attention from the medical practitioners as well as the few research workers. When the second world war was over, there were quite a large number of foreigners which include European, Americian as well as Asian, moving in and out of Thailand. The period of rehabilitation started in 1946, very slowly as regarded to public utilities. In 1950 and 1951, there were cases of poliomyelitis reported in Singapore which is one of the nearest port outside the country, connected to Bangkok by three routes; air, sea and rail. The foreign community specially European, and Americian who are "polio-wised" become worry of the situation. Mectings were called at the Royal Bangkok Sports Club amongst members of committee and medical officials both foreign and Thai to consider the best means and ways to prevent poliomyelitis. Attempts were made to stop new comers to use the facility of the club especially the swimming pool. It was pointed out by the Expert Committee on Poliomyelitis of the

World Health Organization that poliomyelitis can be acquired by association with infected person of such an intimate manner that direct transfer of virus to the alimentary tract of the susceptible is made possible. Under such circumstances, the important of virus in pharyngeal excretions is particularly evident. Similarly, contamination of hand and utensils by pharyngeal virus may be involved.

In September 1952, the first case of poliomyelitis in a European was reported and lost after four days of illness followed by another case of the European after a few days of interval. This case was rushed to Singapore for iron-lung and was saved. Many more cases occurred amongst Thai included all ages group, all classes with mortality rate of about $6 \%$. The epidemic involved 388 cases and lasted from September to December. It was a sad episode for medical practitioner in Bangkok because of the handicap of laboratory and equipment to help them in diagnosis and treatment. Funds were raised from charitable people to buy special equipments like iron-lung, electrical instruments for massage and a clinic for physicotherapy. It is worthy to note that there are not so many cases of spinal-column involvement. Yet no attempts were made to start a laboratory for the diagnosis of poliomyelitis.

The epidemic of poliomyelitis in L. 952 has drawn attention for a few epidemiologist

[^0]who wanted to find out the causes. Theories are discussed started with the improvement of the sanitary condition of the country, the introduction of a new strain as well as the transmission of the old strain into a fertile soil (uninfected European or Americian) resulting in the increase of virulence of the strain.

The improvement of the sanitary condition in Bangkok alter the war especially period between 1946-1952 was almost neglectible. The public utilities were not as good as the pre-war years and it cannot be compared with any European country or United States where poliomyelitis abound; therefore the Thai people still have a good chance of getting small repeated infection.

As for the second theory of strain being introduced, it is worth while doing a survey of the immunity in local inhabitant against the 3 types of polio-virus which was carried out as mention in this report. A group of Thai inhabitant of Cholburi, situated 100 kilometers east of Bangkok on the coast of the Gulf of Thailand, are selected included both sexes, age over 40 . Their blood were drawn and serum separated and tested by neutralization method against 3 types of polio-virus, the result is tabulated as follows:-

According to the above table a group of 42 adults of both sexes age varies from 48-82 residing in Cholburi and Sriraja were asked to have their blood sampled for a determination of antibodies against
the 3 types of polio-virus. The result is that 23 out of 42 give positive antibodies against the 3 types; 11 give positive reaction on type 2 and 3 doubtful on type 1 ; 3 cases give positive on type 1 and 3 and doubtful on type 2 ; two individual give positive on type 1 and 2 and negative on type 3 ; one case gives positive on type doubtful on type 1 and negative on type 3 one case gives positive on type 2 and 3 and negative on type 1; one case gives positive on type 3 and doubtful on type 1 and 2.

Jt is clear that the majority of inhabitants of this area possess the antibody against the 3 types of polio-virus in their blood which shows the existence of the 3 types of polio-virus in the country.

After the above result it can be concluded that the 3 types of polio-virus existed in Thailand all the time as report of such investigation in Cairo, by John R. Paul et al, but it cannot exclude the possibility of the new strain of the 3 types being introduced into the country, or the old strain of the types already existed in Thailand being introduced into new fertile soil. These lead to further experiments.

An investigation is carried out to give a certain information on the opidemic of poliomyelitis which occurred in Bangkok in 1952. The place has a history of mild cases of polionyelitis reported each year for the last 20 years. A survey of blood samples from old age group indicates existence of the 3 types of polio-virus thus
eliminates the idea that there was a mild type of polio-virus and new type or types are introduced into the country but this does not exclude the possibility that new strain were introduced or an old local strain is introduced into a fertile soil thus increases the virulent and can be more harmful to the Thai people. This encourages further
investigation.
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## References :

1. First report of Expert Committee on Poliomyelitis World Health Organization.
2. The report of the Department of Public Health, Ministry of Public Health, Bangkok, Thailand to the World Health Organization.
3. A survey of Neutralizing Antibody to Poliomyelitis-virus in Cairo-Egypt by John R. Paul, Joseph L. Melnick, Vo Hammie H. Barnett and Natan Goldblum.

## Cancer in Chronic colitis

When the cancer has developed in the face of chronic ulcerative colitis, no matter whether it was discovered accidentally or in routine search for it the prognosis had been bad.

Dr. Daniel S. Ellis.

## Incidence of Cancer in Chronic ulcerative colitis

Mayo Clinic - 5.4 percent (Bargen et al)
Cleveland Clinic - 3.8 percent (Brown et al)
Lahey Clinic - 2-44 percent (Johnson et al)
Massachusetts General Hospital 3 percent. (Dr. D. S. Ellis)

| No. | Name | age | Birth Place | No. ofyear | Present <br> Residence | No. of year | Antibodies Found Against -- |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Type 1 | Type 2 | Type 3 |
| 1. | Mr. Pechra, Suengchuie | 70 | Cholburi | - | Cholburi | - | $+$ | + | + |
| 2. | Mr Boon Markprathom | 82 | Cholburi | - | Cholburi | - | + | + | + |
| 3. | Mrs. Chang Koha | 62 | Cholburi | - | Cholburi | - | + | $+$ | + |
| 4. | Mrs. Thanorm Kaigear | 58 | Cholburi | - | Cholburi | - | + | + | + |
| 5. | Mrs. Boonmee Bunpote | 62 | Cholburi | - | Cholburi | - | + | $+$ | + |
| 6. | Mrs. Tiur Tun | 62 | Cholburi | - | Cholburi | - | + | + | + |
| 7. | Mr. Sri Kongpavedh | 64 | Cholburi | - | Cholburi | - | + | + | + |
| 8. | Mr. Prom Boonmec | 59 | Cholburi | - | Cholburi | - | $+$ | + | + |
| 9. | Mr. Eume Kongmeesook | 61 | Cholburi | - | Cholburi | - | + | + | + |
| 10. | Mr. Kloiy Kongkasilpa | 63 | Cholburi | - | Cholburi | - | + | $+$ | $\bigcirc$ |
| 11. | Mrs. Vieng Tieng | 53 | Cholburi | - | Cholburi | - | $+$ | + | + |
| 12. | Mrs. Yukhiea Pueng | 50 | Cholburi | - | Cholburi | - | + | $+$ | + |
| 13. | Mr. Ting Tung | 60 | Cholburi | - | Cholburi | - | $+$ | $+$ | $+$ |
| 14. | Mrs. Dang Sungclarern | 56 | Cholburi | - | Cholburi | - | $+$ | $+$ | $+$ |
| 15. | Mrs. Lek Puncharern | 54 | Cholburi | - | Cholburi | - | + | $+$ | + |
| 16. | Mr. Chong Meesai | 55 | Cholburi | - | Cholburi | - | + | $+$ | + |
| 17. | Mrs. Eng Lee | 63 | Cholburi | - | Cholburi | 22 | + | + | + |
| 18. | Mrs. Ngeg Meesai | 48 | Cholburi | 48 | Cholburi | 48 | $+$ | $+$ | + |
| 19. | Mrs. Ou Gumrat | 78 | Bangkok | 68 | Sriracha | 68 | + | + | $+$ |
| 20. | Nun. Cheu Palamoltut | 60 | Ayudhaya | 1.0 | Sriracha | 10 | $+$ | $\pm$ | $+$ |
| 21. | Nun. Tauggva Pravpraay | 66 | Bangkok | 10 | Sriracha | 10 | $+$ | $+$ | O |
| 22. | Nun Chery Knomratrie | 58 | Petchaburi | - | Sriracha | 58 | $+$ | + | $+$ |
| 23. | Mrs. Chunang Tung | 66 | China | 40 | Sriracha | 40 | $+$ | $+$ | $+$ |
| 24. | Mrs. Bouy Tunteam | 55 | Sriracha | 55 | Srimacha | 55 | + | $+$ | + |
| 25. | Mrs. Choy Muchakeur | 62 | Sriracha | 62 | Sriracha | 62 | $+$ | $+$ | + |
| 26. | Nun. Engchai Tunsiri | 64 | Sriracha | 64 | Sriracha | 64 | + | $+$ | + |
| 27. | Nun. Lek Teo | 72 | Sriracha | 72 | Srimacha | 72 | $+$ | + | + |
| 28. | Mrs. Pratum Wutiporn | 69 | Sriracha | 69 | Sriracha | 69 | + | + | + |
| 29. | Mrs. Kimtou Chaiyagal | 56 | Sriracha | 56 | Sriracha | ${ }^{6} 6$ | + | $+$ | + |
| 30. | Mrs. Paung Kumpipat | 59 | Sriracha | 59 | Sriracha | 59 | 0 | $+$ | $+$ |
| 31. | Nun. Hoi Sikow | 71 | Sriracha | 71 | Sriracha | 71 | + | + | + |
| 32. | Mrs. Oun Ratananon | 65 | Sriracha | 65 | Sriracha | 65 | $+$ | + | $\bigcirc$ |
| 33. | Mrs. Kimson Ruangararm | 55 | Sriracha | 55 | Sriracha | 55 | + | $+$ | + |
| 34. | Mrs. Sup Sangtong | 67 | Sriracha | 67 | Sriracha | 67 | $\div$ | $\pm$ | $+$ |
| 35. | Mrs. Supap Weralit | 59 | Sriracha | 59 | Sriracha | $\breve{59}$ | + | + | + |
| 36. | Mrs 'Tongkum Timkrachang | 59 | Sriracha | 59 | Sriracha | 59 | $+$ | + | + |
| 37. | Mrs. Chai Kimchai | 63 | Chantaburi | 29 | Sriracha | 34 | $+$ | $+$ | + |
| 38. | Mrs. Jui Poungsiri | 64 | Sriracha | 64 | Sriracha | 64 | $+$ | + | + |
| 39. | Mr. Nguan Timgrachang | 63 | Sriracha | 63 | Sriracha | 63 | $+$ | $\pm$ | + |
| 40. | Mr. Chum Intravong | 69 | Sriracha | - | Sriracha | - | $+$ | $+$ | + |
| 41. | Mrs. Yen Pimdee | 62 | Nakornnayok | 19 |  | 19 | $+$ | $\pm$ | $+$ |
| 42. | Mrs. Reed Gertglavgla | 73 | Chacherngsao | 10 |  | 10 | + | $+$ | + |


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