

EPIDEMIOLOGICAL EVALUATION OF TUBERCULOSIS IN PENANG, MALAYSIA: A RETROSPECTIVE ANALYSIS OF YEAR 2006

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Background

- Over the past two decades tuberculosis (TB) has re-emerged as an important public health concern worldwide especially in the developing countries.
- Instead of being eradicated, the prevalence of multidrug-resistant tuberculosis (MDR-TB) has made the treatment even more difficult.
- In Malaysia, among all the infectious diseases, tuberculosis is the single most common cause of death.

Objective

- The state of Penang is among the top three states with the highest burden of tuberculosis.
- The primary objective of this study was to evaluate the socio-demographic background of tuberculosis patients, incidence of co-morbidities, patterns of non compliance and relapse in Penang General Hospital, Malaysia.

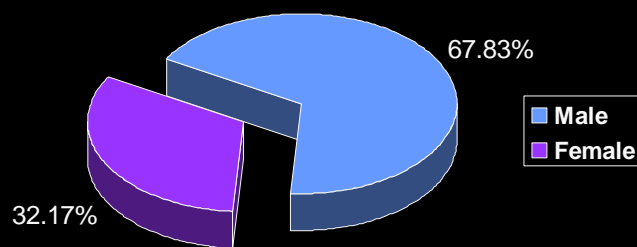
Materials and Methods

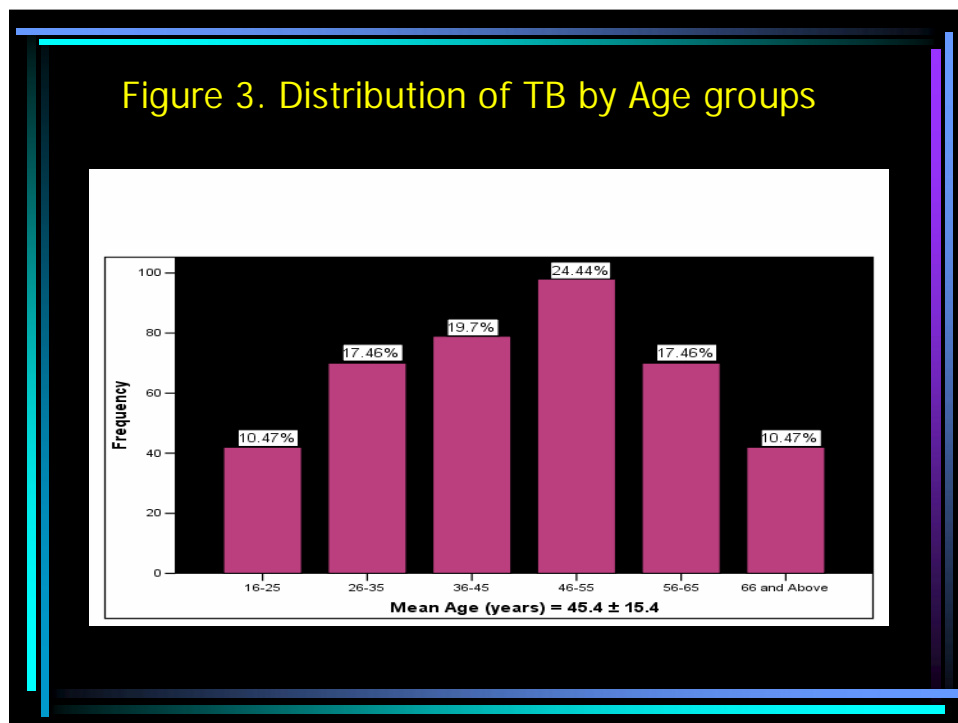
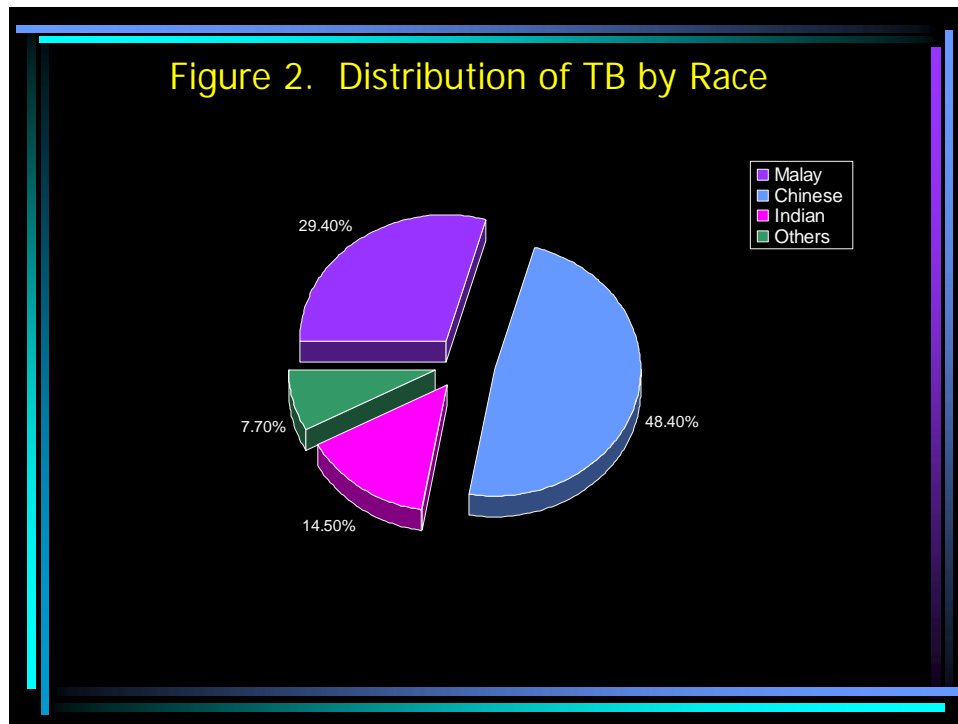
- Study Design
 - Descriptive, Cross- sectional, Retrospective
- Data Collection
 - Data were collected using a structured questionnaire which was pre-tested on a sample of 10 patients to ensure validity.
- Data Analysis
 - Data were analyzed using SPSS version 15.0 software package (SPSS Inc., Chicago, IL) and Microsoft Excel.

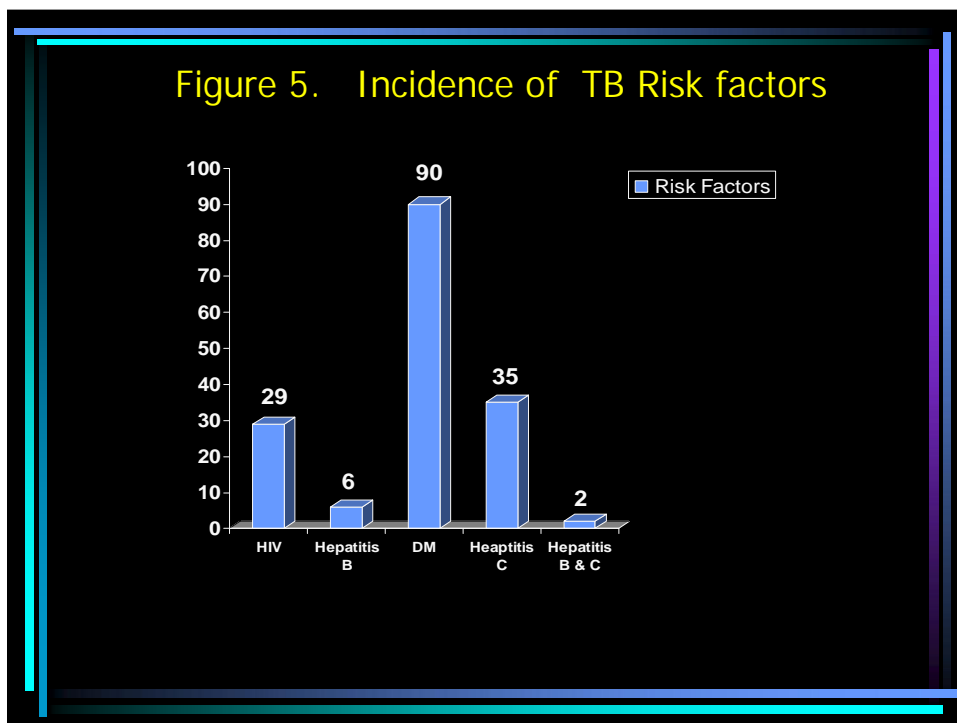
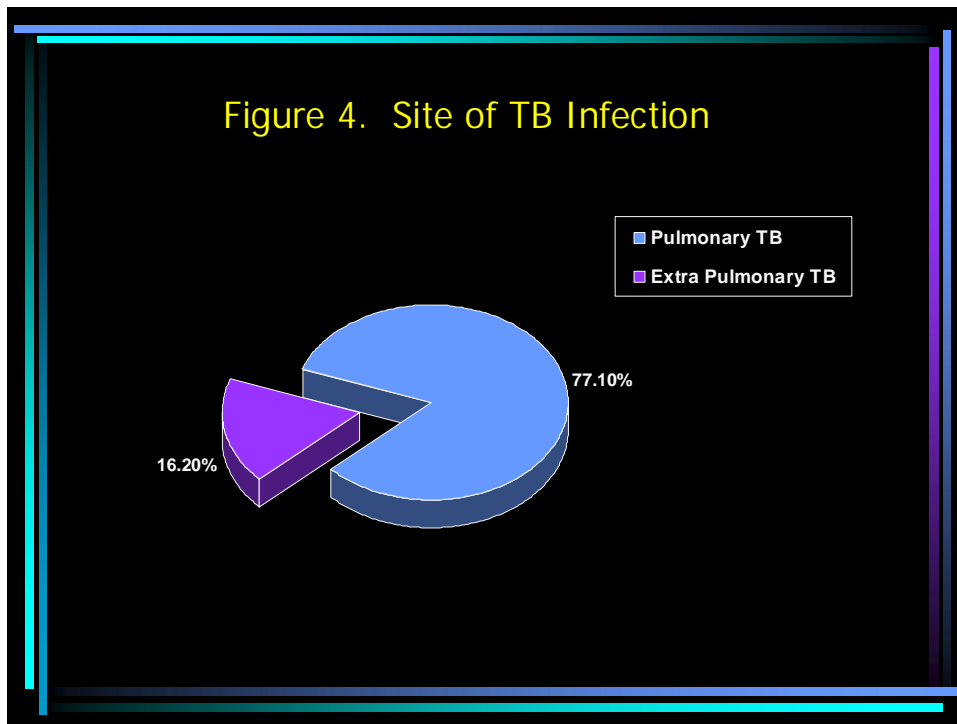
Ethical Approval

- The study protocol was approved by the Ministry of Health Malaysia and center for clinical research (CRC) Penang General Hospital, Penang.

Figure 1. Distribution of TB by Gender







Result	N (%)
Successful	266 (66.3)
Defaulted	42 (10.5)
Deaths	50 (12.5)
Transferred	25 (6.2)
Others	18 (4.5)

Table 1. Treatment Outcomes of TB

Conclusion

- Majority of the victims of TB in year 2006 were Males and ethnically Chinese.
- A high proportion (14%) of the relapse cases were recorded.
- Failure to complete drug treatment course remained a major problem to achieve desired therapeutic goals and a potential threat for the development of MDR-TB.
- Conditions impairing immunity such as HIV and Diabetes were the most frequently encountered risk factors of TB.

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