Task Force Recommendations

Part 1
Security

• The NTP should carefully assess the security situation before deciding on the implementation of a TB prevalence survey. Staff and participants' safety is a top priority.
Exclusion criteria

• Should be defined stage by stage
  – From sampling frame
  – During sampling (when you find infeasible area in selected district after starting sampling process)
  – In cluster (school, diplomatic compound …)
  – Individual sample:
  – Participant/Examination
Excluded areas

- Areas where survey operations are considered not to be feasible (insecurity, military zones, etc.) should be excluded from the sampling frame from the beginning.

Discussion if any country
- Need to exclude >15% (?) of population: reconsider the study population/area.
Individual in cluster

Mobile populations, Visitors

Discussion
Screening Strategy (1)

- The minimum screening strategy that should be used in surveys of the prevalence of TB disease is Strategy 3 in the WHO guidelines. In this strategy, the sampled population is screened using X-rays and a questionnaire about symptoms. All TB suspects are then asked to provide two sputum samples for smear microscopy and culture examination. While screening all of the sampled population with an X-ray considerably increases the cost of a survey, it reduces the workload of laboratories and is thought to provide the best possible estimates.
Screening strategy

• Sputum from all without screening
  – Many TFG members show their concern with this strategy if collection of quality sputum is assured
  – Sputum specimens were re-collected from culture positive cases in Zambia study
Age

- TB disease prevalence survey should exclude children aged under 15 years old, unless there is a certain evidence that children under 15 occupy a significant proportion of the bacteriological positive cases in a country and the survey is expected to detect those cases. Adding children aged between 10 and 15 to the samples may not increase a number of detected cases by the survey. Usually, most of these children will be smear negative. They will not have any benefit from the survey, on the contrary, they be exposed to unnecessary examinations and they will be absent from school.
Design

• The Task Force recommends that countries should design TB prevalence surveys and calculate the sample sizes based on the idea that only one survey with a good precision will be performed, and not based on the idea that two consecutive surveys will be performed.

  – This decision is based on the fact that in some of the previous surveys conducted in the Asian countries, the observed prevalence was often far from the initial estimated prevalence. In order to detect changes in TB prevalence in 10 years or less, the Task Force recommends that any subsequent survey should only be designed after the results of 1st survey become available.
Stratification

- Stratification is highly recommended for the purpose of improving sampling efficiency and the precision of the national point-estimate of TB prevalence. If there is variation in true TB prevalence among the strata, then stratification will improve precision.
Minimum expected participation rate

- It should be estimated taking into consideration only people to be examined (usually for those 15 years old or more), not the entire population of all ages.
  - Don't assume that children < 15 year old are participating in the study 100%.
Non-participation rates

assumption of 10-15% seems reasonable, and acceptable. **Important to make big effort to minimise this**, and to try to ensure does not go above 15%, as while can address this at the analysis stage (with multiple imputation of missing data) the internal and external validity of the survey can only be maintained if the percentage with missing data is quite low.
Precision

• Relative precision of 20% or 25% recommended.

Design Effect

• Design effects of 1.5 to 2 reasonable assumption, if cluster size is 500-1000.
• May find it is higher than 2, for cluster size >1000.
Cluster size

- Cluster size of 500-1000 recommended (design effect increases as increase the cluster size).
Sampling

- Age range is 15+ for inclusion in symptom screening and X-ray survey. Recommended that target a fixed sample size of 15+ year olds per cluster, rather than a fixed total population size (including children) – analysis will be more straightforward and intuitive if the number of 15+ year olds per cluster is similar among clusters.

- Enumeration of children <15 years old: It is also important to know how many children are there in the cluster. Will also enable estimation of TB prevalence in total population
Follow-up of absentees

• Plan to do follow-up/trace on absentees.
  – Who can not come survey site because of ill
  – Old people

• Record why they are absent
  – Not to provide consent
  – Physically absent: duty travel, school…
Household/block selection

• Should be defined clearly
KAP study/ participants, community

• It is not necessary to ask all study participants about KAP. Sample size of KAP study is much smaller than TB prevalence survey.
TB treatment history and current TB treatment

- All participants should be asked
- If yes: When, where (by whom) and "type and category" (if possible: often very difficult to get right answer from the participants)
- Those with recent and/or current treatment can be cross-checked with district registry by local TB staff
Health-seeking behavior: TB suspects

• Depending on
  – If you are interested in TB suspects or TB patients
  – If the post survey follow up interview to TB patients is not feasible, this interview will be more important
Post survey interviews/data collection in detected TB cases

• Questions about health-seeking behaviour and the extent to which identified cases had already had contact with health services are strongly recommended.

• In-depth interview may have different answers from survey screening interview

• Additional medical info on medical risk factors such as HIV status and Diabetics

• Interesting to Compare with detected cases by routine service
Socio-economic evaluation

• The collection of data on socio-economic status and risk factors for TB should be carefully considered. It is essential that the time and effort required to collect such data do not compromise the quality of the basic survey data. It is often not necessary to collect socio-economic data from all the survey subjects.

• National study result if exists v.s. TB patients
Ethical issues

• In most of the protocols reviewed by the Task Force there was no mention of ethical considerations, or the need to submit the protocol for approval by a national ethical review committee. Apart from, the protocols also should be reviewed and approved by international donors and technical assistance agencies that support the survey. Though WHO Global Task Force on impact measurement provides technical review, it is not an ethical review committee. Please consult WHO country office if country or regional ethical review mechanism is available when WHO NPO or MO is involved in the study.