

## **Two-week Course in Health Research Methodology**

This course was first conducted from 14th to 26th September, 2009. There were 30 participants (including 6 candidates in the two-year research mentorship program) representing 25 different institutions from 17 cities of India. The participants were trained in essentials of health research methods through lectures, group discussions, journal clubs and statistical modules.

In-house, we developed an Online Learning Management System (LMS called SUMMIT) using freely available software (Moodle). This enriched their learning with additional resources, online tests and assignments.

The topics for the course included research hypotheses, cross-sectional studies, case-control studies, cohort studies, randomized controlled trials, diagnostic research, evaluating treatments, systematic review, meta-analysis, health policy and advocacy, qualitative studies, research ethics, grants writing, scientific publications, data management, basics of Epi-Info/SPSS and biostatistics (types of variables, sampling methods, sample size calculation, descriptive statistics, inferential statistics – t tests, chi squared tests, ANOVA, ANCOVA, univariate and multi-variate regression and survival analysis).

There were 14 lectures, 7 journal clubs, 8 group discussions, 5 statistics lectures and 6 statistics practical classes (2 hours each). The six trainees in the two-year program presented their research proposal and received feedback from the participants as well as the faculty.

For the group discussions, a topic on a recent lecture/theme was given 24 - 48 hrs in advance. There was one scientific leader and one moderator appointed in each group.

An article on a recent lecture/theme was given 48 hrs in advance and a presenter from each group had to make a structured presentation for 30 mins that was followed up by discussion for 20 mins. A moderator ensured that time was adhered to.

The second course was held in September 2011. The topics were similar to the course in 2009 and 30 candidates from 19 institutions in 18 cities attended. At this course, the eight trainees in the second phase of the two-year mentorship program presented a progress update of their research projects.