



## **SUMMARY OF 3<sup>RD</sup> WORKSHOP ON BASIC EPIDEMIOLOGY & BIostatISTICS WITH EPI-INFO AT PGIMER, CHANDIGARH**

**Simmi Oberoi<sup>1</sup>, Vikram Kumar Gupta<sup>2</sup>**

Sir,

We had the opportunity to attend the '3<sup>rd</sup> Workshop on Basic Epidemiology & Biostatistics' organized by school of public health (including department of epidemiology), PGIMER, Chandigarh. The workshop was of 10 working days from 9-19<sup>th</sup> December, 2014.<sup>1</sup> A total of 30 participants attended it. Course fee was Rs 3000/- excluding the staying facility. Out of the 30 seats, seven were for local participants. Faculty members and residents of community medicine and other departments came to attend it from all over India.

The whole day activity was divided into three sessions including before tea, after tea and post lunch. The topics included are listed as follows:

1. Introduction to Epidemiology and Biostatistics
2. Type of Data and Data Presentation
3. Measuring Health and Disease
4. Summarizing Data and Distribution
5. Measure of Effect
6. Sample and Proportions
7. Use of Routine Sources of Data
8. Comparing Two Means
9. Case Control Study
10. Comparing Two Proportions
11. Cohort Study
12. Association Between Two Quantitative Variables
13. Survival Analysis
14. Sample Size Calculation
15. Intervention Study
16. Sampling Methods
17. Bias
18. Confounding
19. Causation
20. Screening
21. Epi-Info Practical Analysis (Exercise 1 to 6)

All the sessions were of average 1 hour duration followed by practical exercises of the same duration and with thorough discussions. Any queries from the participants were dealt with best efforts. In the first exercise, example of 'John Snow' was quoted.

The USP of the course was workshop on universally freely available software by CDC, USA i.e., Epi-Info. Presently software version 7.1.4 is available.<sup>2</sup> It works very comfortably on any microsoft windows version. Sometime few systems requires installation of microsoft NET framework version 4 and above, which is also available for download.<sup>3</sup> The graphical and drawing making part requires 'Microsoft Silverlight' extension which is again easily available.<sup>4</sup>

Epi-Info is a great software. Epi-Info 7 User Guide is available as pdf file.<sup>5</sup> The exercises related to it started on day 3 of workshop after initial introduction of the subject. Epi-Info has option to create forms with variety of entry options. After making the forms, one can save the format for future use also. The software gives a unique ID code to all the forms. Then data entry can be done easily, but for increasing the speed of entry, a person must do a couple of mini projects as exercises. In classic analysis stage, new variables can be created easily e.g., creating a BMI variable if there is entry of height and weight in the proforma. Impressive graphs can be made easily on giving the command e.g., Bar Diagram, Scatter Diagram. Linear regression can be applied without any difficulty. It can make a histogram easily and entry of ranges and class intervals is very easy. There is also, options of import and export files as microsoft access format (.mdb file) or excel format (.xls file).

If sample size is high, multiple persons can do data entry on separate computers and later can

arrange it as a single file with 'merge' command. If proforma is lengthy or time is short, again multiple persons can do data entry of separate pages of proforma on separate computers and later can arrange it as a single file with 'relate' command.

There are definitely certain advantages of Epi-Info over other softwares. But obviously, it needs frequent practice and concentration. It is highly recommended that such workshops must be organized in all the states/zones of India. Participants after attending such workshop must spread the knowledge wherever and whenever possible.

### Simmi Oberoi<sup>1</sup>, Vikram Kumar Gupta<sup>2</sup>

**Authors' Affiliation:** <sup>1</sup>Asst Prof of Community Medicine, Government Medical College & Rajindra Hospital, Patiala, Punjab; <sup>2</sup>Asst Prof of Community Medicine, Dayanand Medical College & Hospital, Ludhiana, Punjab

**Correspondence:** Dr. Simmi Oberoi (E-mail: dr.simmi@gmail.com)

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