Comprehensive perspective of residents and students of medical institution of North India on biostatistics discipline: A cross-sectional study

Pramod K Gupta
PGIMER, India

Background: Proper application/interpretation of Biostatistics in medical education and research, throughout the world, had been of great concern since the sixties. An attempt has been continuing since then to control it. Biostatistics curriculum in the syllabus of medical PG courses in India could be considered an attempt in this direction. This study is focused to assess whether such an initiative has any intervention effects.

Objective: Assessment of present conditions of Biostatistics education and quality of its application in research.

Methods: This study is based on a questionnaire, which is structured/designated/developed to evaluate application/interpretation/knowledge/need of Biostatistics by interviewing final year PG students of medical institutions of Punjab, Haryana and Chandigarh, who have admitted between 2009 and 2012. Stratified multistage sampling and simple random sampling were used to select the study unit from 13-medical institutions using probability proportionate to size from the study area.

Results: Intermediate results are based on 246 respondents (it may change during the presentation). 89.8% student mentioned the need of subject in medical education and research, however, only 58.5% said such teaching/training is being given at the institute. Self-efforts for learning Biostatistics is reported 64.6%. 54% scored less than 40% in basic Biostatistics test out of which 77.57% gets on average 14 hours of Biostatistics teaching (Mean= 14 hrs SD= 16 hrs). 96% students mentioned the need of Biostatistics for understanding and publishing papers out of which 51.4% disagreed to keep it as a compulsory discipline. 68.93% pay for their statistical works, amounting (Mean= Rs.1714, SD= Rs. 1452) however 27% don't understand it. 98.13% stated the need to learn statistical software.

Conclusion: It emerges from the result that Biostatistics discipline is required and its need primarily oriented to research but proportionate share is quite low for education and knowledge. However, the efforts on teaching and outcome of the application of statistical procedures are still of much concern even after many decades.

guptapk@gmail.com