Bridges and Barriers in Research

Research is critical for the advancement in medicine. As such, mandatory research projects have become one of the basic scholarly activities in the undergraduate and postgraduate medical education. However, conducting a research project can be a daunting task.

A survey among 130 Australian research supervisors observed that majority of students required the necessary generic skills and research-based skills to achieve completion of their research projects.[1] Generic skills refer to communication, time management, independence, and initiative. Among others, the more important research skills needed were literature search, scientific writing, statistical aptitude, and ability to navigate the ethics review process. Compulsory assessment of project milestones aided project completion, improved scientific writing skills and presentation. Moreover, supervisors recognized the need and requested for statistical support, funding for projects and scientific writing. There were also significant differences on matters of experience in research supervision. Experienced supervisors were more likely to require dedicated time for the project compared to novice supervisors, with higher access to expert assistance in scientific writing, ethics application, and research methodology. They also favored co-supervision which was disallowed by the neophytes. In contrast, novice supervisors reported significantly higher rates of unexpected project delays and data acquisition problems. This finding recommends research supervisor training for the research supervision role.

Several studies across different residency training institutions show consistency in major barriers to completion of research undertakings: (1) conflicts in schedule between learning clinical proficiencies and research, (2) lack of protected research time, (3) funding, (4) inadequate faculty support, and (5) mentorship.[2-4]

For as long as research projects are mandatory, educational/training institutions are duty-bound to identify the factors that will advance the research project program, and employ strategies that will break research barriers.

Ma. Bernadette Octavio-Cruz, MD, MSc
Department of Obstetrics and Gynecology
Philippine General Hospital
University of the Philippines Manila

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