



Editorial

Are we generous enough in defining acknowledgement?

Modern day researches involve a diversity of manpower and contribution from many personnel by various means. Much of medical researches now are multidisciplinary, and large studies typically involve multiple centers. The contributions of individual participants have become more diffuse and more difficult to quantify. A comprehensive research article by a single author without any acknowledgement is presumed as if the whole work, from inception to completion, is accomplished by a single author without any help from anybody else. Obviously the acknowledgement section imports the reliability and authenticity to a research paper. A glance into various Indian research publications reflects the perplexity of authors in acknowledging contributors. This probably could be due to unawareness or less understood importance of acknowledgement in research publication.

Acknowledgments in research publications indicate influential contributions to scientific work. It is different from citations; whereas citations are formal expressions of debt, acknowledgments are arguably more personal, singular, or private expressions of appreciation and contribution. Acknowledgments may be made for a number of reasons but often imply significant intellectual debt. In May 2000 the International Committee of Medical Journal Editors (ICMJE) revised its statement on authorship to read as follows: Authorship credit should be based only on 1) substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data; 2) drafting the article or revising it critically for important intellectual content; and 3) final approval of the version to be published. All the above conditions must be met. Acquisition of funding, the collection of data, or general supervision of the research group, by themselves, do not justify authorship. Authors should provide a description of what each contributed, and editors should publish that information. All others who contributed to the work, who are not authors, should be named in the acknowledgments, and what they did should be described.

Acknowledgments embody a wide range of relationships among people, agencies, institutions, and research. Researchers have classified six categories of acknowledgment viz., moral support; financial support; editorial support; presentational support; instrumental/technical support; and conceptual support, or peer interactive communication (PIC). Prevailing trend shows that the most acknowledged entities belong to four categories: funding agencies, corporations, universities, and individuals. It can be assumed that acknowledgments to funding agencies and companies represent acknowledgments of financial support and that acknowledgments to individuals represent PIC.

Of all of the categories, PIC has been considered the most important for identifying intellectual debt, and has remained a controversial concept since a long time. Some researchers have considered acknowledgments of PIC to be as valuable as authorship. The controversy started in 1922, when CMAJ published its most famous paper, of which the authors were Banting, Best, Collip, Campbell and Fletcher. Macleod and 3 others (Henderson, Fitzgerald and Graham) were thanked at the end of the paper for "their hearty co-operation and kindly assistance and advice." However, the 1923 Noble Prize committee chose a person from the acknowledgement list, Macleod along with the first author Banting ignoring the contribution of other authors. The reasons cited for such inclusion were that Macleod approved the plan of the young scientist Banting; provided him the laboratory along with some dogs for the experiments;

assigned Charles Best, to work as Banting's assistant; and afterwards assigned his entire laboratory to the insulin project. He also managed to get enough grant for the large scale commercial preparation of insulin. In spite of large hue and cry, the committee successfully justified Macleod's inclusion.

In the modern scientific era, an analysis of “financial support” and “instrumental/technical support” acknowledgments give insights into other trends in scientific communities. For example, acknowledgments of financial support may be used to measure the relative impact of funding agencies and corporate sponsors and universities on scientific research. Acknowledgments of instrumental/technical support are useful for analyzing indirect contributions of research laboratories to research activities. Similarly, acknowledgement of an individual scientist gives a fair idea about how he has involved himself in various scientific projects. In short, the above mentioned acknowledgments can help us to better understand the context of scientific research.

Scenario in the Indian context is not encouraging in this section of research publication as it is being observed that many research papers lack the section on acknowledgement; if present a biased one. The authors tend to acknowledgement their senior, particularly, their senior faculty members or the head of the department or institutions, although the original help may be obtained from junior faculties. The novice authors sometimes acknowledge some experienced researcher, who does not in any way related to the research, with a hope of their paper being accepted or published with ease. Conversely, even though a research is conceived, or even done and completed by a junior faculty in an institutional set up, the senior faculties do not bother to include their names even in the acknowledgement section, leave aside coauthors.

Similarly, there are frequent complaints by instrumental/technical support staffs pertaining to omission of their names in the acknowledgement list. While one can understand that acknowledging a laboratory for its technical findings may not be proper in a case report; the omission of technical support in a research project primarily based upon laboratory findings should never be overlooked.

It's time we must take care of this important aspect, else our integrity as a researcher and authenticity of research may be questioned. Let us be generous, scientifically practical and honest in acknowledging contributions.

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