Recent studies have shown that many scientists are unaware of what criteria constitutes authorship of articles submitted to peer reviewed biomedical journals. For instance, Dhaliwal et al found that, although 65% of academics were aware that authorship criteria existed, only 44% correctly identified a source (1). A previous editorial in this journal gave basic guidelines for authorship (2). The World Association of Medical Editors (WAME), of which the Editor is a Board Director, recently published its criteria for authorship and is, in main, reproduced below.

Basically, the three main criteria for authorship are:
- Substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data
- Drafting the article or revising it critically for important intellectual content
- Final approval of the version to be published

Authors must meet all three above criteria.

Non-authorship criteria are:
- Performing technical services
- Translating text
- Identifying patients for study
- Providing funding or administrative oversight over facilities

These contributions should be acknowledged in the manuscript with the contributors knowledge and permission.

Many journals nowadays require all authors of submitted articles to specifically state what contributions they have made. As from now, that also will be a requirement for submission to the Journal. This information will be published with the accepted paper. Additionally, one author must take responsibility for the integrity of the work as a whole. These criteria have now been added to the "Brief instructions to authors" published on the index page of each issue of the Journal.

Thus, in a covering letter when submitting articles to the Journal state:
- That the submitted work is original, has not previously been published nor is under consideration by another journal.
- That all authors justify authorship by supplying information on their contributions.
- That all authors approve submission of the final version.
- That all cited references have been checked against the original article.
- Provide details on contributions made by each author.
- Supply the name of the author who responsibility for the integrity of the work as a whole.

WAME criteria for authorship (as posted on www.wame.org)
Everyone who has made substantial intellectual contributions to the study on which the article is based (for example, to the research question, design, analysis, interpretation, and written description) should be an author. It is dishonest to omit mention of someone who has participated in writing the manuscript and unfair to omit investigators who have had important engagement with other aspects of the work.

Only an individual who has made substantial intellectual contributions should be an author. Performing technical services, translating text, identifying patients for study, supplying materials, and providing funding or administrative oversight over facilities where the work was done are not, in themselves, sufficient for authorship, although these contributions may be acknowledged in the manuscript, as described below. It is dishonest to include authors only because of their reputation, position of authority, or friendship ("guest authorship"). Many journals publish the names and contributions of everyone who has participated in the work ("contributors"). Not all contributors necessarily qualify for authorship. The nature of each contributors' participation can be made transparent by a statement, published with the article, of their names and contributions and WAME encourages this practice.

One author (a "guarantor") should take responsibility for the integrity of the work as a whole. Often this is the corresponding author, the one who sends in the manuscript and receives reviews, but other authors can have this role. All authors should approve the final version of the manuscript.

It is preferable that all authors be familiar with all aspects of the work. However, modern research is often done in teams with complementary expertise so that every author may not be equally familiar with all aspects of the work. For example, a biostatistician may have greater mastery of statistical aspects of the manuscript than other authors, but have somewhat less understanding of clinical variables or laboratory measurements. Therefore, some authors' contributions may be limited to specific aspects of the work as a whole.

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References