

Are Eponyms Your Achilles Heel?

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Scientific nomenclature abounds with terms that take their names from people or places, be they discoverers, regions, or individuals unfortunate enough to have a particular disease or condition. These terms are known as *eponyms*, from the Greek *epi* (upon) and *onoma* (name).

What's in a Name?

Individuals who work in the health care field and those of us who write and edit about medicine are thoroughly familiar with eponyms. Some are incredibly common, such as Alzheimer disease, non-Hodgkin lymphoma, Apgar score, and Parkinson disease. Others crop up in more specialized contexts, such as Kaposi sarcoma and Zollinger-Ellison syndrome. Sometimes they are technically *toponyms*, named for the presumptive origin of the condition or pathogen (e.g., Lyme disease, Ebola virus).¹

Eponyms are not limited to medicine, of course. They occur in many other scientific fields, such as chemistry (the Avogadro number), physics (dalton), geography (Richter magnitude scale), statistics (Bonferroni adjustment, Fisher exact test), and astronomy (the Fermi paradox), among many others. They are prevalent in history and sociology (the Victorian era), architecture (Georgian style), and even policy (Obamacare).

But just because a term has a catchy name or we are used to hearing it, does that mean it's the best label? As noted in the *AMA Manual of Style*, "Correct use of eponyms should be considered with a view toward clarity and consistency, the awareness that meanings can change over time and across cultures, and a desire to minimize misunderstanding."¹

Many years ago, I was in a meeting in which the editors of *JAMA* were discussing submitted papers, sorting them into piles of accept, revise, or "no thanks." In the middle of a presentation of a paper in which the eponymous term *Lou Gehrig's disease* was used repeatedly, a non-US editor interrupted with a curt demand for an explanation of who Lou Gehrig was. (Answer: New York Yankees slugger who



Lou Gehrig

retired early when his performance began to be affected by symptoms of amyotrophic lateral sclerosis [ALS].)

That anecdote illustrates why sometimes an eponym, especially one with a regional basis, may not be the best nomenclature to communicate to a global audience.

That's not to say eponyms are not useful terms for communication: No confusion results with the terms Alzheimer disease or Tourette syndrome. Placing a descriptive term, if one exists, in parentheses after first mention of the eponymous term (or vice versa) may be helpful, e.g., amyotrophic lateral sclerosis (Lou Gehrig disease) or Stevens-Johnson syndrome (bullous erythema multiforme).

Where Did the 's Go?

The possessive form for eponyms (Parkinson's disease, as opposed to Parkinson disease) is somewhat of a continuing debate. In the *AMA Manual of Style* there is no waffling—the

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possessive is dropped. This policy was primarily spurred by the National Down Syndrome Society advocating the use of *Down syndrome*, rather than *Down's syndrome*, explaining that the syndrome does not actually belong to anyone.² The Council of Science Editors' *Scientific Style and Format*³ also recommends the nonpossessive form for eponymous terms.

However, dictionaries are not of one mind on the matter: *Stedman's*⁴ endorses the nonpossessive form and *Dorland's*⁵ tends to as well, whereas *Webster's* dictionary⁶ still lists terms primarily with the possessive form, noting "less commonly" that the nonpossessive form is also used.

In addition to the reason given above, another argument for preferring the nonpossessive form is that although eponyms are possessive nouns using proper names, they are structurally adjectival. Even when eponyms are used in an attributive sense, they usually lose their possessive endings over time (eg, Nobel Prize, petri dish).

Consistently using the nonpossessive form can also promote uniformity in the literature. Some agencies endorse the nonpossessive approach (e.g., WHO), albeit inconsistently. Uniformity in terms (e.g., in PubMed or other databases) enables reliable search results and easier indexing. Consistency is also important in training new clinicians and scholars as well as writers and editors in scientific fields, not to mention readers and patients.

Yet another reason to embrace the nonpossessive form is based on how terms are spoken. For example, it's clumsy to say Down's syndrome due to the duplicated s sound. Terms that typically include a definite or indefinite article don't work well as possessive either: the Fisher's exact test?

There are important exceptions, however: It's one thing to say "the patient lived with Parkinson's" and another thing entirely to say "the patient lived with Parkinson." Then again, using the full term *Parkinson disease* would prevent such dilemmas.

Another exception is that the possessive form is usually retained for terms that describe disorders characteristic of certain occupations, such as woolsorter's disease or pitcher's elbow. In those cases, the conditions indeed belong (or once belonged) to the individuals who bear the name.

Eponyms are not a cut-and-dried topic; as in all communication, the audience and context are key. Sometimes eponyms provide the drama or flavor desired: Is it a "major weakness" or an "Achilles heel"? Other times precision is required: not Bright's disease but glomerulonephritis. As communicators, we have the power, and responsibility, to use terms best suited to the message and the recipient.

References and Links

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