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Editorial

IJE's Education Corner turns 10! Looking back and looking forward

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In 2012, the *IJE* launched[1] a new journal section called Education Corner, with a simple vision: to create accessible, concise and in-depth articles to support the core and continuing education of epidemiology students, teaching- and research-focused academics, and those in policy and practice (e.g. government, health systems, not-for-profit and for-profit organizations). Looking back, we believe this special section in *IJE* has been a grand success.

Containing some 70 articles at the time of writing, Education Corner has covered not only core epidemiological topics, such as study design, measurement error and various sources of bias, but also the best cross-cutting methods from statistics, economics, demography, formal logic and the medical and social sciences. The multidisciplinary scope and range of international contributors symbolize the dynamic and ever-evolving discipline of epidemiology and the ethos of the official journal of the International Epidemiological Association (IEA). Education Corner articles feature among

the journal's most cited and accessed (Table 1). Based on our observations and data from a recent survey of readers, several articles from Education Corner have become core readings used in curricula of master's and doctorate degrees in epidemiology globally.[2]

This success should not stop *IJE* from continuing to innovate and expand its impact and reach. The opportunity of a decennial assessment by a new Education Corner editorial team has presented itself. Over the past year, we have evaluated the section through several avenues, including but not limited to a survey of *IEA* members and *IJE* readers, an assessment of past publications and during several editorial board meetings. Informed by this process, we have developed an expanded vision for Education Corner that we will work towards over the next few years. Here we outline this vision.

First, we want to expand on our commitment to serving the membership of the IEA and sister epidemiological

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Table 1 *IJE* Education Corner articles with high levels of engagement as measured by downloads and Altmetric Attention Score

Article	Downloads between 2015 and 2019
Classification of epidemiological study designs[3]	127 304
Interrupted time series regression for the evaluation of public health interventions: a tutorial[4]	86 213
Case-control studies: basic concepts[5]	37 767
Modelling recurrent events: a tutorial for analysis in epidemiology[6]	34 806
Estimating predicted probabilities from logistic regression: different methods correspond to different target populations[7]	32 772
Mediation analysis in epidemiology: methods, interpretation and bias[8]	27 247
Good practices for quantitative bias analysis[9]	15 630
Fixed effects analysis of repeated measures data[10]	12 789
Time series regression studies in environmental epidemiology[11]	12 729
An Introduction to g Methods[12]	10 876
	Altmetric Attention Score
Reflection on modern methods: when worlds collide—prediction, machine learning and causal inference[13]	200
Reflection on modern methods: five myths about measurement error in epidemiological research[14]	136
Reflection on modern methods: revisiting the area under the ROC curve[15]	70
Educational Note: paradoxical collider effect in the analysis of non-communicable disease epidemiological data: a reproducible illustration and web application[16]	47
Reflection on modern methods: when is a stepped-wedge cluster randomized trial a good study design choice?[17]	46

societies, epidemiologists and like-minded health scientists internationally. Epidemiological societies' obligation to support improvements in the health of populations globally is increasingly recognized. Therefore, articles published in Education Corner will remain free to view online and download. Further, to help build capacity in epidemiological teaching, research, practice and policy, we will actively solicit contributions on educational issues pertinent to researchers in lower-resource environments and where epidemiology research and education are less firmly established. Below we also detail a re-emphasis on pedagogical content and dialogue with an epidemiological practice designed to help researchers stay abreast of, and master, methods regardless of their background. The Editors of Education Corner aspire to publish articles that serve as resources in teaching, research, practice and policy for epidemiologists around the world.

Second, the section will no longer require framing submissions as Educational Notes or Reflection on Modern Methods. We will ask authors to focus instead on the inclusion of manuscript elements that directly support the philosophical goals of the section (Box 1). In general, articles should be suitable for self-study or teaching courses in epidemiology, biostatistics and related fields and supporting continuing professional development. Therefore, editorial emphasis will be on readily understandable, user-friendly and educationally sound manuscripts that provide a clear explanation of—or step-by-step guidance for

applying—the covered topics. Recently the technical sophistication of submissions has increased, perhaps reducing the number of readers they could help. We believe few of us are ever too educated to review the basics. From now on, we will ask that submissions present and place newer or more advanced methods in the broader methodological or conceptual toolkit and not as panaceas. Thus, when discussing advanced or complex models, authors should begin by providing background and context rather than moving directly to their application and interpretation. For example, a submission on accelerated failure-time models might briefly review survival functions and standard survival methods and their shortcomings, to provide a basis for more advanced discussion. In doing so, the methods under discussion would be presented, compared with and contrasted with related methods and practical tools—enabling readers to assess alternative approaches and how they might be less or more optimal for their scientific questions and research context. A summary table might help with such contextualization or comparison.

Third, we strongly encourage authors to provide tools that bridge their text to readers' implementation (Box 1). Thus, manuscripts should include an illustration or motivating example, such as a recent analysis or setting which provides a real-world or practical introduction to and relevance of the topic(s). We are especially keen to support article proposals that include datasets with annotated code and results from popular statistical packages. Whereas

> **Box 1 Target attributes for a manuscript submission to *IJE*'s Education Corner**
>
> - Provides an easily accessible and concise update and/or review of essential epidemiological concepts and methods
> - Contains a succinct but in-depth introduction to an essential and/or emerging method being used in epidemiology and discusses important insights about the method, including clarifications and examples of misuse through actual or practical illustrations
> - Provides actual or simulated data and statistical code in a common statistical software language that readers can use
> - Strategically uses equations and derivations supplemented with intuitive and non-technical explanations

understanding the conceptual underpinnings of a topic is essential, we believe that technical literacy is also crucial. Therefore real or simulated data should be provided, along with the statistical code to support applications. Where applicable, manuscripts should include a practical, worked example of the appropriate application and an interpretation of the proposed concept or method described.

For some time, many of these editorial characteristics have been prioritized by the section's 'handling' editors, and thus many articles have followed this general structure and framework. Moving forward, we want to formalize this general presentation style with new submissions. To help ensure these editorial priorities are established at the outset, Education Corner is moving away from reviewing unsolicited full-length manuscripts and asking authors to submit a short one-page proposal instead, using a form that is available from the <u>Education Corner section of the *IJE*'s Author Guidelines</u>. Once completed, authors should submit this form to the <u>Editorial Office</u> for review.

Finally, Education Corner will also have a role in reflecting a refined philosophy and setting goals for the *IJE*. For example, we are interested in expanding the contributing author pool with a greater representation of authors who are early in their careers and those from low- and middle-income countries. Such scientists know best the practical challenges of adopting and adapting epidemiological methods within their research contexts. We envision experimenting with alternative presentation styles that are more inclusive of non-traditional learning styles, such as Q&As with senior scientists or case studies covering real-world applications of

epidemiological methods. We also wish to support scholarship and education related to diversity and inclusion in our field, the design and analysis of studies that promote knowledge creation in populations that have been poorly represented in research, and more equitable population health. This may include critically important translational methods, such as field experiments and population health trials, which are rapidly growing in their use globally. We are excited to embark on this editorial experiment and look forward to working with authors to identify and refine a collection of new contributions to *IJE*'s Education Corner.

Author contributions

All authors contributed to developing, editing and approving this manuscript's final version.

Conflict of interest

None declared.

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