

**NOTES FROM THE FIELD****References for scientific papers: why not standardise to one global style?**A. D. Harries,^{1,2} A. M. V. Kumar,^{1,3} S. Satyanarayana,^{1,3} K. Bissell,^{1,4} S. G. Hinderaker,^{1,5} M. Edginton,¹ A. J. Reid,⁶ R. Zachariah⁶<http://dx.doi.org/10.5588/pha.13.0066>

The different reference styles demanded by journals, both for in-text citations and manuscript bibliographies, require that significant time and attention be paid to minute detail that constitute a tedious obstacle on the road to publication for all authors, but especially for those from resource-limited countries and/or writing in a second language. To illustrate this, we highlight different reference styles requested by five popular journals to which operational research papers are often submitted. We call for a simpler, standardised format for in-text and bibliography reference citations, so that researchers can concentrate on the science and its interpretation rather than fonts and punctuation.

We have been engaged for several years in the exciting initiative of building operational research capacity in the public health sector and in non-governmental organisations in low- and middle-income countries, trying to ensure that these countries become not only recipients but also producers of knowledge through research.^{1,2} There are many barriers to overcome, some of which have been highlighted in previous publications.^{3,4} One barrier that requires time, effort and attention to minute, often trivial, detail is the citing of references in scientific manuscripts. To illustrate this point, we provide examples of reference styles demanded by five different journals to which we frequently submit research papers for publication, and we discuss a way forward.

ASPECT OF INTEREST

We write an operational research or viewpoint article for submission to the *Lancet*. If the paper is rejected, we will then select another journal that may include *Public Health Action*, *PLOS ONE*, *BMC Public Health* or *Tropical Medicine and International Health*. Broadly, there are two types of referencing styles: Vancouver and Harvard. The first four journals require Vancouver style, while the fifth demands Harvard. Each journal's guidelines specify one of these two systems, but they add minor variations of their own, making every journal style unique; in effect there may be as many reference styles as there are journals.

The Table illustrates these different styles. Let us start by writing a hypothetical statement using the generic Vancouver style of referencing. Then, we rewrite

the statement using the specific styles for the other journals that also claim to use the Vancouver style. Note the subtle differences to which we have to pay attention when compared with the generic style. In-text citations are numbered sequentially and vary from being in parentheses (1), square brackets [1], superscript ¹, or a combination ^[1]. In the bibliography, there are several possible combinations of styles based on the number of authors cited, font variations and punctuations. For example, in the *Lancet* bibliography, the journal title is in italics and volume number in bold, while in *Public Health Action* the journal title and volume number are in normal font. In the bibliographies there are numerous differences that include: if there are six or more authors, the names of the first five authors followed by et al., or the first three authors followed by et al.; and no full stop if five or fewer authors are named.

Another example is *BMC Public Health*, where the in-text citations are the same as for *PLOS ONE*, but there are differences in the bibliography that include the following: all authors must be named; the last name is followed by a colon; the title of the article is written in bold font; the journal title is in italics; the year is in ordinary script followed by a comma; the volume is in bold font; and page numbers are spelt out in full. Thus, although all four journals use Vancouver style, each varies enough to require paying significant attention to minute detail.

For *Tropical Medicine and International Health*, the references are in Harvard style, which is completely different from Vancouver (see Table). For in-text citations, numbers are not used to identify the references, which are instead identified by author names, with different formats depending on the number of authors. In the bibliography, references are ordered alphabetically rather than numerically; six or fewer authors are named in full, with the last author preceded by '&'; the journal year follows the authors, with a full stop after 'et al.' and no full stop after the names; the journal title is written in full in italics followed by a comma; the volume is in bold font; and page numbers are spelt out in full. Obviously, conversion from Vancouver to Harvard style is a challenge.

DISCUSSION

Careful attention must be paid to these styles while the manuscript is being written, as the journals are

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KEY WORDS

operational research capacity building; references; The Union; Médecins Sans Frontières

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TABLE Reference styles for five journals illustrating the differences with which researchers must comply

Vancouver style (generic)	
In-text citation	Tuberculosis is a major global health problem. ⁽¹⁾ However, good progress has been achieved with the Stop TB strategy with 7 million lives saved between 1995 and 2010 compared with if care standards had not changed. ⁽²⁾
Bibliography	(1) Lawn SD, Zumla AI. Tuberculosis. <i>Lancet</i> 2011; 378: 57–72. (2) Glaziou P, Floyd K, Korenromp EL, Sismanidis C, Bierrenbach AL, Williams BG, et al. Lives saved by tuberculosis control and prospects for achieving the 2015 global target for reducing tuberculosis mortality. <i>Bull World Health Organ</i> 2011; 89: 573–82.
<i>Lancet</i> (Vancouver style)	
In-text citation	Tuberculosis is a major global health problem. ¹ However, good progress has been achieved with the Stop TB strategy with 7 million lives saved between 1995 and 2010 compared with if care standards had not changed. ²
Bibliography	1 Lawn SD, Zumla AI. Tuberculosis. <i>Lancet</i> 2011; 378: 57–72. 2 Glaziou P, Floyd K, Korenromp EL, et al. Lives saved by tuberculosis control and prospects for achieving the 2015 global target for reducing tuberculosis mortality. <i>Bull World Health Organ</i> 2011; 89: 573–82.
<i>Public Health Action</i> (Vancouver style)	
In-text citation	Tuberculosis is a major global health problem. ¹ However, good progress has been achieved with the Stop TB strategy with 7 million lives saved between 1995 and 2010 compared with if care standards had not changed. ²
Bibliography	1 Lawn S D, Zumla A I. Tuberculosis. <i>Lancet</i> 2011; 378: 57–72. 2 Glaziou P, Floyd K, Korenromp E L, et al. Lives saved by tuberculosis control and prospects for achieving the 2015 global target for reducing tuberculosis mortality. <i>Bull World Health Organ</i> 2011; 89: 573–582.
PLOS ONE (Vancouver style)	
In-text citation	Tuberculosis is a major global health problem [1]. However, good progress has been achieved with the Stop TB strategy with 7 million lives saved between 1995 and 2010 compared with if care standards had not changed [2].
Bibliography	1. Lawn SD, Zumla AI (2011) Tuberculosis. <i>Lancet</i> 378: 57–72. 2. Glaziou P, Floyd K, Korenromp EL, Sismanidis C, Bierrenbach AL, et al. (2011) Lives saved by tuberculosis control and prospects for achieving the 2015 global target for reducing tuberculosis mortality. <i>Bull World Health Organ</i> 89: 573–82.
<i>BMC Public Health</i> (Vancouver style)	
In-text citation	Tuberculosis is a major global health problem [1]. However, good progress has been achieved with the Stop TB strategy with 7 million lives saved between 1995 and 2010 compared with if care standards had not changed [2].
Bibliography	1. Lawn SD, Zumla AI: Tuberculosis . <i>Lancet</i> 2011, 378: 57–72. 2. Glaziou P, Floyd K, Korenromp EL, Sismanidis C, Bierrenbach AL, Williams BG, Atun R, Raviglione M: Lives saved by tuberculosis control and prospects for achieving the 2015 global target for reducing tuberculosis mortality . <i>Bull World Health Organ</i> 2011, 89: 573–582.
<i>Tropical Medicine and International Health</i> (Harvard style)	
In-text citation	Tuberculosis is a major global health problem (Lawn & Zumla 2011). However, good progress has been achieved with the Stop TB strategy with 7 million lives saved between 1995 and 2010 compared with if care standards had not changed (Glaziou <i>et al.</i> 2011).
Bibliography	Glaziou P, Floyd K, Korenromp EL, <i>et al.</i> (2011) Lives saved by tuberculosis control and prospects for achieving the 2015 global target for reducing tuberculosis mortality. <i>Bulletin of the World Health Organization</i> 89, 573–82. Lawn SD & Zumla AI (2011) Tuberculosis. <i>Lancet</i> 378, 57–72.

strict about their style. If a manuscript is rejected by the first journal, the authors will have to make changes to the reference style when it is re-written for one of the alternative journals listed in the Table.

We run operational research courses during which participants from resource-limited countries are taken through a research project from design to paper writing.^{1,2} To date, over 200 papers have been written and submitted to peer-reviewed journals. Referencing is essential to scientific writing, but the effort and attention to detail that are required to ensure that the references conform to individual journal styles is substantial, especially when English is not the first language and/or the alphabet (Chinese, Russian, Arabic) is totally different.

While we ensure that our participants are aware of reference management software packages, there are several challenges with their use, including the need for additional training and funding. Often they are too costly for researchers in low- and middle-income countries. Free software packages are available, but these are not easy to customise for the different journals, and manual changes are still required to ensure conformity with journal guidelines. Thus, references are frequently written out manually, which is very tedious.

Surely, as a growing global research community, we can do better. We do not understand the need for each journal to use a more or less unique style. Perhaps the styles serve as a cachet or tradition for the journals, and they certainly benefit software companies,

but they also constitute a significant extra workload, especially for those doing operational research in resource-limited countries. The 2013 World Health Report calls for research capacity building not only in academic centres but also in public health programmes around the world.⁵ Reference style should not be an unnecessary barrier.

Consequently, we suggest that all in-text citations and bibliographies follow the generic Vancouver style without individual modifications. This style is clear and is already offered as a standardised approach to referencing. Building a culture of enquiry and research close to where health services are being implemented at national level in developing countries is a challenging and

vitaly important task. The unnecessary obstacle of attending to different journal reference styles must be removed.

References

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Les différents styles de référence sollicités par les revues, à la fois pour les citations dans le texte et pour les bibliographies du manuscrit, exigent un temps significatif et une attention à des détails minimes qui constituent un obstacle ennuyeux sur la voie de la publication pour tous les auteurs, mais particulièrement pour ceux provenant de pays à ressources limitées et/ou écrivant dans une deuxième langue. Pour illustrer ce fait, nous insistons sur les différents styles de référence

exigés par cinq revues populaires vers lesquelles les articles de recherche opérationnelle sont fréquemment envoyés. Nous demandons un format plus simple et plus standardisé pour les citations des références dans le texte et dans la bibliographie, afin que les chercheurs puissent se concentrer sur la science et son interprétation plutôt que sur les polices et la ponctuation.

Los estilos diferentes de presentación de las referencias que solicitan las publicaciones periódicas en materia de citas bibliográficas en el texto y en la bibliografía de los artículos exigen un tiempo considerable y una atención minuciosa, lo cual representa un tedioso obstáculo en el proceso de publicación para todos los autores y, en mayor medida, para los autores de los países con recursos limitados o que escriben en un segundo idioma. Con el propósito de ilustrar este

problema, se pusieron de manifiesto las diferencias de estilo exigidas por cinco periódicos a los cuales se presentan con mayor frecuencia los artículos de investigación operativa, con miras a su publicación. El artículo hace un llamado a la utilización de un formato más sencillo y normalizado, de manera que los investigadores se puedan concentrar en los aspectos científicos y la interpretación de los datos, en lugar de ocuparse de las fuentes tipográficas y los signos de puntuación.