

Context Is Everything: How to Decide if a Journal Article Is Useful

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Reviewers and editors use the generalizability of a study as a major factor in deciding on the proper fit between a submitted manuscript and their journal. The more narrow the scope of a journal, the easier it may be for editorial boards, since the field may be circumscribed or, in the case of surgical journals, a procedure is less connected to the specific population and more technique or technology driven. A general medical journal such as the *WMJ* draws a wider range of manuscripts. Also, as the *WMJ* has tried to connect with a broader regional readership in the upper Midwest over the past 2 years, a question for readers might be, “How is Wisconsin similar to or different from where I work?” So, reading an article raises questions for readers but also poses challenges for editors and editorial boards.

Usefulness has to be driven by context. One of my favorite research projects carried out by one of my fellows almost 30 years ago was on the incidence of postpartum “baby blues.” She had two problems carrying out her research – there was no universal agreement about the definition of “baby blues”¹ and, as she dug deeper and deeper to find the origin of the oft-quoted study that showed 50% of women experienced baby blues, she found textbooks repeatedly cited a study from the late 1970s which, when she looked at the original research, involved a population of Latina women at a Los Angeles County hospital – hardly a useful comparison to her practice population in North Carolina.

Context often dictates whether one decides to use a study for guidance or not. In primary care, in particular, we see studies on common problems carried out in subspecialty clinics and

have to extrapolate whether they apply to our practice or not. Context includes, among other things, culture, populations, the organization of care, clinical personnel, technology, and payment systems. Authors should strive to discuss and reflect on context as they write, and we should do the same as we read.

being in an academic health center affect the availability of consultants, the universe of patients, and the method of payment?

The article by Wichmann and colleagues⁴ uses data from the Beaver Dam study, a 25-year long model of community-based research in a stable population in a small town in South

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An example from this issue of an article where generalizability might not be as important would be the article by Kanth and colleagues² on surgical readiness. The growing literature on the value of checklists and rigorous routines in hospitals tries to “standardize” processes for maximal efficiency and quality. The important contextual issue for surgeons who read this article is whether their surgical team includes this checklist, as well as the authors’ recommendation to add preoperative assessment of cardiovascular fitness to the checklist. On the other hand, the report by Saha and colleagues³ describing a consult clinic for pregnant patients is very contextually dependent: how is the health system in which the clinic in the article operates similar to where others work; ie, does the clinic’s

Central Wisconsin,⁵ to look at changes in tobacco smoke exposure in older patients. Their finding that older members of the study population had significant decreases in environmental exposure bodes well for decreasing the risk of tobacco-related illness in that population. But of course, many communities do not have the population profile of participants in the Beaver Dam study, even in other smaller rural communities. Another contextual issue the authors raise is whether there would be differences in communities where state or local policies about public smoking are different from Wisconsin. So populations and policies affect results and perhaps generalizability.

Finally, the economic model developed by Chapple and colleagues⁶ on the potential economic effects of doula support in low risk preg-

nancies may be more generalizable to other states or regions. The authors use guidelines from the Cochrane database, which is one of the most scientifically rigorous international review systems, to frame their analyses and apply them to the statewide total statistics on birth outcomes with a series of inclusion and exclusion criteria in their formula. Wisconsin is not, for example, New Mexico, but the process and the analyses the authors use in this study are quite applicable to other populations. The absolute cost reduction would vary widely, but the study methods are easily replicable. However, to truly understand and generalize this model would require a level of granularity in the data that is not a part of their study. The readiness for a state or sub-population in a state to adopt universal or selected access to doula support in pregnancy, or a state or regional health system's ability to implement it on a wide scale, would require a more focused view of what cost savings and other outcomes might be expected.

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of their own populations and communities, the nature of the systems in which they work, and the financial and organizational incentives that support patient care. The best case for providing population and community health training in health sciences schools is that, without it, clinicians may change their behavior based solely on the results of a study rather than the appropriate application of those results to differing health systems and populations of patients.

Clinical research needs to increase the reliability of findings by repeating studies in larger and more representative populations that allow more generalizability.⁷ To not do so invites, at best, ineffectiveness, and at worst, clinical tragedy, by applying study results inappropriately. The context both of the study and the application of that study will often determine the likelihood of success. An example of how to understand generalizability is that, although horticultural research may demonstrate how to grow better bananas, we don't grow them in the Midwest. It would be a waste of time and money to try. So it also is for much medi-

cal research that fails to explain the context in which it takes place.

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