Editorial: How Does CORR® Evaluate Survey Studies?

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President Ronald Reagan once opined that “the nine most terrifying words in the English language are ‘I’m from the government and I’m here to help’” [7]. Of course, he said this more than 30 years ago, long before nightly dinnertime interruptions by telemarketers and email spam. If the Gipper were still around, his nine most-feared words today might be: “We are conducting a brief survey to better understand …”

You’ll find most of us hiding under our desks when these requests come our way, whether by phone or email.

But as editors at Clinical Orthopaedics and Related Research®, there is no hiding from the fact that we receive many research studies based on email surveys, postal surveys, surveys of large single- or multispecialty collaborative groups, and surveys of society members. While some of them may be interesting, only a much-smaller number are important and robust enough to justify the attention of CORR®’s readers.

We assess studies of this design with the needs of those readers in mind. The studies we publish will, in general, share three traits:

First, these studies should tell readers something important that they did not know before. Simply summarizing what some group of experts (or community practitioners) prefers is, generally speaking, not of sufficient interest to publish here. Most of the time, practitioners are aware of the available options, and they usually also know when multiple options are in common use. The goal of a high-quality general-interest journal like CORR® should be to determine which option the best evidence supports.

Practice-pattern surveys and reports of provider preferences are at best Level-V evidence, and as such, represent a poor basis for choosing a therapeutic approach. But we can imagine—and have published—exceptions to this. We recently published a practice-pattern survey demonstrating that an important element of fracture care in practice deviates from solid clinical evidence [5]; in the future, we might also consider practice-pattern surveys that present some unexpected or counterintuitive findings, but by definition such studies are likely to be rare.

By contrast, we especially enjoy survey studies that cause us to second guess what we thought we knew, and have published a number of these lately; a few recent examples are “Do Surgeons Treat Their Patients Like They Would Treat Themselves” [3], “High Rates of Interest in Sex in Patients with Hip Arthritis” [4], “New Total Knee Arthroplasty Designs: Do Young Patients Notice?” [6], and “Do Orthopaedic Surgeons Acknowledge Uncertainty?” [8].

Second, the group surveyed must represent some well-defined larger group of interest. While the availability of free online survey tools like SurveyMonkey (www.surveymonkey.com) has made it easier to conduct
anything from an intradepartmental questionnaire to an international
assessment of expert opinion, these
tools do not change the fact that high-
quality social-science research generally
gets conducted by qualified social
scientists. We would be surprised if a
sociologist could develop and evaluate
a surgical approach to the shoulder; it
is no more reasonable to assume that a
shoulder surgeon can conduct a valid
survey study without expert guidance.
A key element of survey-study design
is the definition of the group of inter-
est, and finding a representative cohort
within this group to query; to do this, it
often helps to have at least one mem-
ber on a research team who has
particular expertise in survey design.
CORR is an international journal, and
so we assess whether the surveys we
publish address a need of a large-
ough subset of our readers. This will
always be a judgment call, and so we
depend on the authors to make a strong
case for why the population of interest
and the population surveyed are large
or representative enough to matter to
our readership.
Finally, the proportion of those
surveyed that responded must be large
enough (and those who responded
should be similar enough to the
underlying group) to give the reader
confidence that the responses are rep-
resentative. We note that in the era of
Internet surveys, the concept
of “response rate” may mean different
things in different settings [2]; for
instance, the proportion of individu-
als viewing, starting, and completing a
survey all may differ. For web surveys,
it can be difficult or impossible to
know how many individuals may have
seen the invitation, and so it may be
impossible to calculate what propor-
tion of those exposed to the idea of that
survey actually completed it. Differ-
ential response by individuals with
greater interest in particular topics can
severely bias the conclusions a survey
draws. There is no “minimum”
response rate that ensures accuracy.
Higher is better; conversely, the lower the
proportion of those invited who
respond, the greater is the need for the
authors either to raise that proportion
(reminiders are one good way to do
this, though not the only way [1]), and/
or to convince the readers that those
who responded did not differ from
nonrespondents in important ways,
which usually is a tall order.
We note that orthopaedic survey
research is just a subcategory of
orthopaedic research. Survey studies
therefore are more similar than differ-
tent to all the other studies we publish
in CORR. That being so, many of the
same principles apply: We look for a
sound rationale (reason) for the study,
testable research questions, justifi-
cation for all major methodological
decisions, clear reporting of results
(including effect-size estimates and
confidence intervals, where appro-
piate), and thoughtful discussion of key
limitations, main findings, and take-
home messages. But because there are
important differences between survey
studies and other clinical-research
efforts, we recommend those who
design these surveys avail themselves
of any of a number of in-depth
checklists for this kind of research [1,
2]. We encourage, but do not require,
use of these checklists. We will,
though, consider the importance of the
question, the group of interest (and the
relationship of the group surveyed to
the group of interest), and the response
proportion as we assess survey
research submitted to CORR,
since these are the standards our
readers apply as they read this kind of
work.

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