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Saturation in Qualitative Nursing Studies

Untangling the Misleading Message Around Saturation in Qualitative Nursing Studies

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How often have you read a nursing qualitative study in which an author decides to recruit a specific number of study participants and then by some miracle, when that number has been reached, claims that “saturation has been achieved”? Puzzling claims about saturation have permeated our methodological literature for as long as our discipline has been using qualitative approaches and have become ubiquitous in published study reports. Have you ever wondered what authors really mean by this, on what basis they make such claims, and whether they are actually believable?

ORIGINS OF THE IDEA

When nursing first began experimenting with qualitative methods, they were a ‘hard sell’ in the otherwise quantitatively-oriented world of (biomedical) health science research. To justify their efforts as a legitimate form of science, albeit something different from measurement, they relied heavily on the social science tradition from which the techniques were borrowed. Classic social sciences exist for the purpose of social theorizing. The claim of saturation in the context of theory building research implies that one has gathered sufficient data to be able to confidently assure the reader that you have represented all possibilities within a complex theoretical construct. Another way of saying this is that the researcher is providing assurance that further data collection would be redundant in the sense that more cases (interviews, focus groups, documents etc.) will not change the theory that is being proposed as the study’s findings.

Saturation within the formal sense of social theorizing derives from grounded theory, in which it has a distinctive purpose as you approach the point of being able to claim a newly discovered basic social process. In this context, it implies that the researcher has obtained sufficient depth and richness of data in relation to all theoretical options and variances required to justify claims about the full range of configurations within the social process in question.¹¹ However, it has become—inappropriately—the unquestioned gold standard for all qualitative research⁹ and attained something of the status of orthodoxy.¹⁰ And since many qualitative scholars are engaged in research for reasons other than discovering fundamental processes of the human social organizational condition, the term is often attached to different “qualifiers”—such as *data saturation*, *thematic saturation*,⁴ *code saturation* or *meaning saturation*⁵—as an apparent justification for drawing on its presumptive credibility within a range of different approaches. While saturation has a formalized and accepted meaning in the theoretical development process, for the most part, in other forms of studies it is being claimed in a manner that makes it an article of faith,⁸ which raises numerous conceptual and methodological

concerns surrounding what scholars really mean. Fortunately, a debate is beginning to appear in the literature (including within the social science literature) to challenge these conventions.^{7,10}

THE NURSING CONTEXT

Since most qualitative nursing studies (not to mention studies in other applied health disciplines) are not actually designed for the purpose of robust theorizing, and instead represent important descriptions and interpretations of complex clinical phenomena, the idea of saturation is somewhat antithetical to how our discipline actually thinks.¹² A newer nurse might expect that, having seen a few patients with a particular condition, he or she understands it well; an expert nurse would never think that, and in fact a hallmark of expert thinking is to anticipate that each new patient you encounter might teach something you didn't know, even if you had encountered thousands of such cases.¹

So while nurses may well use social theorizing in their inquiries, they are not conducting research for the primary purpose of advancing the social sciences. They are deploying theory, much as they would in practice, under certain circumstances where it demonstrably enhances a practice lens. And no expert nurse comes into the encounter with a single social theoretical claim—rather expertise entails a wide range of possible options to bring to bear to maximize the likelihood of excellent care across a wide range of diverse possibilities and conditions. Similarly, it will be the common experience of seasoned applied researchers entering a clinical field of study to quickly discover that the phenomenon of interest is in fact far more interesting and complicated than they had initially anticipated. Human stories tend to provide you with tantalizing “distractors,” many of which could be clues to important new aspects, but you won't immediately know which would lead you into blind alleys and which might ultimately prove to be productive lines of inquiry.”¹¹ It would be naïve to think that

you will get to the end of any of these lines of discovery and insight in any one study, and what you are instead trying to accomplish is to gain sufficient of interest to have something relevant to report—to excite the clinical imagination of your informed audience so that they can begin to think about how to improve their practice.³

ALTERNATIVES TO SATURATION

Given the departure between what social theorists mean when they use the term, one might reasonably ask why nurses so often claim “saturation” in the context of their clinical studies. Nurses tend to be practical people, and the claim has become one of those “work-arounds” for which nursing is famous. Since many of our qualitative proposals are assessed by interdisciplinary colleagues, most of whom will have been trained in the same social science conventions, there is a fairly widespread expectation that the word “saturation” will turn up somewhere in the research proposal. To omit it invites unnecessary critique and may sabotage your ability to even begin your study in some contexts. It is also important to recognize how fundamental the idea of predicting sample size is within the process of proposing a qualitative study design. For example, you can’t build a budget without justifying the number of study participants you think you will need and the time involved in recruiting and interviewing them. In most of our institutions, obtaining both funding and ethical approval would be impossible without hard numbers. We have become so accustomed to the rule sets associated with parceling out our studies into fundable packages (or in the case of trainees, packages that can be done within constrained time and resources), that we accept the logic of a “partial” inquiry—and by partial, I mean that the dedicated nurse scholar would normally continue to inquire about and examine a complex clinical problem for the duration of a career, not the fixed funding timeline that our systems demand. So we require qualitative studies to name the sample size, and—as is the case in the quantitative tradition—we expect them to justify it. And as

the study progresses, we expect of them some justification for concluding data collection and moving on to interpretation and reporting.

Pushing back against the mandatory saturation claim convention, some nurse scholars are discouraging their colleagues from reverting to “the s word” in their justification of their sample size (both the one they proposed, and the one they eventually ended with).^{2,6} As Malterud (a family physician) and her colleagues⁷ have made clear, there is no logical justification for sample size in applied qualitative studies. Instead a thoughtful scholar can make a reasonable estimation that there will be something worth reporting once a certain number of instances of a phenomenon have been thoroughly investigated. Malterud’s team⁷ would call this estimating “information power”—or the power to create a convincing argument that one has a reasonable basis upon which to begin to draw tentative conclusions. And since qualitative studies in our discipline are not designed for the purpose of proving factual claims or absolute truths, but rather surfacing possibilities in new ways to think about complex issues, the idea of information power seems a more authentic option than the artificial claim that one has reached a point of saturation. Similarly, there is an authenticity in a claim that you have investigated sufficiently to have something of interest to report beyond what would have been evidence in the available literature, recognizing that the value of a study may lie more strongly in the interesting new questions it shines a light upon as much as the conclusions it is able to draw.

THE POWER OF QUALITATIVE INSIGHTS

Ultimately, the product of a nursing qualitative study should be to provide us with insights we could not have known, or known in the same way, from prior research or a superficial clinical understanding. If it has done its job, a good qualitative nursing study enlightens us about some aspect of the population or experience in a manner that is intriguing and offers possibilities for ongoing practice or study. If I

were king of the editorial world, I would remove “saturation” from our review rubrics, and instead ask reviewers to critically consider whether the study seemed robust, in-depth, coherent—there are quite a number of other legitimate ways to ask about credibility, integrity and relevance. I would invite their comment on whether the findings as reported seems a simple recitation or taxonomizing of self-evident themes that the researchers had noticed in the course of interviewing or observing people, or whether they have demonstrated that the researcher has thoughtfully engaged with the phenomenon, dug below the surface level of something, and reported it in a manner that opens up our thinking in some useful manner. Merely reporting what people talked about when prompted with specific questions is descriptive reporting—not what the inductive analytic enterprise is seeking to accomplish as a valid scientific form. A good qualitative researcher helps us gain a new or advanced understanding as to why they talked about what they did and what that means for those of us who seek to serve them better.

MOVING FORWARD

In their characteristic pragmatic manner, nurses will quite likely continue to reference the idea of saturation, even when they know they don't really mean it, as long as they understand the conditions of funding and publication success to require it. By bringing a nursing epistemological lens to our inquiries, and by drawing on the newer applied methodological traditions that invite an authentic representation of the basis on which you actually did make your sample size estimations and justify leaving “the field,” we open up the path for more logically credible study report in which a good argument wins the day, rather than a pro forma inclusion of a meaningless term.¹² When we open ourselves to integrity of argument in the qualitative research reporting world, we create the conditions under which excellent nursing reasoning about why you did what you did will be sufficient to convince reviewers that a thing is worth doing, and has been done with credibility.

I believe that evidence of saturation is all too often listed in our methods texts and review guidelines as a quality criterion for qualitative study reports. The gap between the original meaning of the term and its application within the clinical nursing research context is for the most part ignored. As journal editors we definitely complicate the problem when we ask reviewers to comment on whether there is evidence of saturation. What we likely ought to be asking is whether there is evidence of sufficient depth, richness, detail and coherence within the reported findings to make the interpretations and conclusions relevant and credible. Can we see a direct line of sight between what researchers have set out to do, how they set out to accomplish that, what they have claimed to have found as a result, and what intriguing and informative sense they make of that with respect to the practice of our discipline or the wider health care or societal health context? If so, then we can safely conclude that the integrity we require has been effectively demonstrated.

I sincerely hope that as the debate around saturation continues, we can start erasing the term from our reporting requirements and quality checklists, and instead build more informed and thoughtful ways to decide whether a study was well done and its products deserve publication.

REFERENCES

1. Benner, P. (2001). *From novice to expert: Excellence and power in clinical nursing practice*. Upper Saddle River, NJ: Prentice Hall.
2. Bradshaw, C., Atkinson, S., & Doody, O. (2017). Employing a qualitative description approach in health care research. *Global Qualitative Nursing Research, 4*, 1-8. doi: 10.1177/2333393617742282
3. Cutcliffe, J.R., & McKenna, H.P. (2002). When do we know that we know? Considering the truth of research findings and the craft of qualitative research. *International Journal of Nursing Studies, 39*, 611-618.

4. Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Method*, 18(1), 59–82.
5. Hennick, M.M., Kaiser, B.N., & Marconi, V.C. (2017). Code saturation versus meaning saturation: How many interviews are enough? *Qualitative Health Research*, 27(4), 591-608. doi: 10.1177/1049732316665344
6. LoBiondo-Wood, G., & Haber, J. (2014). *Nursing research, methods and critical appraisal for evidence-based practice* (8th ed). St. Louis, MO: Elsevier Mosby.
7. Malterud, K., Siersma, V.D., Guassora, A.D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research*, 26(13), 1753–1760. doi: 10.1177/1049732315617444
8. Morse, J. M. (2015). Data were saturated . . . [Editorial]. *Qualitative Health Research*, 25(5), 587–588. doi: 10.1177/1049732315576699
9. O'Reilly, M., & Parker, N. (2013). 'Unsatisfactory saturation': A critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research*, 13(2), 190–197. doi: 10.1177/1468794112446106
10. Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualization and operationalization. *Quality & Quantity*, 52 (4), 1893-1907. doi: 10.1007/s11135-017-0574-8
11. Thorne, S. (2016). *Interpretive description: Qualitative research for applied practice* (2nd ed)., New York & London: Routledge.
12. Thorne, S., Stephens, J., & Truant, T. (2016). Building qualitative design using nursing's disciplinary epistemology. *Journal of Advanced Nursing*, 72(2), 451-460. doi: 10.1111/jan.12822

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