drawn from anthropological field study, is especially attractive.<sup>2</sup> It deals with the premise that objectivity is difficult or not possible when the observer cannot be separated from the observed.

Some evidence in the SAGE-PAGE study implies that the research model used was not adequate to the task, i.e., the surprising (to the authors) disagreement on what happened during the encounter between physicians and patients and that patients were four times more likely than physicians to report that a treatment procedure had been performed during the encounter.

My own work doing genograms with medical students indicated the construction of their genogram, albeit in a less rigorous fashion than that described in the SAGE-PAGE trial, had a positive impact on their perception of the residency program to which they were applying.<sup>3</sup> My subjective experience was that I was able to make much more human contact with medical students than had been the case in more traditional interview styles. Additionally, I was surprised at the educational and even therapeutic impact of some of the encounters.

I trust the intuition of students of the genogram, e.g., Dr. Rogers and Dr. Rohrbaugh, for if we did not intuitively know it to be of value, it would have fallen by the wayside long ago.

John Blossom, M.D. University of California, San Francisco

## References

 Rogers JC, Rohrbaugh M. The SAGE-PAGE trial: do family genograms make a difference? J Am Board Fam Pract 1991; 4:319-25.

 Wilson HS, Hutchinson SA. Triangulation of qualitative methods: Heideggerian hermeneutics and grounded theory. Quant Health Res 1991; 1:263-76.

 Blossom HJ. The personal genogram: an interview technique for selecting family practice residents. Fam Syst Med 1991; 9:151-8.

To the Editor: We found the study by Rogers and Rohrbaugh on the impact of the family genogram to be a valuable contribution in the evaluation of a tool that has been assumed to be helpful to family physicians in the care of patients and the training of residents. Their effort has strengthened the scientific aspect of family medicine by submitting a commonly used practice to the rigors of the scientific method. There are a couple of points, however, that we believe are appropriate to consider in weighing whether their study represents an adequate test of the value of the genogram in family practice.

By the nature of their study design, they were only able to measure the impact of the genogram at a single visit. In clinical practice, however, genograms are more often used as a longitudinal tool, having value beyond the visit at which the information was collected. This ongoing use of the genogram reflects the continuous nature of the family physician's relationship with patient families. In addition, by exclud-

ing new patients in their study, they may have been omitting the situation in which the genogram might have shown some impact on a single visit. It would be interesting to know whether patients who give information for a family tree on the initial visit have a more favorable impression of their physician than those patients who do not. Similarly, it may be that the family physician would realize greater value from the instrument at the original visit rather than later. The physician-subjects in the Rogers and Rohrbaugh study, for example, were already perceived by 70 percent of their patients before the study began as having asked questions about their families, possibly in taking the family and social histories. The genogram would seem to hold little additional value for them at a later point in their relationship with their

Finally, we believe that one important finding reported by Rogers and Rohrbaugh deserves further consideration. They reported a significant inverse relation between completeness of the genogram and the physician's reporting of the prescribing drugs. This finding may demonstrate one positive impact of the genogram. It may have been that the physicians with more complete family information were less likely to prescribe needless or inappropriate drugs and satisfied patients in other ways, such as reassurance, education, understanding, or advice. Although alternative explanations can be offered for this significant inverse relation, it does seem to merit more attention, especially as it may relate to the value of the genogram.

Rogers and Rohrbaugh have reported on a carefully designed and executed study, which has provided a valuable service. Nonetheless we would conclude that it would be premature for the family physician to cease doing genograms.

Denis Lynch, Ph.D. Harry Mayhew, M.D. Toledo, OH

## References

 Rogers JC, Rohrbaugh M. The SAGE-PAGE trial: do family genograms make a difference? J Am Board Fam Pract 1991; 4:319-26.

The above letter was referred to the authors of the article in question, who offer the following reply:

To the Editor: We appreciate the comments by Drs. Blossom, Lynch, and Mayhew on the SAGE-PAGE trial. Both letters offer reasonable explanations for our negative findings. Indeed, the results might have been positive had we included relational data in the genograms (Blossom) or studied either initial visits or continuing doctor-patient relationships (Lynch and Mayhew). We hope these possibilities will be investigated.

It is also possible, as Lynch and Mayhew suggest, that the significant negative correlation between genogram completeness and drug prescribing might reflect a positive impact of the genogram. Yet type I error seems equally plausible given the number of correlations computed.

Finally, Blossom may be correct that the "newer qualitative research modes" will show how using genograms can improve clinical practice. Still, if genogram encounters have the educational and therapeutic "impact" he claims, we expect this will someday be demonstrated by traditional scientific means as well.

John Rogers, M.D., M.P.H. Michael Rohrbaugh, Ph.D. Houston, TX

## Treatment of Pharyngitis

To the Editor: In a letter recently published in 7ABFP, Dr. McIntyre criticizes the use of rapid streptococcal antigen tests and asks, "... why use a test that identifies less than one-half of the treatable organisms?" From his letter it appears that he assumes mycoplasma organisms and groups C and G streptococci to be antibiotic-responsive, in addition to group A streptococci. A review of his references provides little support for his implied view that antibiotic treatment is demonstrably beneficial to patients whose throats are infected with agents other than group A streptococci. Corson, et al.2 expressed the opinion that "treatment of non-group-A streptococcal pharyngitis may be warranted" but offered no supporting evidence. McCue<sup>3</sup> was unable to demonstrate clear benefit from treatment of group G streptococcal pharyngitis with penicillin V potassium or erythromycin in his relatively small series. The other papers cited by McIntyre were essentially silent on the subject of antibiotic treatment. Dr. McIntyre has called to my attention the paper by Gerber, et al.4 in which group G streptococci appeared to be responsive to penicillin, but this study is inadequately controlled.

There has been a long controversy in the medical literature whether antibiotics shorten the clinical course of even group A streptococcal pharyngitis. Randolph, et al.<sup>5</sup> are probably correct in asserting that antibiotics may shorten symptoms in group A infected children to whom they are given shortly after the onset of symptoms, but I have not seen convincing evidence for effectiveness in adults, especially those who have had symptoms for more than 3 days (the question of preventing rheumatic fever is a separate issue that will not be addressed here).

The physician's desire to help patients can understandably tempt us to prescribe antibiotics for all sore throats, but there are good medical and economic reasons to avoid their use without good evidence that they are effective. Pharyngitis is so common and the economic benefit to drug companies of wide antibiotic use so substantial that studies to demonstrate their effectiveness in this context must surely have been attempted in the half century since penicillin became available. The fact that pharmaceutical representatives are not inundating us with evidence that

antimicrobials benefit patients with non-group-A pharyngitis suggests that they have not been proved effective for that purpose.

Robert D. Gillette, M.D. Youngstown, OH

## References

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- McCue JD. Group G streptococcal pharyngitis. JAMA 1982; 248:1333-6.
- Gerber MA, Randolph MF, Martin NJ, Rizkallah MF, Cleary PP, Kaplan, EL, et al. Community-wide outbreak of group G streptococcal pharyngitis. Pediatrics 1991; 87:598-603.
- Randolph MF, Gerber MA, DeMeo KK, Wright L. Effect of antibiotic therapy on the clinical course of streptococcal pharyngitis. J Pediatr 1985; 106:870-5.

The above letter was referred to the author of the letter in question, who offers the following reply:

To the Editor: Dr. Gillette's comments are most appreciated to extend the discussion on the scientific approach to the patient with pharyngitis. My original letter clearly does not suggest physicians "prescribe antibiotics for all sore throats." The intent of the letter, however well articulated, was to point out that using the rapid strep tests encourages clinicians to evaluate pharyngitis as "strep or nothing," without considering the multiple causes of pharyngitis.

The large amount of human suffering and economic loss from pharyngitis should force us to seek out carefully with the history and physical any treatable cause of pharyngitis. Although thoughtless overtreatment exposes the patient unnecessarily to drug reactions, undertreatment has a cost also in human suffering, patient dissatisfaction, and lost time from work. In my practice, sinusitis is the most common final diagnosis in patients who present with "sore throat," and of course the standard therapy includes antibiotics. Whether due to Stoicism or parsimony in my private patients, I see very few viral-appearing upper respiratory tract infections.

Other treatable causes of pharyngitis include oral candidiasis, allergic rhinitis, pharyngeal gonorrhea, reflux esophagitis, Stevens-Johnson syndrome (if an offending agent can be withdrawn), Corynebacterium hemolyticum, <sup>1</sup> Corynebacterium diphtheriae (thankfully rarely), Yersinia enterocolitica, <sup>2</sup> Chlamydia psittaci (TWAR subspecies), <sup>3,4</sup> Lyme disease, <sup>5</sup> and probably a host of rarer diseases. Causes of pharyngitis that are recognizable (and thus reassuring to the patient) include Coxsackie virus, mononucleosis, and the primary attack of herpes simplex type I. It is not practical in moderately ill outpatients to try to elucidate the rare causes of pharyngitis, but group C streptococcal<sup>6</sup> and group G streptococcal<sup>7</sup> pharyngitis