We believe that the stroke was responsible for the pain relief, which brought improvement in his mood disorders. To the best of our knowledge, there is no reported similar case. The underlying mechanism whereby relief of pain occurs after a stroke is not clear; we suppose that the stroke was accompanied by damage to pain centers or pathways so that the input of the patient's pain signals could not be interpreted by the brain.

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OBSTETRICS IN FAMILY PRACTICE

To the Editor:

This letter is in response to the letter to the editor by Thomas J. Ruane in the July 1989 issue of the *Journal (Obstetrics in family practice, J Fam Pract 1989;29:16).* I was so glad to see his letter because I, also, have been a bit worried that the practices of academic family medicine are gradually falling into the trap that has occurred in many other specialties, in which a reality gap develops between community practice and academic practice.

I believe this is what Dr Ruane is suggesting in his letter. Like him, I believe that in most areas of the United States, family physicians will not be doing obstetrics and will not be doing much hospital practice. I know right now you can show me lots of figures proving me wrong, just as General Motors showed proof in the 1960s and 1970s that big automobiles would always be the most wanted car in America.

My hope is that our leaders in academic medicine can really look seriously at these issues while leaving our considerable egos aside. The other issue needing much more serious evaluation (besides obstetrics and hospital practice) is the possible merging of family practice and internal medicine. I feel very sad when one of our most respected founders and leaders, Dr Nicholas Pisacano, says in the *AAFP Reporter* (June 1989): "I'm telling you that we will not merge the two specialties as long as I can breathe." The world changes so rapidly that even if Dr Pisacano believes it is not a good idea for family practice and internal medicine to merge today, how can he be so sure about 1 year or 5 years from now? Open and continuing dialogue seems to be a much healthier and humane approach.

William D. Manahan, MD
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GATEKEEPER ISSUES

To the Editor:

I believe that neither of the authors in the gatekeeper controversy *(Can the family physician avoid conflict in the gatekeeper role? Ellsbury KE: An affirmative view. Stephens GG: An opposing view. J Fam Pract 1989; 28:698–704)* focuses clearly enough on the key issue in gatekeeping, namely, how to manage patients who demand unnecessary care. Anyone in active family practice can agree that many such patients exist, even in relatively unsophisticated rural areas. We have all seen people who "need" a dermatologist for mild acne, who "need" a plastic surgeon for wart removal, who "need" an MRI scan to investigate tension headaches.

In health insurance milieus, where premium costs are really shared across a wide network of players, such behavior is antisocial. It is also fraught with potential self-injury. Family physicians should no more assist patients in obtaining unnecessary care than they should assist drug addicts in obtaining drugs or assist healthy patients in obtaining disability benefits. Whether we like it or not, we have social obligations as physicians as well as duties to individual patients. Usually these responsibilities are comfortably mixed, and we are able to benefit our patient and our society simultaneously. But encounters certainly do occur that place us in an uncomfortable ethical dilemma.

The dominant insurance plans of the 1970s and early 1980s, indemnity plans, made it easy for us to ignore our social responsibility. Since no one else was trying to constrict unnecessary care, why should we? Unfortunately, our passive attitude did much to create our public image as triage officers rather than competent treating physicians. Furthermore, many of us engaged in antisocial behavior ourselves by milking the indemnity plans with unnecessary diagnostics from which we profited.

Dr Stephens suggests we develop a cadre of "technocrats" who would extricate the family physician from any difficulty in the physician-patient relationship. In this scheme, rather than confront a patient who demands unnecessary care, the physician would triage the patient to a third party who would make the real decision as to medical necessity. Besides being impractical, the suggestion further diminishes the family physician's stature. It suggests to patients that the family physician is not really capable of managing healthcare on his own, but needs consultation even in reaching management decisions, let alone in carrying out appropriate treatment.

Trust is fundamental to the physician-patient dyad. In most cases, it takes years to develop. Many physicians and patients struggle for the first few years of their relationship together, as they come to mutually understand one another. Many health maintenance organizations take patients who previously did not have a relationship with a primary physician, and arbitrarily create one. It is understandable that some of these relationships prove difficult for both parties for months or even several years. Our current popular style of group family practice makes the problem even worse, in that patients often rotate from physician to physician and never really develop much trust. Nonetheless, my belief—and my experience—is that patients do develop this trust over time and are well satisfied having their healthcare "managed." I also believe that they personally, and society

in general, benefit from management.

Daniel C. Lyons, MD
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The preceding letter was referred to Dr Stephens, who responds as follows:

Dr Lyons' main points are that family physicians have a social, ie, ethical, obligation to manage (control, reduce, eliminate) unnecessary medical care; that this can be achieved by means of a trusting physician-patient relationship; and that not doing it diminishes the family physician's stature. In making these assertions, he also acknowledges my position that "uncomfortable ethical dilemma(s)" characterize the exercise of such power.

What is not made clear by Dr Lyons is when or how society selected family physicians upon whom to impose special obligations to monitor and regenerate the health-seeking behavior of citizens with respect to its appropriateness and necessity. Surely such control, whether by persuasion, administrative power, or economic restraint, belongs, at a minimum, to the entire medical profession rather than a minority subset. Family physicians, by and large, did not create the conditions that seem to make such control desirable. Little is gained by family physicians wearing hair shirts to atone for the excesses, extravagances, and exploitations of medical care, past and present. There are plenty of guilt feelings to go around.

I argued that health maintenance organizations (HMOs), at their best, do not operate from a morally superior position, because they participate in structures of power and money that are narrowly self-interested, anonymous, secretive, and antidemocratic. A moral physician might work in them ethically, but not without conflict and risk of unknown dimensions. On the other hand, equally moral physicians might refuse to work in HMOs on ethical grounds, even as a protest against their ethical ambiguity.

All physicians have an obligation to work for equity, justice, fairness, and high levels of professional competence for all citizens. They do this mainly by participating in political processes that establish health policies having these characteristics more than by exercising any form of social control over their patients.

I am not so optimistic as Dr Lyons that family physicians always (or usually) know what is medically necessary or that they are fully capable of managing the entire medical care of patients on a contractual basis. Medical necessity is a moving front that depends, in large part, on state-of-the-art developments in subspecialties in medical schools and large hospitals.

I am quite willing to exercise my best judgment about what patients need, even to try to persuade them to accept my judgment, but I am not willing to deny them access to other physicians' judgment when they think they need it or just want it.

Enough "technocrats" to ration medical service are already in place. Medical administrators are the fastest growing group in the healthcare industry. Let them come out of hiding and go public with their policies and decisions about what patients need and what services their contracts provide. I prefer the role of patient advocate to HMO watchdog.

A. Gayle Stephens, MD
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FAMILY FUNCTION, STRESS, AND INFLUENZA

To the Editor:

I found the recent report of family functioning and stress as predictors of influenza B infection[1] well designed and intriguing but also deserving comment. Although I believe that family functioning and stress are biologically plausible predisposing factors for viral illnesses, I am not sure that the conclusions of the study are warranted for two reasons.

First is the matter of confounding. The authors state: "Several potential confounders were anticipated such as socioeconomic status, family size, and initial serology levels. . . . " They presumably performed a stratified or multivariate analysis to show that in fact none were confounding variables. However, not mentioned were factors such as day care (well known to be a strong risk for infectious diseases), school, crowding, and age. Because some of the individual crude associations reported are modest (eg, from Table 4 the odds ratio for dysfunctional compared with balanced families is 1.82, approximate 95% confidence interval 1.02–3.02) control of all possible confounders is essential to the conclusions.

The second point is a more fundamental problem with the analysis. The use of the chi-squared statistic for association is incorrect because observations are not independent—an assumption underlying the statistic.[2] In his text Mattson states that "violation of the requirement of independence of data in a chi-squared analysis is one of the most frequent errors in statistical analysis." Family members are clearly dependent, which is easily seen from the fact that younger children were assigned the mother's FACES score. Therefore, the occurrence of disease in one family member cannot be treated as independent of the others. Family membership must be taken into account so as to have a measure of its effect as well as family functioning on the risk of disease. Only then can the conclusion be drawn that it is the effect of family functioning and not family membership (which are very different) that is responsible for the increased susceptibility to influenza B.

I would conclude that the results are only suggestive based on the fact that potential confounders were not considered and the analysis failed to take into account the effect of family membership.

Mark Grant, MD, MPH
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2. Mattson DE: Statistics. Oak Park, Ill, Bolchazy-Carducci, 1986, pp 169–170

The preceding letter was referred to Drs Clover and Abell, who respond as follows:

Dr Grant raises several questions pertinent to our study.[1] Dr Grant's first concern regards confounding. Obviously, it is very difficult to control for all potential confounders. However, the variables he raised were addressed in our study. First, all the children were either in day care or school programs, as mentioned in our methods section. This inclusion criteria not only made our study groups "equal" but allowed for a high rate of exposure to influenza. Age and pre-season serology were controlled for in our analysis. Finally, crowding is difficult to address, but family size, socioeconomic status, and occupation were addressed in our analysis.

Dr Grant's observation concerning the lack of independence is well placed. By assigning the young children the FACES score of their mother, we clearly made the family functioning for the children *dependent* upon the mother. Our outcome variable—the occurrence of influenza—is in our opinion an independent measure.

One way to look at the data in light of the lack of independence of the family functioning variable is to analyze each family as a unit, reducing our sample size to 58 families. When we did this analysis, the trends were still evident, with the incidence of influenza increasing respectively from disengaged to moderately cohesive to enmeshed families; given this reduced sample size, the *P* value resulting from the chi-square statistic was greater than our alpha of .05. Thus, we cannot rule out random fluctuation as the cause of the manifested incidences, although the actual estimates are as hypothesized.

Second, we looked at secondary attack rates (defined as a second family member acquiring influenza disease within 7 days after onset of symptoms in the index case) within the household, since it could be argued that once influenza was introduced into the household, other family members would be at increased risk of developing influenza as compared with the families to whom influenza had not been introduced. By comparing the secondary attack rates with the rates of new index cases in the family, we found the risk was higher for someone developing influenza from the outside than from within the family. Having reviewed the secondary attack rates in our data, we feel that it is appropriate to treat the occurrence of disease in each individual as independent of other family members. Longini et al[2] have recently suggested a technique that precisely adjusts for potential differences in the incidence of influenza between the community and the family. We plan to analyze our future data using this approach.

Scientific inference includes ruling out systematic and random threats to both internal and external validity. We believe our analysis provided a sound basis for ruling out potential confounding. If we use the family as the unit of analysis, we have less confidence in ruling out random variation as the source of the reported relative risks; yet, we infer that randomness is not responsible for these results. Thus, we propose that our estimates for the absolute and relative incidence of influenza stand as published.

We appreciate Dr Grant's critique of our work. We believe that there is much yet to learn about the incidence of influenza in the community and the family. We believe that the technique proposed by Longini et al[2] may well provide physicians a needed tool to more adequately evaluate the factors determinant of the spread of influenza.

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FAMILY PRACTICE OBSTETRICS IN CONNECTICUT

To the Editor:

Numerous authors have commented over the past several years on the experience in individual states with declining participation in obstetrics by family physicians.[1,2] This has prompted descriptions of the family physician delivering babies as an "endangered species."[3]

Traditionally, the Northeast has been a region with the lowest participation in obstetrics. A 1977 national survey showed enormous regional variation in the proportion of family physicians practicing obstetrics, ranging from a high of 61% in the North Central region of the country to a low of 6% in the Northeast.[4]

How ironic, then, that one can now look to the state of Connecticut and find reason for optimism. Over the past 5 years the number of Connecticut family physicians practicing obstetrics has increased 350%! The majority are in private practice; the rest are on the faculty of two of the three family practice residency programs in the state. While the absolute numbers remain relatively small (a total of 28 practitioners at present), the trend is undeniable and runs directly counter to that seen in other states.

What factors underlie this increase? Malpractice insurance costs have stabilized. Total malpractice premiums per year declined when all the major carriers switched from occurrence coverage to claims-made coverage in 1986. Family physician representation on a recent ad hoc committee looking at obstetric malpractice premiums helped secure a lower risk category for family physicians when compared with their obstetrical colleagues. Annual premiums for a family physician choosing to include obstetrics remain within reach, generally on the order of $3000 to $4000 in excess of premiums for those excluding obstetrics. In addition, there has recently been a remarkable turn downward in the number of medical malpractice cases in the state of Connecticut. The *Connecticut Law Tribune* recently reported a 30% de-

crease in the number of lawsuits filed from 540 in 1985–1986 to 377 in 1987–1988.

The second factor, which may explain the trend toward an increase in family practice obstetrics, is the outpouring of graduates from the state's family practice residency programs. Previous authors have reported that obstetrics is typically practiced by younger family physicians.

Whatever the explanation for the above, the numbers look encouraging and suggest that reports of the virtual extinction of family practice obstetrics are premature. Increased faculty involvement in several of the state's residency programs should provide appropriate role models to encourage additional graduating family physicians to consider obstetrics as they enter practice.

The fact that patients in the state of Connecticut will continue to have a choice in prenatal care among midwives, family physicians, and obstetricians is good news for them, their families, and for the discipline of family medicine as well.

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