Recruiting Physicians for Rural Practice

DONALD L. MADISON, MD

A NUMBER of excellent studies have correlated the choice of a rural location for medical practice with certain characteristics of physicians (1-4). Researchers have shown that smalltown physicians are more likely to be the sons of farmers and to have grown up in a rural environment. But they are known also to be a group of older physicians, most of whom made their decision to locate some years ago. Therefore, the findings of Bible, Champion, Hassinger, and others on the reasons why physicians decide on a rural practice have to be considered as descriptions of the situation at a point in the recent past and not necessarily as the definitive answers to the question of what physicians might be looking for in a rural practice today.

If ideas regarding recruitment of more physicians to rural areas are limited to what is suggested by the findings of this body of research, the prospects are anything but bright. For example,

Dr. Madison is associate professor of medical care organization, department of family medicine, School of Medicine; and director, rural services research unit, Health Services Research Center, University of North Carolina. The paper is based on his presentation to a symposium, "What Health Professionals Look For in a Rural Practice—A Researcher's Point of View," at the 26th National Conference on Rural Health of the American Medical Association, held in Dallas, Tex., March 29, 1973. Tearsheet requests to Donald L. Madison, MD, University of North Carolina School of Medicine, Chapel Hill, N.C. 27514.

Parker and Tuxill in their study of metropolitan and smalltown physicians in an area of upstate New York found that the most important factors influencing those physicians who had gone into practice in a small community were the idea of living in a small community, the likelihood of developing a busy practice earlier, and their perception of the need of a small community for another physician (5). These researchers concluded that "the pool of new physicians then possibly interested in small-community practice seems largely restricted to physicians coming from small communities who like small-community living, feel the need for physicians in those communities, and wish to establish a busy practice early. With our present educational and population trends, this will be a small pool" (6).

The question of what physicians may be looking for in a rural practice is interesting, but it is an important question only if the answers can be related in some way to an effective intervention strategy. If it were found that most health professionals (or their families) are looking for opera, professional football, or a local branch of Neiman Marcus, that would be interesting (and discouraging for rural areas) but not terribly important. It is not possible to change the geography of the country, nor can we influence the marriages of physicians whose spouses may disagree with them over the importance of some of these factors.

There are, however, some actions that may be taken in order to capitalize on the findings of research and maximize the pool of potential health professional recruits for rural areas. I shall

review briefly a few strategies that have been tried in the past. Most of them assume an answer to some variation on the question of what physicians look for in a rural practice.

The Rural Background Factor

The first such variations on this question are, Why aren't more physicians looking for anything in the way of a rural practice? How can the pool of potential recruits be made larger than it is? Certainly the evidence is strong that a rural background will correspond to the selection of a rural location for practice, and there is a way to intervene based on this evidence. Medical schools could preferentially select a larger proportion of students whose backgrounds would appear to maximize the likelihood of their returning to rural areas. However, the prospect of this happening soon is not good. Few medical schools and postgraduate training programs have, as yet, begun to look beyond their traditional single goal of assuring the technical competence of the students they produce toward the equally important question of whether their products—technically competent or not-will occupy professional roles that will have maximum social value to society. Of course, the prospect of funds specifically earmarked for the support of students selected by these nonacademic criteria might quickly change this outlook.

The Exposure Factor

Another possible way of enlarging the pool of potential rural practitioners is by scheduled exposure to rural practice and lifestyles during the medical education continuum. Students have received this exposure in two ways: (a) through preceptorships under rural practitioners, sometimes as a part of the formal curriculum, particularly in State-supported medical schools, and (b) in "community medicine" projects, in which a large group of medical and other health science students spend their summers in rural communities under the auspices of a regional project sponsored either by a medical school or a student organization.

Considerable anecdotal evidence is beginning to accumulate which suggests that both tactics yield some return in physicians who decide to locate in rural areas because of this exposure while they were medical students. However, the best evidence that the rural preceptorship and student health project are an effective intervention strategy will

probably always remain anecdotal, because these projects do not lend themselves to an experimental evaluation design, and most of the students that participate tend to be self-selected.

Financial Aid During Medical School

Another type of attempt to increase the number of rural practitioners is by tempting students when they are most vulnerable. Medical education is expensive to society and to the students. Many of them need financial help during medical school, and the offer of a loan, to be forgiven upon fulfillment of a service commitment in a rural area, can be tempting and a possible inducement. Such loan programs tied to a service commitment have been operated by several States, particularly in the South, since the end of World War II. In a recent study of these programs, Mason reported that nearly half of the students receiving loans chose to repay the loan in cash rather than through service, although the success varied greatly from State to State (7).

In a study of the total experience of the second oldest of these programs, it was found that 74 percent did some service as payback, although some physicians paid partly by cash to reduce their obligated time. The study group included only physicians who were beyond residency training and military service and therefore were in a position to have begun fulfilling their service commitment. Forty-one percent of those doing service stayed in the community for some period beyond the terms of their service commitment, but less than 18 percent are in the same communities at present (unpublished data from a study of the North Carolina Medical Care Commission's student loan program by the Rural Services Research Unit, Health Services Research Center, University of North Carolina, 1972).

Again, there is anecdotal evidence that this strategy is partially effective, but whether it is sufficiently so to justify the cost of such incentives can be questioned. The issue of self-selection applies in these programs too. It is impossible to know how many physicians who receive loans would have gone to rural locations anyway compared with how many were induced to locate in a rural area, at least temporarily, because of this assistance. In at least one State, North Carolina, this program may also have contributed rather heavily to high physician turnover in small communities.

Other Material Incentives

A tactic frequently used by small towns to recruit physicians suggests a further variation on the question of what the physicians want—can they be recruited to a rural practice with a material incentive? Under the assumption that a significant number can be, many communities have offered some form of guarantee or financial bonus to physicians who will set up practice. The Province of Ontario recently instituted a program of this type to recruit physicians to its isolated regions (8). In earlier times, as recorded by Roemer, communities sometimes offered free housing or an automobile as inducements (9). More recently, the initial gift or subsidy has been a building or equipment.

Perhaps the best known example of this recruitment tactic is the now defunct program carried on for many years by the Sears Roebuck Foundation and the American Medical Association. Undoubtedly some physicians are looking to be recruited and can be recruited with these sorts of incentives. Each tactic has its individual success stories. But the Sears-AMA program, the Vermont Regional Medical Care Project, and other similar programs based on a building and a subsidy are usually considered now as having been failures (10,11).

Methods of Coercion

Another possible answer to the question of what might attract some physicians to a rural practice is that they look for the best among a set of sharply limited alternatives. With few exceptions, coercion has not been attempted in the United States as a tactic to improve medical manpower distribution, but at least three partly coercive methods have been successful in other countries as well as in the United States. All of them require Government authority.

First, is the negative incentive of designating closed areas. The experience in the United Kingdom is the best known example of this tactic, which is only possible within the framework of a national health service. The Government closes geographic areas having favorable physician-population ratios to new practitioners under the British National Health Service, and this ban then has the effect of increasing the competitive recruiting advantage for the remaining areas with fewer physicians.

The second method is conscription. In the United States only the armed services have used this method of recruiting physicians. However, several less economically developed countries conscript young physicians for limited terms of service in communities of need, usually rural ones, as a method of obtaining a better geographic distribution of medical manpower.

Finally, there is indirect conscription; that is, offering the physician the opportunity to enter one form of Government service as an alternative to another, possibly less desirable, service to which he might otherwise be conscripted. The Public Health Service—particularly the Indian Health Service—has relied on this method successfully for many years. This indirect conscription for service in a Government-operated system contrasts with another more recent example, the National Health Service Corps. The Corps' physicians are in the service of Government but are assigned to practice in a locally administered system in a community having an acute need for primary medical manpower. With the end of the draft, both direct and indirect conscription in this country will, of course, no longer be possible.

The Incentive of An Organized System

Finally, I suggest still another possible strategy to promote redistribution of medical manpower to rural areas; this strategy implies several answers to the question of what physicians might be looking for in a rural practice. It requires a somewhat different look at the problem. If one considers physician manpower as but one necessary element of the primary health care system—the element that contains professional medical knowledge and skills, and one does not insist that the physician also possess the material means to practice—then recruitment of physicians by organized health care systems is a valid strategy for redistributing medical manpower to rural areas.

The underlying assumption is that where an organized medical care system which requires medical manpower to function already exists, recruitment will occur much more readily. The physician selling only knowledge and skills is easier to find than one who must come ready and willing to market a building, equipment, and employees in addition to professional skills and knowledge. Evidence of the correctness of this assumption is the relative ease with which physicians are recruited to small communities which are the homes of established group practice organizations, or, for that matter, of the much smaller physician staffs of rural neighborhood health centers. It is not an accident that the towns of Elkins, W. Va., Madi-

sonville, Ky., Gallipolis, Ohio, and Marshfield, Wis., have far more favorable physician-population ratios than do the vast majority of communities of similar size and location.

This redistribution strategy must start with the establishment of newly organized medical care systems. For a community, this would obviously be a much larger and more difficult initial task than is the recruitment of a physician entrepreneur, but its accomplishment could have much greater and more lasting payoff in the overall objective of redistributing physicians to areas where they are most needed.

But is the organized system based on group pratice a means of increasing the pool of potential recruits to rural practice, or would it merely further concentrate those who would likely be in rural practice in any event? I think its impact would probably be mostly on those physicians who otherwise would probably not be in rural practice, at least not for long.

Data from recent research support this view. Parker and Tuxill's study of upstate New York physicians showed that those physicians already in rural areas, who tend to be older, came because they wanted to develop a busy practice quickly in a community without sufficient numbers of physicians (5). Yet a 1971 study by Crawford and McCormack of physicians in Virginia who recently left primary practice (men and women mostly in their thirties) revealed that the apparent uncontrollability of the "busy practice" was the most important reason for leaving it, and 96 percent of those who left mentioned "group practice" as a likely benefit in enhancing the viability and attractiveness of primary practice (12).

Also pertinent are some preliminary findings from a current nationwide study of group practice organizations and physician staff stability (13). Questionnaire responses were examined from 74 primary physicians (generalists, internists, and pediatricians) who practice in six multispecialty groups. All six groups are located in towns of 12,000 or less population and distant from a metropolitan area. Most of the physicians had rural or smalltown origins. If circumstances were to force them to leave their present organizations, the great majority would favor another smalltown location and disfavor a metropolitan environment. In these two respects they are not unlike all rural physicians, regardless of form of practice.

However, the reasons why they decided to work

in their present organizations are of interest. The majority held the community and the general geographic location of the group as unimportant to their decision. The most important factors were (a) freedom from the business aspects of medical practice—91 percent considered this an important factor, (b) predictable working hours, and (c) immediate access to other physicians for consultation and referrals. These conditions of work are particularly associated with organized multiplephysician practice. Finally, in answer to the question of which form of practice they might consider if circumstances were such that they had to leave their present organization, they strongly favored multispecialty group practice and strongly disfavored solo or two-physician practice. This finding suggests that, by and large, these physicians practicing in rural areas tended to be from rural areas, and apparently liked rural areas, but they were attracted not so much because of any particular characteristics of the community but because of how the practice they entered was organized.

In Parker and Tuxill's study (5), urban physicians were asked to rate various factors which deterred them personally from locating in a small community. Heading the list was favoritism toward large-community living, unrelated to practice considerations. Nearly 70 percent mentioned this factor as important. But, of the next five factors in order of frequency of mention, none was derogatory of small-community living. Items such as lack of cultural and entertainment facilities, influence of spouse, and scarcity of nonmedical intellectual companionship appeared further down the list. The next most frequently mentioned deterring factors were all professional considerations of practice thought by urban physicians to be associated with rural practice, but factors that need not necessarily be true of small-community locations, depending on the way practice is organized.

The principal findings suggested by all of the research I have cited can be summarized as follows: (a) the number of physicians not adverse to rural areas as practice locations is limited; but (b) the number who can be attracted to both small-community living and to the solo or two-man entrepreneural practice style, which has been customary in small communities, is substantially smaller.

The most effective redistribution strategy would seem to be one directed toward maximizing the return on the numbers of physicians who might be willing to locate in small communities, given certain conditions. I suggest that most of these conditions can be summarized as those professional benefits coming from association with an organized system of medical care. If this assumption is true, then what is needed is development of more organized systems in rural areas.

Most medical doctors are not trained nor particularly well suited for this difficult task. Developing organized systems can be made even more difficult by the opposition of physicians already practicing in the area. Rural physicians, in particular, have not been reluctant to oppose new programs that appear to be unconventional in their sponsorship or financing. Yet consumer sponsorship and adoption of the prepayment principle have been associated for many years with the successful provision of medical care to geographically dispersed populations throughout the world. Unconventional administrative models for the delivery of medical care to rural areas have been developed and operated in this country under a variety of auspices including companies, unions, government, consumer cooperatives, medical care funds, hospitals, and, of course, private physicians.

In a study of a sample of rural group practice organizations in which administrative control is shared to some degree with a consumer group, five out of six experienced during their development open hostility from the local medical community (unpublished data from a comparative study of medical practice organizations and stability of physician staff, Health Services Research Center, University of North Carolina, March 1973). This was true even though the establishment of these new groups had the effect, on the average, of at least doubling the numbers of physicians serving the medical care needs of these underserved rural areas. My point is that many health professionals may be far more willing to work in rural areas under unconventional practice conditions, and that the medical community can be an important force against bettering the situation, as well as for improving it.

Conclusions

Research has made a modest contribution to the question of how more physicians might be recruited to rural practice. This contribution consists mostly of pointing out that there may be certain predispositions on the part of physicians toward certain lifestyles, locales, and practice patterns. They have these predispositions for a variety of reasons, many of them closely related to the experience of the individual person.

The major contributions toward answering the question will not be made by researchers. The recruitment of more physicians to rural practice is a means toward a broader social goal. The answers will come from the work of those who can apply the findings of research, together with the lessons of the past, to promoting the most equitable distribution of health services among all of the people.

REFERENCES

- Bible, B. L.: Physicians' views of medical practice in nonmetropolitan communities. Professional and social aspects. Public Health Rep 85: 11-17, January 1970.
- (2) Champion, D. J., and Olsen, D.B.: Physician behavior in southern Appalachia; some recruitment factors. J Health Soc Behav 12: 245-252, September 1971.
- (3) Hassinger, E. W.: Background and community orientation of rural physicians compared with metropolitan physicians in Missouri. University of Missouri Research Bull 822, Columbia, Mo., 1963.
- (4) Peterson, G.: A comparison of selected professional and social characteristics of urban and rural physicians in Iowa. Health Care Research Series No. 8, Graduate Program in Hospital and Health Administration, University of Iowa, Iowa City, 1968.
- (5) Parker, R. C., Jr., and Tuxill, T. G.: The attitudes of physicians toward small-community practice. J Med Educ 42: 327-344, April 1967.
- (6) Parker, R. C., Jr., Rix, R. A., and Tuxill, T. G.: Social, economic, and demographic factors affecting physician population in upstate New York. NY State J Med 59: 706-712, Mar. 1, 1969.
- (7) Mason, H. R.: Effectiveness of student aid programs tied to a service commitment. J Med Educ 46: 575– 583, July 1971.
- (8) Guaranteed annual net professional income and establishment of practice grants for physicians in private practice. Public Health Division, Ontario Department of Health, Toronto, August 1970.
- (9) Roemer, M. I.: Approaches to the rural doctorshortage (with special reference to the South). Rural Sociol 16: 137-147, June 1951.
- (10) Can doctors be kept down on the farm? Med World News 12: 15, 16, Dec. 24, 1971.
- (11) Phillips, M. L., Mabry, J. H., and Houston, C. S.: Eager communities and reluctant doctors, N Engl J Med 278: 1263-1268, June 6, 1968.
- (12) Crawford, R. L., and McCormack, R. C.: Reasons physicians leave primary practice. J Med Educ 46: 263-268, April 1971.
- (13) Madison, D. L.: Recruitment of physicians into large practice organizations. Paper presented at the Invitational Conference of Health Services Research Centers, Bethesda, Md., Oct. 12, 1971.