# The Relation Between Physician and Patient Age in Family Practice

Sigurd E. Sivertson, MD, Harry J. Knopke, PhD, Elaine McDonald, BA, and Jane Harberg, BS Madison, Wisconsin

A study of 100 selected Wisconsin family physicians demonstrated that younger physicians generally had more contact with younger patients, middle-aged physicians had an even distribution of patient age contacts, and older physicians had more contact with older patients. The increase in older patients became pronounced for 56 to 60-year-old physicians. Generally a ten-year increase in physician age was accompanied by a five-year increase in patient age. The rising average age of the American population, combined with the direct physician-patient age relationship demonstrated here suggest that geriatrics will become increasingly relevant not only in the continuum of medical education but also for the individual practicing physician.

During the consultation phase of a program that assists family physicians in the study of their practices (Individual Physician Profile<sup>1</sup>), two comments were often made by participating physicians: "My patients are growing older with me." "I am fast becoming a geriatrician."

These and similar remarks aroused our curiosity and brought to mind the fact that the relationship between physician and patient age has long been a subject of speculation. Data obtained through the Individual Physician Profile program provided us with an opportunity to determine whether or not a direct relationship did, in fact, exist between physician and patient age.

## Method

The 100 physicians studied were enrolled in Individual Physician Profile during the years 1970 to 1973. This self-selected sample represented about eight percent of Wisconsin family practitioners. The data on which this study was based included physician age, patient age, and number of patient contacts.

The physicians were divided into six age groups and their patients into five. Two way analysis of variance was used to identify differences in patientphysician contacts for the different age groupings.

### Results

The initial analyses indicated that the physicians in each of the six age groups had significantly different average numbers of contacts with the five patient age groups ( $p \le .01$ ). For each physician age group, Table 1 gives the average number of contacts with each patient age group, as well as the percentage of the combined practices each patient age group represents. The data in Table 1 indicated that:

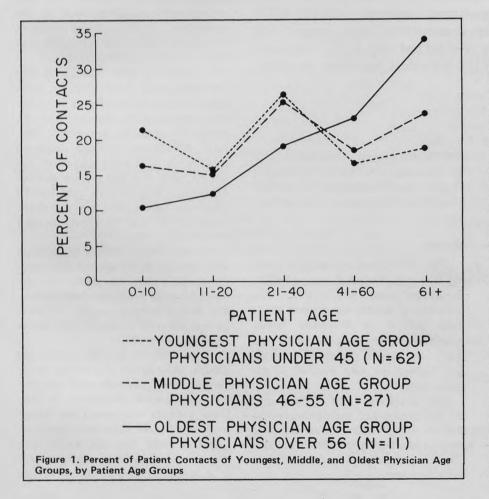
1. Contacts with patients in the first age group, 0 to 10 years, comprised an average of 24 percent of the total practices of physicians in the under 39 physician age group. Contacts with these patients decreased steadily in the older physician age groups, such that the average number of contacts with patients aged 0 to 10 years was significantly less for physicians over 61 than for physicians aged 40 to 45 ( $p \le .05$ ).

2. The average number of contacts with patients in the second age group, 11 to 20 years, was greater for the younger and middle-aged physicians. The largest average number of these patient contacts occurred with physicians aged 40 to 45.

3. As with the first two patient age groups, those in the 21 to 40 age range formed more contacts with younger and middle-aged physicians. In fact, these patients constituted the largest segment of these physicians' practices. Contacts with this age group also decreased as physician age increased. 4. Contacts with 41 to 60-year-old

From the Department of Continuing Medical Education, University Extension, University of Wisconsin Center for Health Sciences, Madison, Wisconsin. Requests for reprints should be addressed to Dr. Sigurd E. Sivertson, Associate Chairman, Department of Continuing Medical Education, University Extension, University of Wisconsin Center for Health Sciences, 610 Walnut Street, Madison, Wis 53706.

Table 1. Aver	rage Numbe		Contacts a ge, by Patier	nd Percent nt Age	of Total Pra	actice by
		Phys	ician Age Gro	oups		
Patient Age Groups	under 39	40-45	46-50	51-55	56-60	over 61
0-10	40.8	37.8	26.7	25.4	20.3	12.6
	(24%)	(19%)	(17%)	(16%)	(12%)	(8%)
11-20	26.9	31.5	22.6	25.1	20.3	19.0
	(16%)	(16%)	(14%)	(16%)	(12%)	(13%)
21-40	46.2	50.5	38.7	41.1	32.5	27.6
	(27%)	(26%)	(25%)	(26%)	(21%)	(18%)
41-60	25.3	35.9	29.6	29.3	38.8	33.6
	(15%)	(19%)	(19%)	(19%)	(24%)	(23%)
over 61	30.4	38.9	39.8	35.0	50.0	56.8
	(18%)	(20%)	(25%)	(23%)	(31%)	(38%)



patients increased with physician age, forming a larger percentage of the total practices of the physicians in the older age groups. This percentage increase in contacts with older physicians existed also in the 61 years and older patient age group.

5. The average number of patients over 61 contacted by physicians under 39 was significantly less than the average number of these patients contacted by physicians who were over 61  $(p \le .05)$ .

Thus, younger and middle-aged physicians generally had more contacts with younger and early middle-aged patients, while older physicians had more contacts with late middle-aged patients. Physicians in the first four age groups were in contact with more patients under, rather than over, 40 years of age. The distribution was reversed in the 56 to 60-year-old physician age group, where greater percentages of middle-aged and older patient contacts occurred. This reversal was pronounced for physicians over 61, where the average number of contacts with patients 0 to 10 years old was significantly less than the average number of contacts with patients who were 61 years and older (p ≤ .01).

A further description of these trends is graphically presented in Figure 1. Here the physicians have been combined into three age groups, youngest (under 45), middle age (46 to 55), and oldest (56 and older). Whereas 24 percent of the practices of the youngest physicians consisted of patients in the 0 to 10-year age group, only eight percent of the oldest physicians' practices consisted of contacts with patients in this age group. Moreover, 18 percent of the youngest physicians' practices were made up of patients over 61 years of age, while these patients constituted 38 percent of the practices of the oldest physicians.

These data suggested that a relationship between physician age and patient age did exist for participants in Individual Physician Profile: younger physicians generally had more contacts with younger patients, while older physicians generally had more contacts with older patients. Further computation revealed that, in general, a tenyear increase in physician age was accompanied by a five-year increase in average patient age.

#### Comment

Analysis of the data collected from 100 family physicians satisfied our curiosity and confirmed the anecdotal comments of the physicians: a direct relationship between physician age and patient age was found. What had long been speculation was supported by data for the first time. Recent writings in medical sociology<sup>2-5</sup> have not reported comparable data. Profile of Medical Practice 1973<sup>6</sup> and Social Economic Issues of Health 1973<sup>7</sup> both contain a wealth of statistics, but neither specifically relates patient age to physician age.

A previous report<sup>8</sup> dealing with clinical geriatrics described the general increase in the age of Wisconsin's population. The report described the broad and general nature of geriatric practice, pointing out that 18 percent of patient contacts with family practitioners were already in the 65 years and older age group. Together with the decreasing birth rate, these data give further credence to the prediction that geriatric practice will increase significantly for the individual family physician and for medical practice in general. Consequently, geriatrics will of necessity become an increasingly relevant component in the continuum<sup>9</sup> of medical education.

Since the increase in patient age is greatest for 56 to 60-year-old physicians, the results of this study suggest that family physicians in this age group should begin to devote more time and energy to continuing medical education in geriatrics. Those educators responsible for planning continuing education programs would do well to take this into account.

Both medical school and graduate education emphasize the professional satisfaction to be found in the diagnosis and treatment of disease. However, in caring for the elderly the physician derives greatest satisfaction from behavioral, supportive, and rehabilitative aspects of prolonged patient care. Physicians long involved with elderly patients have gained this expertise through experience.

These same physicians with greater expertise in the care of the elderly have many advantages over their younger colleagues; however, certain problems should be noted. While the ability to empathize with older patients is a boon to the older physician, it may become inappropriate, resulting in over-identification with, or at the other extreme, rejection of elderly patients.

Medical education that addresses itself to these realities constructively will provide a service not only to the older patient but also to the aging physician.

#### References

1. Sivertson SE, Meyer TC, Hansen R, et al: Individual Physician Profile: Continuing education related to medical practice. J Med Educ 48:1006-1012, 1973

Educ 48:1006-1012, 1973 2. Freeman HE, Sevine S, Reeder LG: Handbook of Medical Sociology, ed 2. Englewood Cliffs, New Jersey, Prentice-Hall, 1972

1972 3. Jaco EG: Patients, Physicians and Illness: A Source Book in Behavioral Science and Health, ed 2. New York, The Free Press, 1973

Free Press, 1973 4. Mechanic D: Politics, Medicine and Social Science. New York, John Wiley and Sons, 1974

5. Mechanic D: Public Expectations and Health Care. New York, Wiley-Interscience, 1972

 G. Vahovich SG, Aherne P: Profiles of Medical Practice. Chicago, American Medical Association, 1973
7. Alevizos G, Walsch J, Aherne P:

7. Alevizos G, Walsch J, Aherne P: Social Economic Issues of Health. Chicago American Medical Association, 1974

 Sivertson SE: A framework for problem solving in clinical geriatrics, editorial.
Postgrad Med 57:129-131, 1975
Meyer TC: Toward a continuum in

9. Meyer TC: Toward a continuum in medical education. J Med Educ 48(12) pt 2: 67-70, 1973

