
Communication

A Simple Measurement of Family Care in Medical Practice

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That the role of the "family" in family practice and the concept of the "family as the unit of care" in family medicine have remained unclear is in part due to a mixture of political and philosophical agendas and in part due to a lack of a measurement tool that permits systematic investigation of the idea. Smilkstein¹ noted that "it is time to replace the rhetoric on families with studies that clearly validate the place and worth of family in family practice."

In fact, despite a rather large number of papers on various aspects of "the family in family practice," the amount of real data on this issue are disappointing. One empirical study of the elements of family practice that derived its data from the analysis of structured interviews with family physicians failed to identify any element which sounded like the "family as the unit of care," although care of the individual within the context of the family came through quite clearly.²

Fujikawa and co-workers³ looked at the extent to which entire family units were cared for by one physician in a family practice group and found that only 28 percent of the families received all of their routine care from one physician.

It is also possible to look at the number of problems identified that are "family problems." In the Virginia study⁴ only 3,844 of the over 626,000 problems listed (0.7 percent) were problems that related to the family. The way in which these data were collected and coded, however, make interpretation difficult. The manner of data collection certainly affected the results obtained by Merenstein,⁵ who could find a recording of family issues in only 11.9 percent of the charts of family physicians. It should be noted that there are two broad categories of family data: implicit and explicit. The former is usually unrecorded, timely, and derived from the ongoing care of individual family members. The latter is usually formally recorded at one point and derives from a long, ritualized encounter such as a history and physical examination.⁶ Merenstein's data collection method assured that he was looking primarily at explicit family data.

This communication presents a rather simple way of measuring the size of the family unit as perceived by the physician. The data should be taken more for their heuristic value than as "absolutes."

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Methods

The University of Wisconsin Department of Family Medicine and Practice (DFMP) has developed a computerized encounter-monitoring system to follow the progress of medical students on their family practice clerkships.⁷ The system has been shown to give timely and useful data regarding the demography, comprehensiveness, and continuity of the student's practice and a useful record of the technical and counseling procedures in which students are engaged.⁸ The system relies on the use of mark-sense computer cards that are read by an optical reader.

Twelve of the teaching physicians agreed to fill out these cards for 100 successive encounters to enable the DFMP to establish norms for student performance. All physicians were board-certified family physicians in private practice. Data were collected for 1,126 encounters. Sixty-four percent of the patients were female (8 percent pregnant female), 22 percent were under the age of 10 years

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Table 1. Percentage of Encounters in Which a Specific Number of Other Family Members Have Been Seen

Number of Other Family Seen	Percentage of Visits	Plus or Minus Standard Error of the Mean
None	33	14
One	24	8
Two	20	8
Three	15	6
Four or more	8	9

and 26 percent were over the age of 59 years. Seventy-two percent of the visits occurred in the clinic, 12 percent in the hospital, and the remainder elsewhere. Eighty-five percent of the patients were patients previously seen by that physician, and an average of 1.99 problems per visit was recorded for each contact.

Part of the encounter card included a section covering "other family members seen." The physicians were instructed to record here the number of other members of that particular patient's family whom they had personally seen as patients. The physicians were not given specific definitions as to what constituted a "family," so that, in a sense, what was being measured was the physician's perception of the family unit. Likewise, they were not given specific instruction on the period over which the other visits could have occurred, and there was no request that they search their records, so in effect the physician's memory of that particular family unit was also being measured.

The physicians were requested to record on the card all problems they considered in their care of the patient at the time of that encounter, even if they did not actually treat the problem at that visit. Available problem categories included medical, psychosocial, risk, and family. (These problem categories had been previously developed for educational rather than research purposes, so overlap was possible.)

Results

The average family physician in this study saw

1.46 additional family members for each patient recorded, giving (including the index patient) a total of 2.46 for the average size of the family unit. There was considerable variability in the results (mean = 1.46, standard error = 0.55) presumably because of the small sample size, the nonspecific instructions, and variations in recording among physicians. Table 1 shows the percentage of visits in which the indicated number of other family members had been seen as patients by the physician.

The average physician recorded a family problem during slightly less than one out of ten encounters (8.0 percent). This number compares with the Virginia study, where 0.7 percent of problems were family related.

Comment

As noted above, the purpose of this paper is to demonstrate a simple method for measuring, from the physician's perspective, the average size of family units in his or her practice and the extent to which family problems are recognized. While the number of participating physicians was small and the total number of encounters likewise limited, this type of method provides a useful start to the problem of measuring the extent of family contact in family practice.

References

1. Smilkstein G: The family in family medicine. *J Fam Pract* 1982; 14:221-222
2. Beasley JW, Hansen MF, Ganiere DS: Ten central elements of family practice. *J Fam Pract* 1983; 16:551-555
3. Fujikawa LS, Bass RA, Schneiderman, LJ: Family care in a family practice group. *J Fam Pract* 1979; 8:1189-1194
4. Marsland DW, Wood M, Mayo F, et al: Content of family practice: Part II. Diagnoses by disease category and age/sex distribution. *J Fam Pract* 1976; 3:37-68
5. Merenstein JH: A comparison of residency trained family physicians and internists. *Fam Med* 1984; 16:165
6. Beasley JW, Longenecker R, et al: The patient/family profile. In Taylor RB (ed): *Family Medicine: Principles and Practice*. New York, Springer-Verlag, 1983
7. Beasley JW: Using private practice settings for academically intensive family practice clerkships. *J Fam Pract* 1983; 17:877-882
8. Beasley JW, Makleff R, Myren R, et al: Evaluating continuity and comprehensiveness in student clerkships using a computerized encounter monitoring systems. *J Med Educ* 1985; 60:320-329