Physicians' Usefulness Ratings of Family-Oriented Clinical Tools

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Background. Family-oriented patient care is a cornerstone of family practice. Family practice educators have proposed various methods to help the physician to better assess and treat families. Little is known, however, of the usefulness of family-oriented clinical tools to practicing physicians.

Methods. On a mailed survey questionnaire, 595 members of the Wisconsin Academy of Family Physicians were asked to rate the usefulness of 10 family-oriented tools and indicate the frequency of use and level of training received for each item. In addition, physicians rated their current and desired level of competency for involving families in patient care.

Results. Two hundred ninety-nine (50%) physicians responded. Most of the tools were rated as useful but used infrequently. Identifying the effects of chemical dependency on the health of families and conducting family conferences were rated as highly useful and frequently used skills. Clinical tools rated as least useful were record keeping by family charts and folders and

family function assessment by the Family APGAR. Physicians who had received training in the use of a tool rated it as more useful, except for the Family APGAR and family charts or folders. Physicians with busier practices rated some of the tools as less useful than did other physicians. Respondents indicated a desire to develop their family counseling skills.

Conclusions. Most family-oriented tools were reported to be useful but used infrequently by practicing physicians. Residency programs should continue to provide training for assessing and treating families, particularly in the areas of family systems theory, self-awareness of the physician's own family background, and the effect of chemical dependency on families. Future research should target larger and more varied groups of family physicians.

Key words. Family practice; family; physicians practice patterns; clinical protocols. (*J Fam Pract 1993*; 37:30-34)

Family-oriented patient care is one of the defining characteristics of family practice. The important role of the family in medical care has been based on both philosophical views^{1,2} and a growing empirical database demonstrating the reciprocal relationship between the patient's health and the family context.³ The continued popularity

of the Family in Family Medicine Conference, sponsored by the Society of Teachers of Family Medicine, is further evidence that a family orientation of health care has many advocates.

Many clinical tools have been suggested to the family physician as means of more effectively interacting with patients and their families. In 1986 the Society of Teachers of Family Medicine proposed guidelines⁴ for skills and knowledge considered to be beneficial when working with the family system. These included genograms, family conferences, the Family APGAR (Adaptation, Partnership, Growth, Affection, and Resolve),⁵ and the family approach to the family system.

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ily life cycle. Additional approaches to family-oriented care that have been proposed include organizing information in family charts or folders,⁶ family systems theory, and family counseling.⁷ These techniques can be augmented by physician awareness of the family role in chemical dependency, cultural influences on medical care, and the physician's own family background.

In addition to advocating specific family-oriented clinical tools, family medicine educators have proposed a developmental model to rate competency for dealing with families. Doherty and Baird⁸ created a hierarchy of physician involvement with families composed of five levels:

Level 1: Minimal emphasis on families

Level 2: Ongoing medical information and advice

Level 3: Feelings and support

Level 4: Systematic assessment and planned intervention

Level 5: Family therapy.

This hierarchy has been used as a guideline for curriculum planning, with level 3 as a common educational goal for residents.

Clearly, many methods and theoretical frameworks are available to facilitate a physician's ability to work with families. Investigators have previously assessed physician attitudes toward specific family-oriented methods such as the family conference,⁹ continuity of care with family members,¹⁰ and appropriate levels of physician involvement with patients' psychosocial concerns.¹¹ However, the attitudes of a large sample of practicing family physicians toward a wide-range of other family-oriented methods have not been determined. The goal of this study, therefore, was to determine the family-oriented tools and knowledge that practicing family physicians find most useful. This information may be used to guide the development of family systems curricula in residencies and medical schools.

Methods

The target population for this descriptive study was the 1096 practicing members of the Wisconsin Academy of Family Physicians. From this group, 595 subjects were selected by random drawing. Subjects were mailed an envelope containing a questionnaire, a consent form, and a self-addressed stamped envelope. After 1 week, a reminder postcard was mailed to the physicians who had not yet returned the survey. Ten days later, a new copy of the survey along with a new cover letter was sent to nonrespondents.

Table 1. Descriptions of 10 Family-Oriented Items in a Physician Survey

Family Conferences: A planned meeting with family members to discuss patient care.

Family Life Cycle: The series of developmental stages that a family undergoes and how this affects health and illness.

Family Systems Theory: The theory of how families function as a social unit.

Family Characteristics of Different Cultures: Cultural differences in family structure and how these affect health and illness.

Genogram: A graphical depiction of the patient's family history.

Family Charts or Folders: The use of a separate chart containing family information or the use of a single folder for each family unit.

Chemical Dependency and Families: Identification and management of the effect of chemical dependency on the health of all family members.

Family APGAR: A 5-item survey completed by family members for assessing family relations.

Self-awareness of Physician's Family Background: Awareness of how one's own family dynamics can influence patient care.

Family Counseling: Meeting with the family for several sessions to address psychosocial and emotional issues.

Family APGAR denotes five measurements relative to family function: Adaptation, Partnership, Growth, Affection, and Resolve.

The following demographic data were gathered: sex, type of postgraduate training, years in practice, weekly patient load, and practice setting (academic or nonacademic). Respondents rated the usefulness of 10 familyoriented tools (Table 1) on a scale of 1 (useless) to 6 (essential). Respondents also indicated the level of training received in each area: none = never received training in the area; informal = observed the technique used by a peer or read about the technique; or formal = received formal training in this technique in medical school, residency, a continuing education setting, or a fellowship program. Physicians then rated the frequency with which they used each tool. There were six choices: daily, weekly, monthly, semiannually, annually, and never. Finally, the physicians rated both their current competency and their desired competency for family involvement according to Doherty and Baird's model (Table 2).8

Descriptive statistics for all variables were derived for the entire sample, as well as for subsets of the sample based on available demographics. Pearson correlations were calculated between all variables and evaluated for significance. A one-way analysis of variance (ANOVA) was used for testing the relation between level of training and usefulness ratings. Finally, a t test was used to

Table 2. Items Used in Survey for Physician Self-assessment of Skill in Involving Families in Treatment

Level 1: I have little or no skill in conducting a family conference.

Level 2: I am skilled at conducting a family conference dealing with medical information and advice.

Level 3: I am skilled with a medically oriented family conference, and at dealing with the emotional responses of the family members.

Level 4: I am skilled with both medically oriented and emotionally oriented family conferences, and I am able to make brief family systems interventions.

Level 5: I am skilled with the above (medically and emotionallyoriented family conferences, brief interventions), and can conduct an ongoing series of intensive family therapy.

Adapted from Doherty and Baird.8

evaluate the difference between the current and desired levels of competence on the scale of family involvement.

Results

Of the 595 surveys mailed, 313 were returned. Fourteen were unusable because either they were returned without a forwarding address or the physician had stopped practicing family medicine. The remaining 299 responses yielded a 50% return rate.

The demographic characteristics of the responding physicians are shown in Table 3. A comparison of physicians responding to the first mailing and those respond-

Table 3. Demographic Characteristics of 299 Physicians Responding to a Survey of the Usefulness of Clinical Tools

Characteristic	Outcome
Sex, %	
Female	20
Male	80
Years in practice, %	
0-5	26
6–10	33
11–15	21
16–20	7
21+	14
Average number of patients per week	104.9
Area of medical training, %	
Family practice	89
General practice	
Other	8 3
Practice setting, %	
Nonacademic	93
Academic	7

NOTE: Not all respondents answered each question.

Table 4. Physicians' Usefulness Ratings* of Family-Oriented Tools

	Overall Usefulness Mean (±SD)	Sometimes Used (%)
Chemical dependency and families	$5.02 (\pm 1.00)$	95
Family conferences	$4.61 (\pm 1.10)$	96
Family counseling	$4.10 (\pm 1.27)$	70
Self-awareness of physician's family background	4.07 (±1.37)	62
Family characteristics of different cultures	3.94 (±1.33)	68
Family systems theory	$3.88 (\pm 1.26)$	60
Family life cycle	$3.64 (\pm 1.30)$	58
Genograms	$3.49 (\pm 1.46)$	48
Family charts or folders	$2.87 (\pm 1.48)$	20
Family APGAR	$2.81 (\pm 1.24)$	5

*Usefulness was assessed on a scale from 1 to 6, where 1 indicates useless and 6 indicate essential.

Family APGAR denotes five measurements relative to family function: Adaptation, Partnership, Growth, Affection, and Resolve.

ing to the follow-up mailings showed no significant differences in demographic variables. Of the 30 rating scales (10 items with 3 ratings each), 7 showed significant differences between early and late responders, although no consistent pattern was apparent. Because the target population for this study was physicians in non-academic settings (n = 275), respondents working in medical schools or residency programs were excluded from the following data analysis.

As shown in Table 4, identifying the effects of chemical dependency on the health of family members, conducting family conferences, and providing family courseling were rated as the most useful family-oriented tools. Only family genograms, family charts or folders, and the Family APGAR received usefulness ratings below the midpoint (3.5) of the 1 to 6 rating scale.

Ratings of frequency of use (Table 5) were roughly similar to the ratings of usefulness. Identifying the effect of chemical dependency was rated the highest in both tables; the Family APGAR was rated the lowest in both tables.

Ratings of usefulness on each item were not related to physician experience (ie, number of years in practice), physician sex, or type of postgraduate education (eg, family practice vs general practice). However, a significant negative correlation was found between usefulness ratings and physician patient load for two items: family characteristics of different cultures (r = -.137, P < .05) and the genogram (r = -.139, P < .05). These findings indicate that physicians who saw more patients were likely to rate these two items as less useful than other respondents.

On the scale of self-assessed skill in family involvement (Table 2), the average rating for current compe-

Table 5. Physicians' Ratings of How Frequently They Use Various Family-Oriented Tools

	Frequency of Use (%)					
	Daily	Weekly	Monthly	Semiannually	Annually	Never
Chemical dependency and families	11	21	31	29	4	5
Family conferences	2	17	20	49	9	4
Self-awareness of physician's family	19	14	9	14	5	38
background	100					2.1
Family systems theory	12	17	12	19	6	34
Family characteristics of different cultures	7	9	15	22	16	34 32
Family life cycle	5	12	11	20	10	42
Family counseling	2	5	14	27	22	30
Genogram	13	7	6	13	10	<u>52</u> 80
Family charts or folders	12	2	3	2	1	80
Family APGAR	0	0	1	2	1	95

NOTE: Underlined values represent the mode for that item.

Family APGAR denotes five measurements relative to family function: Adaptation, Partnership, Growth, Affection, and Resolve.

tency was 3.05 (level 3, feelings and support) and the average rating for desired competency was 3.91 (level 4, systematic assessment and planned intervention). The difference between current and desired skill levels was found to be significant (t[182] = 14.17, P < .05).

For the majority of the tools, physicians who had either informal or formal training in specific areas (eg, the family life cycle) rated those items as more useful than did physicians with no exposure to those areas. This positive association between the level of training (ie, none, informal, or formal) and usefulness ratings was particularly evident for three tools. Increased amounts of training in the area of the impact of chemical dependency on the health of family members was associated with a correspondingly higher rating of usefulness. For this particular tool, the rating of usefulness was higher for each level of training achieved (F[2, 264] = 17.78, P < .05). Similarly, physicians who had formal training in family systems theory and self-awareness of one's family background found these concepts significantly more useful (F[2, 257] = 4.60 and F[2, 242] = 27.15, respectively,P < .05) than those respondents who had received either informal or no training in these areas. On the other hand, physician ratings of the usefulness of the lowest ranked tool (the Family APGAR) were not associated with the level of training received (F[2, 189] = 1.5, not significant), suggesting that exposure to this method does not enhance its usefulness.

Discussion

The overall findings indicate that family physicians find many family-oriented tools to be useful in their practices, even though some of these tools are applied infrequently. Two specific tools were consistently rated as most useful: the ability to identify the effects of chemical dependency on the health of all family members, and the ability to

conduct a family conference. These tools were also the two that were employed most frequently.

It is noteworthy that the 10 survey items are not homogeneous; rather, they comprise interview skills (eg, conducting a family conference), methods of organizing family information (eg, family charts), and conceptual frameworks (eg, family systems theory). Inherent differences in these categories may have influenced physician ratings. For example, the lower ratings of tools for charting or organizing family information (ie, Family APGAR, genograms, family charts) may reflect the way a physician's practice is organized rather than a physician's ability to use the tools. The extra time and effort required to complete a genogram or convert to family charts may be the major deterrent to the use of these tools rather than their lack of value. In contrast, conceptual frameworks (ie, family systems theory, family life cycle) may be rated as more useful and applied more frequently because of the relative ease with which these cognitive skills can be employed. Physicians can use a family systems knowledge base without altering their existing practice routine. These differences in the nature of the questionnaire items, therefore, must be considered when interpreting the usefulness ratings. Also, we acknowledge that our list of family-oriented tools was necessarily incomplete. Our sampling of the 10 items, though derived from medical literature, was deliberately kept brief to increase the likelihood that busy physicians would respond to the survey.

These findings can offer some guidance for residency curriculum planning. First, family medicine educators should continue to integrate family-oriented tools into the residency curriculum. The majority of items were rated as more useful when a physician had received at least informal exposure to the topic. Second, structured resident learning experiences should be considered in the areas of the effects of chemical dependency on family members, family systems theory, and self-awareness of

one's family background. For these three topics, physicians receiving formal training rated the tool as more useful than those physicians who had received only informal training. Third, the results indicate that structured methods of collecting and organizing family information (eg, the Family APGAR, family charts or folders, genograms) were rated low in usefulness regardless of the amount of exposure to them. This finding presents a challenge to family medicine educators to find practical ways to integrate family data collection methods into a traditional practice and to produce empirical support for their clinical value. Finally, respondent ratings on the levels of family involvement support Doherty and Baird's contention that the minimum goal of residency training should be competency at level 3 (ability to address emotions of family members). The high desirability of level 4 skills (ie, the ability to make brief family interventions) suggests that continuing medical education (CME) training in brief family assessment and intervention approaches would be helpful to practicing family physicians.

Higher usefulness ratings of family-oriented tools do not appear to have been due to the influence of enthusiastic family medicine educators during residency training. Physicians with over 20 years of experience provided usefulness ratings similar to those of recent graduates. Not surprisingly, however, physicians with the busiest practices rated some family-oriented tools as less useful. The relation between heavy patient load and decreased use of genograms, for example, is consistent with previous findings that physician-administered genograms increase the length of the encounter. 12 Busy physicians also reported lower usefulness ratings for the family life cycle and family characteristics of different cultures. The pressure for efficiency may inhibit the provision of comprehensive medical care. 13 Alternatively, these findings may indicate that some family-oriented tools are not essential to providing quality medical care as evidenced by the thriving private practices of some respondents who gave low usefulness ratings.

The conclusions of this study are limited by several factors. The responding physicians (50% of the sample) may not represent the target population. Moreover,

members of the Wisconsin Academy of Family Physicians may not be representative of family physicians nationwide. Additionally, the responses to this survey were self-reported and therefore may not represent the actual practice habits of the physicians. Finally, caution is warranted when interpreting the statistical results. Causal inferences should be avoided because the data are correlational. Also, the use of multiple correlations increases the likelihood that some statistically significant findings occurred by chance.

The results of this survey, however, indicate that many family-oriented tools are useful to physicians practicing in nonacademic settings. It is hoped that this information will stimulate family medicine educators to integrate training in family-oriented clinical methods into medical school and residency education.

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