The Role of Physicians' Personal Knowledge of the Patient in Clinical Practice

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Background. Primary care physicians' personal knowledge of their established patients has not been investigated systematically, and its role in clinical practice has not been characterized empirically.

Methods. A qualitative study used an iterative, grounded theory method for thematic analysis of transcribed, semistructured long interviews. Subjects were family physicians in stable employment and in continuous clinical practice for at least 2 years at a staff-model health maintenance organization.

Results. Personal knowledge of the patient clearly influenced the use of time in the examination room, the recognition of changes in baseline status, and the ability to verbalize medical information in terms that have unique meaning for particular patients. Personal knowledge fostered a sense of predictability in personal interactions;

facilitated the creation of trust; served as an organizing scheme for data collection, recall, and interpretation; counterbalanced impersonal professional principles such as compulsiveness, duty, and responsibility; shaped ability to communicate effectively about issues related to quality of life and functional status; influenced choices of consultants; but also had the potential to interfere with diagnosis or with patient presentation of new information.

Conclusions. Personal knowledge of patients was an important influence on physicians' daily clinical practice in this setting.

Key words. Patient-physician relations; physician knowledge; qualitative research; research; long interview; interviews; grounded theory; family physicians; primary health care. (J Fam Pract 1995; 40:249-256)

Afamily physician's personal knowledge of a patient is the unique and particular collage of fact, speculation, values, transference, and countertransference that comprises the physician's working understanding of that patient.^{1,2} It has been described as "an elaborate set of lively recollections of specific patients" that is important for clinical reasoning.³ Originally identified by Michael Balint in his work with English general practitioners,⁴ it is a component of the patient-physician relationship that develops over time. It emerges as a dynamic component of the

relationship and helps direct the physician's patient-centered, negotiated approach to health care decision-making. It complements the biopsychosocial model of illness by drawing attention to a more holistic understanding of the patient that may include ethical values, historical details shared by patient and physician, and the pervasive influence of cultural forces on the healing relationship. It facilitates clinical reasoning for medical, ethical, and pragmatic patient care decisions.

The concept of family physicians' personal knowledge of their patients is part of the value-oriented perspective on the patient-physician relationship. Together with such notions as the "connexional" dimension of medical care, the physician as friend to the patient, and the role of culture and psychodynamics, trepresents a multidimensional view of relationships that form between partners in the healing process. As therapeutic knowledge, personal knowledge involves a temporary union of the

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observer, the observed, and the observation,⁸ and may be one of the factors that allows experienced physicians to recognize patient encounters as "ceremonies" and "dramas."

The notion of personal knowledge of patients has been studied more explicitly in nursing than in medicine.10,11 For nurses, personal knowledge in the form of "knowing the patient" is important for such management tasks as weaning the patient from a ventilator, adjusting intravenous medications, and demonstrating caring. 12 In the guise of "clinical judgment," the physician's personal knowledge of the patient may affect the physician's compliance with clinical guidelines. 13 In addition, research on architects, psychotherapists, engineers, managers, and planners has demonstrated the importance of this type of tacit, circumscribed knowledge for daily problemsolving.14 This type of knowledge may not be unique either to physicians or to Western culture: "I will tell you, in old China, Chinese doctors claimed to have 'secret knowledge' of herbs and ancient family remedies. For me the secret knowledge is knowledge of the patient and his relationship with you and others."15

The present study explores family physicians' personal knowledge of established patients to determine its role in daily problem solving in clinical practice.

Methods

This study employed qualitative methods: an interpretive, hermeneutic approach to the research question¹⁶; semi-structured, long interview data collection¹⁷; and iterative, grounded theory data analysis.¹⁸ In addition, a split-sample design with iterative member checking, searching for opposing evidence, and triangulation of interview and focus group data was used to ensure validity of the results. All data were collected and analyzed by one of the authors under the supervision of the coauthors. The study protocol was approved by the Human Subjects Review Committee of the University of Washington in Seattle.

Study Site

From 1985 to 1992, one of the authors participated as a practicing family physician at a staff-model health maintenance organization (HMO) in a medium-sized northwestern city (Group Health Northwest, Spokane, Wash). This setting was chosen for study because collegial relationships established therein were considered a potential asset to the data collection process, and because a comprehensive sample, which was obtainable at this location, was needed to maximize data validity. The HMO population of approximately 70,000 enrollees consisted of pre-

dominantly white and middle-income patients with an educational level of high-school or above, who received care at seven health care centers throughout the city.

Participants

All staff family physicians who had been practicing family medicine for a minimum of 2 years at the HMO and who were not in the process of changing employment were considered eligible. Twenty-two physicians met these criteria; 21 participated.

Interviews and Focus Group

To make the concept of the physician's personal knowledge of patients empirically intelligible, it was necessary to examine the self-reported clinical activities of physicians, identify instances of personal patient knowledge, and interpret what role this knowledge played in the caregiving process. This approach to identifying meaning, described as a *hermeneutic* approach, guided the research methods used here.

The first phase of data collection occurred through semistructured long interviews with the first 15 family physicians who agreed and could be scheduled for interviews between July 1993 and August 1993. All participants provided written informed consent and demographic information. Interviews were conducted at a location chosen by the physician: clinic, home, or a convenient restaurant. The semistructured interview questionnaire, shown in the Appendix, was developed as part of a previous study.1 Physicians were asked to speak a length about their relationships with patients whom they considered their "personal" patients and who would consider them their "personal" physician. 19 Probing questions were asked as necessary to clarify how the patient physician relationship might facilitate or interfere with patient care. At no time was the expression "personal knowledge" mentioned by the interviewer. The interviews lasted between 30 and 90 minutes, with an average duration of approximately 60 minutes. Interviews were recorded and the audiotapes later transcribed. In add tion, field notes were made during and after the interview to record important points, clarifications, and key phrases used by informants.

After analysis of the phase 1 transcripts, the second phase of data collection occurred between February 1994 and March 1994. Open-ended interviews were conducted with the six remaining family physicians participating in the study. These interviews were aimed at validating the findings of the initial data analysis; therefore, the proceeded as interactive discussions of the dimensions of

personal knowledge derived from phase 1. The process of member checking was used extensively during these interviews. "Member checking" refers to the presentation of specific concepts and components of the interview material (which become part of the emerging model) to study subjects in order to receive specific input about the validity of the concepts and relationships that have been ascertained. As part of this process, contrary evidence was actively sought in this phase. Informed consent, audiotaping, the collection of field notes, and transcription of tapes proceeded as in phase 1.

After analysis of phase 2 transcripts, the third phase of data collection consisted of meeting with a voluntary assembly of the HMO staff physicians at the time of their monthly all-physician conference (ie, a type of focus group). Again, the purpose was to present findings of the analysis that had been completed through phase 2 and to receive feedback regarding the validity of these findings. This phase allowed for "triangulating" research findings acquired by way of interview with those revealed through the group process. Four physicians who had been interviewed, four who did not meet entry criteria, and an assortment of nonphysician staff and physicians intraining attended this meeting. During this phase, field notes alone were collected to record specific points of feedback offered by the group and to characterize the discussion that was elicited.

Data Analysis

The written transcripts of the phase 1 interviews (approximately 300 pages) were read many times and coded for thematic content following methods of grounded theory. First, one of the authors identified the major concepts in the transcripts and noted them in the page margins. As a way of ensuring that major themes were not overlooked and that textual interpretations were clearly grounded in the data, a complete transcript was selected for thematic richness, and independently coded for content by two physician postdoctoral fellows experienced in qualitative methods; the content of these three independent codings was then compared qualitatively. The same author organized coded segments into new categories and subcategories, based on thematic relationships within major concepts. Finally, with the assistance of individual and group meetings with the coauthors, core themes were derived around which all categories could be integrated.

A computer word processing and outlining program was used to help organize the emerging categories and themes. From this final level of coding, and from a synthesis of research from other disciplines that independently bore relevance to the emerging analysis (ie, an-

other type of triangulation involving themes that emerged from the data and independent findings in the literature), a model was developed to describe the development of the physician's personal knowledge of the patient as a component of the patient-physician relationship and its effect on the primary care management process.

Phases 2 and 3 of data collection and analysis consisted of an iterative process of data collection, evaluation, interpretation, and revision to test and refine the model derived from the phase 1 analysis. This iterative study design allowed for the presentation of results from phase 1 to subjects of phases 2 and 3. These subjects provided feedback about the analysis, which was used to refine the emerging model. Also during this time, the ongoing research was presented to small groups of peers and faculty, which allowed additional perspectives to be incorporated into the analytic process.

Results

Phase 1 and 2 interviews were completed with 18 men and 3 women, all of whom were white and were board-certified in family medicine. Respondents ranged in age from 35 to 52 years, with a mean of 41.5 years.

Content Area 1: The Patient-Physician Relationship—The Context for Growth of Personal Patient Knowledge

The following passage describes the sense of commitment to the patient that seemed a typical part of the relationship these physicians experienced with their personal patients:

... I didn't stand at that bedside for hours at a time and hold his hand or anything, but I ended up talking to him about things that were not easy to talk about, and when the time came that he died, everybody... was very complimentary of the fact that I'd tried so hard and done so much, when in fact medically I don't really think I had, but I was there emotionally when they needed someone to be there, and I think that experience was a positive enough experience, in spite of the outcome, that they had real good memories of that....

Patients with whom such a relationship existed represented approximately 20% to 50% of the active patients of these physicians, although the estimates varied widely from physician to physician. Themes of "liking" the patient occurred often, characterized by the repetition of words such as "friendship," "loyalty," "sharing," "enjoyment," "entertaining," and "trust." In contrast, cases

of personal patients whom the physician disliked were also presented. Attention to the needs and concerns of the patient, or "patient-centeredness," was a commonly reported element of the personal patient relationship. In descriptions of encounters with these patients, there was a fluidity between medical interactions and social interactions. Mutually negotiated and acceptable limits to the amount and intensity of interaction seemed a hallmark of these relationships, which featured a paucity of unexpected or ambiguous communication.

Content Area 2: Personal Knowledge in the Physician-Patient Relationship

Although the term "personal knowledge" was never mentioned by the interviewer in phase 1, it surfaced spontaneously in several of the interviews in such expressions as "knowledge of the patient," "family physicians' knowledge of their patients' lives," "knowledge of a person and a family," and even "personal knowledge," as illustrated by this comment: "The primary reward I get from [medicine] is the personal knowledge of [patients]." Approximately 70 examples of personal knowledge and its effect on patient care were identified in phase 1.

Each interview contained two to five case reports. In almost every one, it was easy to identify elements of the physician's personal knowledge of the patient. These examples fell into two broad categories: the role of personal knowledge as a way of recording and recalling patterns of information for patient care, and the effects of personal knowledge on specific aspects of the patient encounter.

THEME 1: PERSONAL PATIENT KNOWLEDGE AS INFORMATION STORAGE SYSTEM FOR PATIENT CARE

Personal knowledge enables a physician to organize information about patients. In the interviews, personal knowledge was often revealed in the form of unique patient details the physician remembered. These details seemed to summarize a complex meshwork of information about an individual. Details about the patient that the physicians stored and recalled opened the door to intricate representations of patients' lives, in almost the same way as a hologram contains the complete picture in any of its subdivisions. During the interviews, each physician's narrative of these patient stories typically grew from the initial recall of a single detail. Kernels of stored impressions and experiences were referred to by the physicians as "life details," "tidbits," or a "formula in the brain." For example, one physician recalled that a former patient was a beekeeper. The initial memory of this detail ushered forth a cascade of data about this individual, his medical condition, behavior, personality, and family.

The following passage demonstrates both the content of information comprising one physician's experience of personal knowledge, which he referred to as "prior knowledge," and the form in which he stored this information:

Interviewer: . . . What kind of prior knowledge do you mean?

Physician: Social situations, your prior interactions with them: have they been good, have they been bad . . . is it a person who tends to distrust authority, and no matter what you say, they kind of don't believe you; or how compliant they've been in the past; if they've had any . . . treatments, did they follow through or just not follow through?

Interviewer: . . . so that's [the] kind of knowledge that you just kind of have as background or something?

Physician: Yeah, it's [the] kind of knowledge that you pike up when you get familiar with people and you know their tendencies and perhaps you know their level of education and their understanding.

Interviewer: ... you just kind of keep it like in the file boxfur that patient in your own brain, or ...?

Physician: It's kind of a memory.

Different physicians had their own methods of documenting these facts in their clinical recordkeeping; some retained them primarily in their memory. Bits and pieces of this information may have been interwoven with the written medical record, but not consistently and not necessarily in a format interpretable by other care provides.

THEME 2: PERSONAL PATIENT KNOWLEDGE AS PATIENT DETAILS IN CLINICAL ENCOUNTERS

Personal knowledge also served as a library of individual patient patterns that were accessed by the physicians for decision-making during clinical encounters. It represented unique, patient-specific details, or situated knowledge, of the natural history of health and illness for particular individuals. This type of personal knowledge was not only an asset for diagnosis and treatment of particular patients' conditions over time but also an influence of how physicians used their time in specific encounters.

One physician's personal patient knowledge allowed her to enter the room and understand intuitively and almost immediately whether a particular patient was much worse than at a previous encounter. One of the authors asked this physician about making same-day appointments for her own patients:

Interviewer: So having all that . . . all that stuff at your disposal makes it easier for you to be willing to just bring the in and take care of it?

Physician: Right, right, right.... I'll know if there's something really wrong here or not because I'll know them, you know.... The minute you see them you know ooh, ooh god, this is ... "You are much worse, right?"

In this case, personal knowledge allowed a physician who knew a particular patient to interpret current complaints in light of previous events and symptoms, and to recognize the cycling patterns of symptoms and behavior that characterize illness histories of certain patients. Both the illness patterns and the behavior patterns, functional and dysfunctional, that were unique to a particular patient became part of the physician's personal knowledge of the

The physician's personal knowledge of the patient influenced the patient encounter itself by providing a common vernacular for expressing concepts of illness, therapeutic response, and prognosis. Unique expressions were developed during the interaction of seeking and providing health care that seemed to allow both parties to reach a common understanding regarding specific details of the treatment process. This understanding allowed for more tightly focused functional assessment of the patient and more patient-specific treatment goals than would be otherwise possible.

Physician: ... So, you know, it gives you a way that maybe in't measured in feet walked per minute or something like a research study might do, but it gives you some valuable information about—you know, there's more functional information if C [the patient] can't reach the fishing hole than trying to ask him how many flights of stairs he can or can't climb. By the same token, I don't know ... it's never come to this, [that is] a trade-off in terms of, well, "C, you've just gotta quit fishing; you might die out there" or something, but I think the quality of his life is better because we're working toward treating his problems in a way that the things he wants to do in life are treatment goals.

In certain clinical situations, personal knowledge appeared to be an especially useful tool for the physician. Many examples were cited by these participants to illustrate the range of utility of their personal knowledge of patients in clinical caregiving: eg, decisions for elective joint replacement, or other elective surgery; procedures with borderline medical indications; the decision to intubate or extubate; the decision to hospitalize vs pursue intensive outpatient intravenous therapy; the decision to

transfer a patient into a nursing home for long-term care; the decision to provide antibiotics to a mother for treatment of recurrent otitis media in her child according to her own judgment; the decision to treat patients over the telephone or to require an office visit; and the management of abnormal screening tests in pregnancy.

THEME 3: THE DOWNSIDE OF PERSONAL KNOWLEDGE

The informants suggested that one disadvantage of using personal knowledge about previous patterns of disease or patient behavior is that the physician could close himself to other possibilities for diagnosis and treatment that could be more appropriate for any particular patient or situation. Instead of attending to the clinical data obtainable at the moment by appropriate history-taking and physical diagnosis, the physician might make assumptions based on prior assessments, experiences, and expectations; that is, on his personal knowledge of the patient. This situation could result in failure to diagnose and treat what is present, or the attribution of an incorrect diagnosis to uncertain findings. Physicians in this study seemed more aware of the former possibility than of the latter.

Another disadvantage mentioned was the possibility that a practitioner's medical judgment might be impaired as a result of overidentification with the patient. One physician was convinced that personal knowledge could represent a "trap" for primary care physicians if it inappropriately replaced medical knowledge in therapeutic decisions. Another physician described how he made special efforts to separate his personal style of interacting with close friends from his systematic, deductive-reasoning style used for diagnosis. He justified the adoption of clearly different styles of interaction on the grounds that he might otherwise "miss something important" when providing medical care to these persons, and he spoke of shifting back and forth during the office encounter between different speech patterns and mannerisms appropriate to each style of interacting. Additionally, it was noted that increased familiarity with a patient might result in the physician socializing more with patients during the encounter, thereby prolonging the amount of time spent in the examination room or on the telephone. Finally, it was suggested that familiarity with patients might incline some physicians to take for granted or ignore their own patterns of behavior with these patients. Unknowingly and unwittingly, the physician might behave in a manner that is insensitive or offensive, under the assumption that, because of a shared relationship or a certain degree of mutual understanding, such behavior would be acceptable to the patient.

Discussion

A Model of Personal Knowledge

Based on the findings of this study and literature review, we suggest the following model of personal patient knowledge.

The concept of personal knowledge is not a homogeneous entity. Rather, it is part of the dynamic relationship that develops over time between physicians and patients who grow to identify each other as "personal" caregiver or recipient in the primary care setting. Its components include both particular information and the emerging process of the patient-physician relationship. It can often be identified by the physician's reference to "knowing" the patient or having a history of professional interactions with the patient.

Personal knowledge fosters a sense of predictability in interpersonal interactions; facilitates the creation of trust; serves as an organizing scheme for data collection, recall, and interpretation; counterbalances impersonal professional ethical principles, such as compulsiveness, duty, and responsibility; shapes the physician's ability to communicate effectively about issues related to quality of life and functional status according to the patient's needs and abilities to comprehend; influences choices of consultants to whom patients are referred; and may interfere with diagnosis or with patient presentation of new information.

Personal knowledge coexists with medical knowledge, personal psychology and interpersonal skills, and cultural systems of meaning that are interwoven with all other aspects of care delivery. These elements are part of the meshwork of doctoring skills that the primary care physician brings to the clinical encounter. They support the process by which the physician is able to assess the patient's presenting narrative during the office encounter and ascertain which feature seems "out of whack" at a level that warrants professional action in a diagnostic or therapeutic sense. Their importance in any particular clinical encounter depends on the patient, the illness, the physician, and the service environment in which health care delivery occurs. As the relationship between patient and physician matures, all components of the meshwork generally become more developed, although this maturation may not always occur in every patient-physician relationship.

Practical Implications of Personal Patient Knowledge

For the group of physicians in this study, personal knowledge of their patients was intermingled with medical

knowledge and influenced their patient management decisions in important ways. The physician's choice of how to focus the use of time in the examination room, the recognition of changes in the baseline condition of a particular patient, and the ability to discuss the medical diagnosis, prognosis, and therapy in terms that had immediate, specific meaning to a patient were typical ways in which personal knowledge affected the tone and flow of the interaction between patient and physician. All physicians in this study agreed that they used this form of knowledge regularly in caring for their personal patients.

While personal knowledge may be an antidote to the "Tar-Babies"20 of clinical medicine, which set off chain reactions of tests and procedures, it does not necessarily result in a reduction in health care utilization. On the contrary, personal knowledge may lead to increased used intensive care facilities, specialized tests, or other services. depending on how it is applied for a particular patient The chief effect of this form of knowledge on the medical case management process is the creation of more person alized care for the patient. From the patient's perspective, the cultivation and use of personal knowledge by the physician should result in increased quality of care and greater likelihood of having one's needs and expectation met.21,22 This observation may partially explain how cer tain physicians can be notorious among their medical peers for unscientific practice styles yet still be adored their patients.

Personal knowledge belongs not only to the physician. Other members of the caregiving team may us personal knowledge for the benefit of the patient, or the patient may use it to select and interact with physician. Trust between caregiver and patient may develop at least in part on the basis of mutually shared personal knowledge. Just as physicians may use their personal knowledge of patients in ways that compromise the professional quality of care they provide, it may be possible for patients misuse their personal knowledge of the physician; for example, to request controlled substances at a time who caregivers who have little knowledge of the patient are duty. This possibility merits further inquiry.

Study Limitations

This study depends on a homogeneous sampling strates and employs a divided sample, the long interview method of data collection, grounded data analysis, iterative design, and extensive use of member checking. This strates maximizes the validity of the results but limits their governalizability. For example, these results may be "empirically generalizable" to other small-city HMO settings the northwestern United States, but not to inner city or rural settings or to areas with a high concentration

minorities. In addition, different results might be obtained with a sample of physicians with different characteristics, eg, markedly older or younger physicians, in fee-for-service based practices, of different ethnic backgrounds, or not board-certified.

Future Research

These results are rich with potential for further research. First among these is the further characterization of the shape and content of personal patient knowledge in different primary care settings and among different health care providers. The overlap between this type of knowledge among physicians, nurses, and other members of the health care team needs to be better defined. The factors that promote and prevent the development of this knowledge should be of interest to family medicine educators. Since it is reasonable to assume that empathy may facilitate the acquisition of personal patient knowledge,24 and since empathy can be taught, it would be interesting to explore whether the development of personal patient knowledge is promoted by training processes such as Balint groups. Another potential research question is whether continuity of care is related to the development of personal patient knowledge, and if so, what is the mechanism of that relationship?

From a clinical perspective, it would be especially useful to investigate how physicians' personal knowledge of their patients affects specific clinical situations. For example, patient satisfaction and functional outcome after knee replacement therapy might be related to the process by which the decision for arthroplasty is made. It might be hypothesized that decisions that incorporate specific elements of personal patient knowledge lead to higher patient satisfaction and better functional outcomes than decisions not incorporating this type of knowledge. A study such as this would require the development of a measurement tool by which personal patient knowledge could be more specifically delimited and quantified.

The final example comes from the managed care arena: the relationship of personal patient knowledge to consumer satisfaction and disenrollment has implications for successful "competition" for enrolling and retaining members. Organizational strategies that promote or detract from the development of personal patient knowledge may affect organizational viability. Thus, research that identifies health services factors that influence the development and flow of personal patient knowledge in different models of managed care organizations might provide practical management suggestions for HMO administrators

Conclusions

The personal patient knowledge of primary care physicians originates in the patient-physician relationship and permeates clinical practice at many different levels. It may have beneficial or detrimental consequences, depending on the combination of individuals and circumstances in which it arises. For the physicians in this study, personal patient knowledge is an important influence on clinical practice; for researchers, teachers, and managed care organizations, the concept of physicians' personal patient knowledge offers many diverse opportunities for future study. These findings challenge primary care clinicians to become aware of how this form of clinical knowledge influences their daily practice and how they may best apply it for the benefit of their patients.

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Appendix

Questions Asked of Physicians During Phase 1 of Data Collection

1. Tell me about your relationship with a patient for whom you consider yourself the "personal physician."

(*Clarification*: We are interested in finding out from you about particular patients that both you and they consider you to be their personal physician: the type of relationship you have with each patient, how it developed, and how the relationship affects the type of care you provide for that particular patient.)

Suggested prompts:

How does your relationship affect the care you provide this patient?

- How has your relationship developed and changed over time?
- How has that change affected the care you have provided for this person and his or her family?
- Are there any health care decisions you have made for this particular patient that have been directly affected by your personal relationship with him or her?
- 2. Tell me about relationships you have with other patients that have affected the care you provided them?

Suggested prompts: Same as above.