

Reading and Interpreting Genograms: A Systematic Approach

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Family physicians continue to struggle with the problem of how to make optimal use of family information in everyday clinical practice. One important task in addressing this problem is describing systematically the categories of family information that are incorporated into the usual clinical problem-solving process used by physicians. In this article the usefulness of the genogram as a data-gathering and assessment tool is reexamined, and six information categories that can be used for generating and testing clinical hypotheses are outlined. Three clinical case studies are presented to demonstrate how physicians can read and interpret genograms systematically.

Clinical problem solving involves numerous individual tasks or steps but is often divided into two major components: problem definition and problem management. Defining or diagnosing a problem often contributes to the resolution of the condition; treatment, however, may also be used in diagnosing or defining a problem. This circularity of "diagnosis as treatment" and "treatment as diagnosis" occurs frequently in the clinical care of patients, but is especially relevant when dealing with psychosocial or family problems.¹

Although the literature is replete with testimonials about how important psychosocial and family information is to problem solving in family practice,²⁻⁷ there are few empirical data about how clinicians actually use this information to define and manage patients' problems. Despite the lack of descriptive studies, clinicians are increasingly being advised to make use of family assessment tools in problem solving.⁸⁻¹⁰ How family information should be used appropriately in problem definition and management in everyday clinical encounters, however, has not yet been made explicit or specific.

The purpose of this article is to begin to explore ways in which family information can be used in clinical problem solving. In particular, the usefulness of the family

genogram¹¹⁻¹⁶ as a "diagnostic test" is examined. Diagnosis is seen as more than just the process of labeling. It is the elucidation of the contributing causes of the patient's distress or complaints in such a manner that the clinician will be able to understand more about the way in which a patient is ill, the mechanisms by which the illness is produced, and the reasons why the patient is ill at this particular time so that appropriate therapeutic interventions can be initiated.

By collecting and recording sufficient family information, a clinician can interpret relevant cues from the genogram in working toward a diagnosis.¹⁷ The clinician may consider a diagnosis at any of several levels (eg, organ, person, family, community),¹⁸ and may use a variety of classification systems or typologies to clarify and bring precision to the diagnosis or diagnostic label.¹⁹⁻²¹

As a diagnostic test, the genogram is seen as having characteristics similar to the electrocardiogram. For example, if a clinician is considering a myocardial infarction or pericarditis as possible explanations for a patient's chest pain, the electrocardiogram will be read systematically (ie, rate, rhythm, axis, intervals, P wave, QRS complex, ST segment, T wave), and this information will be interpreted to test these two diagnostic hypotheses. Alternatively, if the chest pain is thought to be somatized distress resulting from family pathology, the biopsychosocial information recorded on a genogram can also be read and interpreted systematically to generate and test appropriate "diagnostic hypotheses."

Recently, McGoldrick and Gerson²² have outlined six basic interpretive categories derived from family systems theory than can be used for clinical problem solving. A

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TABLE 1. GENOGRAM INFORMATION CATEGORIES FOR CLINICAL PRACTICE

Category 1. Family Structure

1. Composition of family or household (eg, intact nuclear family, single-parent household, remarried family, three-generational household, household with extended or nonfamily members)
2. Sibling constellation (eg, birth order, siblings' gender, distance in age between siblings, other factors influencing sibling pattern: timing of each child's birth in family's history, child's characteristics, family's "program" for the child, parental attitudes and biases regarding sex differences, child's sibling position in relation to that of parent)
3. Unusual family configurations (eg, consanguineous marriages, multiple remarriages)

Category 2. Family Life Cycle

1. Present family life cycle stage (eg, launching young adult, the new couple, the family with young children, the family with adolescents, the family with elderly members)
2. Family life cycle transitions or developmental crises
3. Family life cycle events that are "off time" or "out of sync" (eg, early death, delayed launching, spouses of very different ages, late childbearing)

Category 3. Pattern Repetition in Families Across Generations

1. Repeated patterns of illness (eg, specific diseases, symptoms)
2. Repeated patterns of functioning (eg, somatization, denial, substance abuse)
3. Repeated patterns of relationships (eg, enmeshment, conflicts, cutoffs)
4. Repeated structural patterns (eg, divorce, remarriage)

Category 4. Life Experiences

1. Recent life stressors (eg, marriage, pregnancy, acute illness)
2. Chronic life stressors (eg, chronic illness, poverty, racism)
3. Coincidences or recurring significant dates, ages, and temporal life events (eg, anniversaries, holidays)
4. Cultural, social, economic, political, or environmental forces (eg, ethnicity, migration, natural disasters, warfare)

Category 5. Family Relational Patterns

1. Type of relationships in the family (eg, cutoffs, conflicts, distant, fused, or enmeshed)
2. Triangles (eg, parent-child triangles, common-couple triangles, divorce-and-remarried-family triangles, triangles in families with foster or adopted children, multigenerational triangles)
3. Types of relationships with nonfamily members

Category 6. Family Balance and Imbalance

1. Balance or imbalance in family structure
2. Balance or imbalance in family roles
3. Balance or imbalance in level or style of functioning
4. Balance or imbalance in resources

revised version of these six genogram categories is presented herein (Table 1). By using these categories, clinicians can learn to read and interpret genograms systematically, much as they learn to utilize other diagnostic tools. The basic approach to genogram interpretation is illustrated in the three clinical case studies that follow.

CLINICAL VIGNETTES

Case 1

A 34-year-old woman made her first visit to the Family Practice Center on January 8, 1985, with the chief complaints of ear fullness, decreased hearing, and hayfever symptoms. She reportedly had recurrent left otitis media requiring a myringotomy as a child. She continued, however, to have chronic problems with her left ear that were thought to be secondary to repeated infections. These episodes had been treated with antibiotics with temporary resolution. The patient noted recently a feeling of fullness in her ears with diminished hearing but no pain, tinnitus, or dizziness. She complained also of exacerbation of her

hayfever symptoms, ie, nasal congestion, clear rhinorrhea, sneezing, and watery, itchy eyes. She also noted, however, that it was unusual for her symptoms to act up like this during the winter. The patient's physical examination revealed a mild otitis externa with debris but no evidence of active allergic disease involving her eyes or nose.

At this point in the encounter the patient's physical examination was insufficient to explain her current symptoms, and the physician considered the possibility of somatized distress.²³ To test this hypothesis as efficiently as possible, a skeletal genogram²⁴ was obtained, as the physician had no prior knowledge of the patient's family or social environment (Figure 1). The patient reported that she and her two children had moved to the state five months ago and now lived with her parents. She had recently completed very contentious divorce proceedings that led to rather severe emotional difficulties for her children. Her son began to pull out his hair; both children were receiving counseling. The patient felt very much alone. In addition, she had also begun to work at two new jobs because of financial difficulties.

In analyzing this patient's genogram, the physician noted the following clinically relevant family and psychosocial cues:

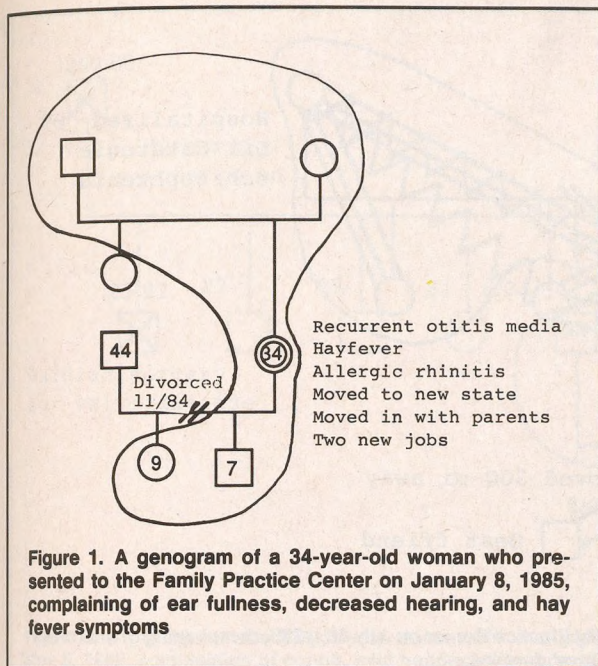


Figure 1. A genogram of a 34-year-old woman who presented to the Family Practice Center on January 8, 1985, complaining of ear fullness, decreased hearing, and hay fever symptoms

Case 2

A 26-year-old man presented to the Family Practice Center on July 18, 1985, with a three-day history of intermittent episodes of shortness of breath, palpitations, and a sensation of impending doom. He denied paresthesias, chest pain, nausea, vomiting, or any special precipitating events. He feared that he might be "dying from cancer or chronic bronchitis" resulting from his ten years of smoking two packs of cigarettes a day. Physical examination revealed a sinus tachycardia, but findings were otherwise within normal limits. A provisional diagnosis of anxiety disorder was entertained.

Because the patient had been seen on prior occasions, the physician had already obtained a basic genogram. The family history was reviewed briefly before eliciting new information to add to the evolving genogram (Figure 2). The patient had little contact with his family with the exception of one sister. When the patient was 10 years old, his mother was hospitalized with a diagnosis of catatonic schizophrenia. Two years later the parents divorced, and his mother and three younger sisters moved to another state. Approximately ten years later, the patient committed his father to a psychiatric facility after the latter attempted suicide with drugs. At that time, the patient brought his second oldest sister back to his home state because she was close to her father and was having conflicts with her mother. His other sisters had very close relationships with their mother. The patient had conflictual and distant relationships with both of his parents and with his two sisters who live with their mother.

Further history was obtained and revealed that the patient's own marriage of nine months had ended in a stormy divorce three months previous to the visit. In addition, his best friend and confidant had moved 300 miles away about two months ago. Currently, the patient worked as a computer technician from 3:30 PM until midnight. When he arrived home, he stayed up until 1 or 2 AM watching television, and drinking one or two beers in order to sleep. He lived with three other single roommates with whom he had no particular emotional ties.

In analyzing this patient's genogram, the physician noted the following clinically relevant family and psychosocial cues:

1. Conflict, estrangement, and distance in the relational patterns between parents and children (category 5, parent-child triangles)
2. The patient's divorce, his best friend moving away (category 4, recent life stressors)
3. The patient's divorce and his parent's divorce (category 3, repeated structural patterns)

An electrocardiogram was normal, and an "attack" during the patient's visit helped the physician to make a more specific diagnosis of panic disorder. The patient readily accepted the recommendation for psychotherapy.

Comment: Family therapists have pointed to the im-

1. A single mother with two children living with her parents (category 1, family or household composition)
2. Divorce, moved to a new state, working two new jobs (category 4, recent life stressors)
3. Lack of social support (category 6, family imbalance in resources)

Based on this analysis, the physician made a provisional diagnosis of adjustment disorder with somatoform features. Using the genogram information as backup, the physician recommended to the patient that her problem could be exacerbated by the stress she was under and asked whether she would like to be referred for counseling. The patient seemed relieved and accepted the referral.

Comment: The impact of stressful life events and inadequate social supports on patient and family health status and illness behavior have been studied extensively over the past 30 years.²⁵ The importance of performing a "psychological review of systems" or "psychosocial risk assessment" when indicated by the clinical situation has been advocated.²⁶⁻²⁸ Family physicians can practically employ a variety of brief psychotherapeutic techniques to help patients deal with stress detected in this way.²⁹ The genogram can be constructed quickly in a respectful, nonthreatening manner and then can serve as an important source of clinical hypotheses about potential psychosocial reasons for the patient's visit. The genogram can also provide material to strengthen a referral for counseling services. On the other hand, the genogram can reassure the clinician that the family environment is stable and probably not contributing substantially to the patient's illness, so that alternative explanations must be sought.

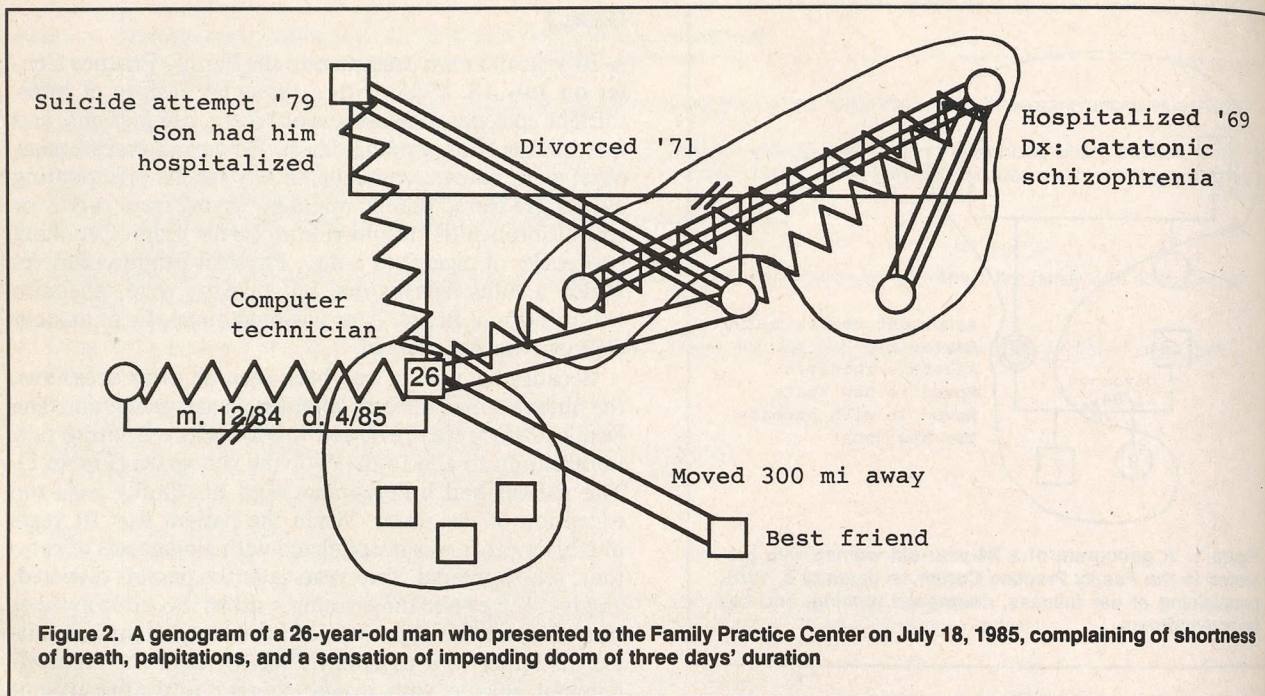


Figure 2. A genogram of a 26-year-old man who presented to the Family Practice Center on July 18, 1985, complaining of shortness of breath, palpitations, and a sensation of impending doom of three days' duration

portance of looking at the family system as a set of interlocking triangles.³⁰ Triangles are "sets of three relationships in which the functioning of each dyad is dependent on and influences the other two. The formation of triangles in families involves two people bringing (triangling) a third into their relationship and usually serves the function of lessening difficulties in the initial dyad."²² Often the individual who is triangulated may become dysfunctional (it is important to note that physicians can also become triangled by a family and rendered clinically dysfunctional). In making decisions about therapy, the clinician can utilize the genogram to generate hypotheses about existing triangular patterns, boundaries, and the nature and quality of relationships in a dysfunctional family. Unless the physician has obtained specialized training in family counseling, treatment of these types of relationships usually requires referral to a family therapist or an appropriate mental health professional.

Case 3

A 53-year-old woman presented to the Family Practice Center on May 5, 1985, complaining of a dry cough, mild headache, and general malaise of two days' duration. She denied having fever, sore throat, shortness of breath, or chest pain, but she noted some nervousness, insomnia, and a sense of feeling "fuzzy in her head." Her past medical problems included angina pectoris, hypertension, diabetes mellitus, peripheral neuropathy, and osteoarthritis. Her medications included isosorbide dinitrate, nifedipine, prazosin hydrochloride, hydrochlorothiazide-triamterene,

tolazamide, phenytoin sodium, and ibuprofen. The patient's physical examination revealed some mild coryza and pharyngeal injection consistent with a low-grade viral upper respiratory tract infection. To clarify the situation further, the physician decided to construct a genogram (Figure 3). Following the death of her son from measles encephalitis, the patient had experienced a brief period of depression in May 1962, but she had no history of suicide attempts or major psychiatric illness either before or after her son's death.

In analyzing this patient's genogram, the physician noted the following clinically relevant family and psychosocial cues:

1. The death of the patient's son in the month of May (category 4, recurring significant dates, ages, or temporal life events)
2. The patient's daughter's 22nd birthday and the patient's age of 22 years when her son died (category 4, recurring significant dates, ages, or temporal life events)

Learning these details, the physician inquired further about the patient's current depressive-anniversary reaction. He discovered that she indeed had had suicidal thoughts, but felt guilty about them because she thought her daughter, who was just graduating from college, needed her support. The physician discussed the possibility of a referral for counseling, but the patient refused. She did agree to a follow-up visit with him three days later, at which time her mood was much improved. The physician met the patient for follow-up visits over the next two months to see how she was managing with her

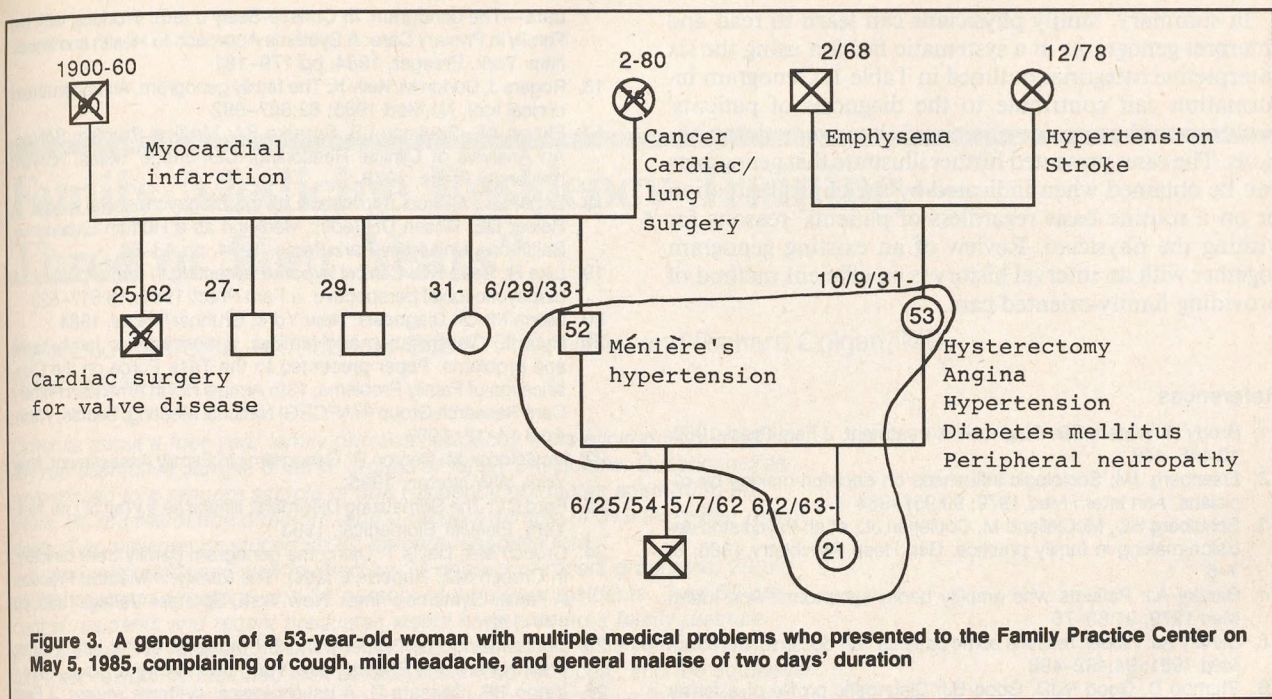


Figure 3. A genogram of a 53-year-old woman with multiple medical problems who presented to the Family Practice Center on May 5, 1985, complaining of cough, mild headache, and general malaise of two days' duration

depression and grief reaction. She did very well and the following year had no recurrence of her anniversary reaction during the month of May.

Comment: Depression and suicidal ideation are clear indications for a comprehensive family and psychosocial history. The genogram provides an efficient framework for quickly scanning the family situation for contributing causes and precipitating events. Further in-depth history is required if the initial family scan fails to identify potential explanations. In this case, the genogram allowed the physician to target rapidly the most likely issues for the patient.

A variety of authors have discussed the important clinical phenomenon of unresolved grief in ambulatory care settings.^{31,32} Often grief reactions will become manifest on the anniversary of significant events (eg, births, deaths, marriages, divorces, illnesses, accidents). Patients may present with vague somatic, psychological, or behavioral symptoms, or exacerbations of preexisting illnesses.^{33,34} The recording of key dates (month, day, and year, if possible) and ages on the genogram can help clinicians in generating clinical hypotheses about potential unresolved grief.

DISCUSSION

The case studies presented above illustrate how genograms provide a rich source of patient and family data, and can be used in the clinical problem-solving process familiar to physicians. The six genogram interpretive cat-

egories are based on a revision of those proposed by McGoldrick and Gerson.²² Further refinement of these categories can be anticipated as more clinical experience is gained with their use in primary care.

If the genogram is to become accepted as a clinically useful diagnostic test, the following major research questions require further investigation: What is the relative frequency of family and other psychosocial problems in primary care? What are the sensitivity, specificity, and predictive value of genogram information (ie, family signs and symptoms)? What are the reliability and validity of genogram information? What types of clinically relevant hypotheses are typically generated from genograms? How are genogram cues and hypotheses differentially interpreted and evaluated by various practitioners? What is the impact of a family systems approach to diagnosis on subsequent clinical outcomes, physician test-ordering and prescribing behavior, the quality and cost of care, and patient-provider satisfaction?

Family therapists have called attention to the limitations of the medical model's linear view of disease causation and the need for a systems or cybernetic model of clinical reasoning.³⁵ Training physicians to think in a circular (or nonlinear) fashion, however, has often proven difficult. A metalevel viewpoint, however, holds that linear and nonlinear modes of thinking are complementary^{36,37} and indeed necessary for successful biopsychosocial differential diagnosis and treatment to occur. Paradoxically speaking, when caring for patients and their families, it may be useful first to think linearly about biopsychosocial issues in order to start thinking systemically about these issues later.

In summary, family physicians can learn to read and interpret genograms in a systematic fashion using the six interpretive categories outlined in Table 1. Genogram information can contribute to the diagnosis of patients' problems and can guide clinicians' therapeutic interventions. The cases presented further illustrate that genograms can be obtained when indicated by the clinical situation or on a routine basis regardless of patients' reasons for visiting the physician. Review of an existing genogram together with an interval history is an efficient method of providing family-oriented care.

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