CLINICAL TOOLS

Article

Genograms

Practical tools for family physicians

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GENOGRAM IS A VERSATILE clinical tool that can help family physicians integrate a patient's family information into the med-

ical problem-solving process for better patient care. Physicians in primary care often have to treat patients with serious medical illnesses (eg, cardiovascular disease, diabetes, hypertension) in combination with psychosocial problems (eg, domestic violence, substance abuse, relationship difficulties). Knowledge of both biomedical and psychosocial issues is needed to diagnose and manage these patients. The family genogram (family tree) offers a unique opportunity for obtaining family medical and social history from patients more easily, and for expanding a family physician's understanding of the presenting problems by providing a quick picture of the context in which they occur.

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Family systems medicine

During the last decade, research has demonstrated a relationship between family functioning and the physical and emotional well-being of an individual patient.¹ Family systems medicine has promoted a family orientation to patient care by developing several assessment tools that incorporate both family and psychosocial information into medical care. These family assessment tools include the family APGAR, family circle method,² genogram,³ PRACTICE,⁴ and FIRO⁵ models.

Physicians using a family systems medicine orientation have found that creating a diagram of a family's health care problems assists them in managing many of their patients' health care concerns. Genograms have been compared to more traditional medical tools, such as x-ray films and cardiograms, that help facilitate hypothesis generation, differential diagnoses, and ultimately a management plan for the patient.⁶ "The genogram can be thought of as an x-ray of the family.... It gives the physician and the patient a graphic display of the family, including the family's patterns of illness and psychosocial problems."7

Constructing a genogram

Symbols for genograms have been standardized, enabling physicians to build a

SUMMARY

A genogram can help a physician integrate a patient's family information into the medical problem-solving process for better patient care. A genogram allows a physician to obtain medical and psychosocial information from a patient easily and, as a result, to have a better understanding of the context of the presenting symptoms.

RÉSUMÉ

Le génogramme est un outil qui permet au médecin de mieux intégrer les données familiales du patient dans le processus médical de solution de problèmes, donc d'améliorer la qualité des soins. Grâce au génogramme, le médecin peut facilement obtenir les informations médicales et psychosociales, ce qui facilitera la compréhension du contexte des symptômes de présentation.

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picture of family structure quickly and see how it affects a patient's ability to cope with illness or other significant life stressors (*Figure 1*).⁶ A genogram collects and records three generations of family information in six specific categories:

- family structure;
- life cycle stage;
- pattern repetition across generations;
- life events and family functioning;
- relationship patterns and triangles; and
- family balance and imbalance.⁸⁻¹⁰

Physicians wanting to adopt a family systems orientation to patient care will often start with a basic, or "skeletal," genogram. Completing a skeletal genogram with a new patient is frequently an effective way to develop baseline data on who the other family members are, who lives at home, what this patient's context is, and what the family's patterns of illness are. The skeletal genogram takes 5 to 20 minutes to complete and is limited to questions of family structure, significant family events, and history of family health problems. Often a skeletal genogram can be completed while recording a traditional family history. During the first visit with complex families, a genogram is best limited to only two generations, or to only family members with significant health problems. Missing family data can be added later if necessary. Family physicians should consider completing expanded genograms when confronted with patients or families with difficult clinical problems (*Table 1*). Expanded genograms focus on three-generational relationship patterns and usually take 20 to 30 minutes to complete.^{3,7,9}

Benefits

The information recorded in genograms assists family physicians to generate hypotheses about patients' risks for familyrelated illnesses or stressors, such as diabetes, hypertension, coronary heart disease, substance abuse, and depression. A family history of these problems often allows a family physician to generate a hypothesis about a patient's presenting complaint quickly and then develop questions that help in coming to a diagnosis and management plan.⁶ For example, for a patient with gastric complaints, a genogram that indicates a strong family Table 1. Issues for which genograms might be helpful

BIOPSYCHOSOCIAL ISSUES

- Anxiety, depression, or panic attacks
- Substance abuse
- Multiple somatic or vague complaints
- Noncompliance

PSYCHOSOCIAL ISSUES

- History of physical, sexual, or emotional abuse
- Childhood behaviour problems
- Difficult life cycle transition

DOCTOR-PATIENT ISSUES

- Angry or demanding patient
- Patient whom physician dislikes



Case 1. The following case study and accompanying genogram were taken from Dr William Watson's practice.

I first met Nuala on a busy afternoon, after she was referred urgently by her sister who worked as an emergency room nurse at the local hospital. Her sister said only that she was having lots of stomach problems and was under a lot of stress. When I met this 38-year-old woman, she looked depressed and tired with slightly bloodshot eyes.

When asked why she was coming to see me, she said somewhat angrily, "I've been to see three doctors so far and none of them could help me with this stomach problem." I suspected at that point that she might be a difficult patient. She complained of dyspepsia symptoms including heartburn, bloating, and epigastric discomfort for the past 6 weeks. She had no nocturnal pain or melena. She had tried antacids with no relief. When asked what she thought was causing her symptoms, she said she thought it might be an ulcer. I asked her about alcohol intake and she indicated that she had increased from two to three drinks a day. She also stated that she smoked 20 cigarettes a day. At this point she became very impatient, saying she had to get back to work. As her

physical examination was normal, I prescribed an H_2 -receptor blocker and asked her to return in 2 weeks.

When she returned I asked her whether she had any stressors in her life. She acknowledged it had been difficult for her recently. She also stated that her stomach felt much better, and she seemed less angry. I asked, "Do you think there could be a connection between your stomach problems and some of the stresses in your life?" She then related how she had broken up with her boyfriend 6 weeks ago and had subsequently increased her alcohol intake. She appeared upset about this and seemed on the verge of tears. She went on to talk about how stressful her work had been lately. With the information on excessive alcohol intake, dyspepsia, and smoking coupled with a demanding, stressed patient, I decided to construct a genogram to gain a better understanding of family health issues and relationships.

Nuala talked about her alcoholic father, whom she hated for constantly berating her mother and herself. She denied any physical or sexual abuse. She described her mother as meek and passive. Both parents died several years ago. "Well, Nuala," I said, "Sometimes these experiences can affect us in ways that we don't understand. It seems that people who have lived in families like yours often have pains that doctors cannot completely fix. Perhaps your pain is somehow connected to your past."¹¹

"Could be," she said.

I then completed her examination and reviewed her blood test results, which showed a mild elevation of liver enzymes. I suggested that she would have to stop her excessive alcohol intake if she ever wanted to get better. I mentioned some options for treatment and suggested she return in 3 weeks for a follow-up visit.

On the third visit, she looked more at ease and healthier. She said she had thought a lot about what we discussed on the last visit, especially with regard to her family. She recognized some patterns of alcohol overuse, especially in her grandparents, father, and brother. She thought that she would seriously like to explore alcohol treatment programs and also obtain counseling for her stress problems. history of alcoholism would lead to a high index of suspicion about the possible role of alcohol. Genograms can also be effective for evaluating the problems of patients with multiple vague complaints.

By doing a genogram with Nuala (Figure 2), I was able to enhance our rapport. Often demanding, difficult, and angry patients, as well as patients whom physicians dislike, respond well to being involved in completing their genograms. The genogram process frequently lets patients and physicians escape from what feels like an unproductive relationship. Patients interpret the genogram process as an act of being listened to and cared about as people.

The process permits physicians to learn more about patients' life experiences, and as a result, to be more empathic to patients' needs and behaviours (*Figure 3*). The new insight and empathy can in turn be used to facilitate a more effective and satisfying doctor-patient relationship for both patient and physician. The increased rapport often means patients are more open and accepting of both medical and nonmedical referrals.

Completing a genogram also communicates a message to a patient that a family physician is interested in addressing family and psychosocial problems as part of ongoing health care. Many patients and physicians find the genogram a nonthreatening way of inquiring about potentially sensitive issues, such as sexual abuse and alcoholism.^{7,12}

The visual impact of genograms can also be useful for both physicians and patients in determining whether presenting medical problems are connected to family or psychosocial issues. Family physicians can quickly look at complex medical and relational genograms and understand how family information could affect patients' presenting complaints. On the other hand, patients are often struck by recurring patterns in their families, such as alcoholism and cardiac problems. This information can influence patients' awareness, and foster a sense of urgency to deal with and make decisions about complying with suggested medical regimens (Table 28).9

Potential roadblocks to using genograms

The main concern expressed by family physicians is the length of time it takes to

complete a genogram. Some family physicians consider genograms to be impractical in a busy office practice because they increase the amount of time spent on the family history section of the office visit.¹³ Family physicians who have successfully integrated genograms into their practices acknowledge that the genogram process increases the length of visits. However, they also believe that the extra time required is often well spent building patient rapport or providing potentially useful family information that can be used to address a patient's concerns during a particular office visit or at some future visit.

It is also important to note that a genogram is rarely completed in one office visit and is often constructed with a patient over time. For example, many physicians construct a skeletal genogram when they first meet a patient, and then expand it when indicated. Often, the genogram is kept in a special place in the chart (eg, attached to the back) so that it can be easily located, and therefore referred to and built upon repeatedly.

The other criticism of genograms is that, to date, research has not proven the clinical utility of this family assessment tool.^{10,12-17} However, studies have shown that the genogram process captures more psychosocial and biomedical information than traditional history taking.^{14,15} The results of these research studies should not discourage family physicians from using genograms (only 10% to 20% of interventions used in medicine are supported by randomized control trials¹⁸). Future genogram research should focus on examining whether there is value in having a genogram as baseline information for every patient's chart and what specific patients, or particular patient problems, could benefit from genograms.¹⁹

Conclusion

A genogram is a practical clinical tool that fosters a family systems approach to patient care. Genograms give family physicians a quick, integrated picture of patients' biomedical and psychosocial histories. Genograms allow family physicians to diagnose and manage difficult biopsychosocial clinical problems that often can not be addressed using the traditional biomedical model. Genograms also assist

Table 2. Benefits of genograms

SYSTEMATIC MEDICAL RECORD KEEPING

- Easily read, graphic format
 Identifies generational, biomedical, and psychosocial patterns
- Assesses connections between family context and illness

RAPPORT BUILDING

- Nonthreatening way to obtain emotionally laden information
- Increases trust and patient compliance
- Demonstrates interest in patient and significant others
- Reframes presenting problem for patients

MEDICAL MANAGEMENT AND PREVENTIVE MEDICINE

- Highlights supports and obstacles to compliance
- Identifies life events that could affect diagnosis and management
- Identifies illness patterns; facilitates patient education

Adapted from McGoldrick.8





Case 2. This case study and genogram were drawn from St Michael's Hospital Family Practice Unit.

Peter T. was a 28-year-old married man of Portuguese descent who had been a patient of mine for about 2 years. My previous contact with him had been minimal, consisting of an annual physical examination and a couple of visits regarding minor infections.

When Peter came to see me at the clinic, he was obviously agitated and distressed. He reported that he had been having some chest pain associated with dyspnea during the past 10 days, and that he had had to leave work and go home early on a couple of occasions. As Peter talked about this, he was extremely anxious and shaky. When I asked him what he thought was going on, he initially said, "I don't know; that's why I came to see you." However as I persisted in trying to understand his concerns and fears, he indicated that he was worried that he might have some problem with his heart.

While I did a physical examination, I inquired about the various risk factors associated with heart disease, and discovered only one factor in his case (ie, his father had been diagnosed with angina about 4 years earlier). The examination revealed minimal tenderness along the left parasternal region with no other positive findings. I ordered a chest x-ray examination and did a cardiogram in the office (which was normal).

Because I wondered whether Peter's symptoms were related to stress, I inquired about any recent changes or pressure in his life. He told me of significant changes in his work situation: some of his senior colleagues had left the company a month ago to establish their own business, and they wanted him to join them. He had been ambivalent about this, but finally decided to remain with his company. Consequently he now had a more senior position with his company and felt that expectations of him were higher.

I established a working diagnosis of costochondritis, prescribed some coated aspirin, and suggested that Peter return to the clinic in 1 week. Three days after the initial visit Peter phoned me in a very agitated state, saying that his symptoms had not improved at all and that he in fact had to leave work early that day due to his chest pain. I tried to reassure him by telling him that his chest x-ray examination results were normal and that there were no indications of any serious physical health problems.

When Peter came in for a follow-up appointment, he was again very anxious and reported no significant change in his presenting problems. I explained to Peter that often many factors contribute to symptoms such as his, and that to understand these more clearly I needed to obtain more information.

I proceeded to construct his family genogram (Figure 3). As I asked Peter questions about his own family, his responses were quite matter-of-fact; however, in contrast, he was cautious and apprehensive when talking about his wife's family. When I commented on this observation, he indicated in a sad tone that it was difficult for him to talk about it. When I suggested that often the most difficult things to discuss are the most important ones to talk about, he became tearful and began to express how much he missed his wife's mother.

She had died the previous year after a yearlong battle with cancer. Peter stated that he was very close to her and in fact, "she was more like a mother to me." As we discussed this further, it became apparent that Peter's grief regarding this loss was unresolved, as he had tried to remain' strong for his wife and her family at the time of the death. In addition, Peter and his wife took on increased responsibilities for the extended family after this death, demands that were difficult and anxietyprovoking for them.

When I asked Peter if there were any similarities or parallels between that situation and the recent changes at his workplace, he was able to identify that in both situations he had lost people about whom he had cared and on whom he had depended. I also indicated to Peter that he was likely experiencing an anniversary reaction to his mother-in-law's death, which was a normal and healthy part of his grieving process.

I explained to Peter that unresolved grief and other stressors in his life, combined with his anniversary reaction, were likely the primary factors contributing to his current symptoms. I suggested referral to a social worker for counseling, and Peter accepted this saying, "Talking about these things with you today has helped me to see that they still bother me." physicians to establish rapport with patients and to have empathy with, and understanding of, patients' circumstances, especially when dealing with difficult patients.

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References

- Campbell T. Family interventions in physical health. In: Sawa R, editor. *Family health care*. Newbury Park, Calif: Sage Publications, 1992:213-26.
- Barrier D, Christie-Seely J. The presenting problems of families and family assessment. In: Christie-Seely J, editor. Working with the family in primary care: a systems approach to health care and illness. New York: Praeger, 1984:201-13.
- Mullins H, Christie-Seely J. Collecting and recording family data – the genogram. In: Christie-Seely J, editor. Working with the family in primary care: a systems approach to health care and illness. New York: Praeger, 1984:179-91.

4. Barrier D, Bybel M, Christie-Seely J,

Whittaker Y. PRACTICE – a family assessment tool for family medicine. In: Christie-Seely J, editor. Working with the family in primary care: a systems approach to health care and illness. New York: Praeger, 1984:214-34.

- Doherty W, Colangelo N. The family FIRO model: a modest proposal for organizing family treatment. *J Marital Fam Ther* 1984;10:19-29.
- Like R, Rogers J, McGoldrick M. Reading and interpreting genograms: a systematic approach. *J Fam Pract* 1988;26(4):407-12.
- 7. Crouch M, Davis T. Using the genogram (family tree) clinically. In: Crouch M, editor. *The family in medical practice: a family systems primer.* New York: Springer-Verlag, 1987:174-92.
- 8. McGoldrick M. Genograms in family assessment. New York: Norton Co, 1985:39-124.
- Crouch M, Christie-Seely J. The (Roent) genogram of medicine; or using the family genogram in patient care. *Med Encounter* 1991; 8(1):8-10.
- Rohrbaugh M, Rogers J, McGoldrick M. How do experts read family genograms? *Fam Systems Med* 1992;10(1):79-89.
- 11. Radomsky NA. Creating new meaning through dialogue. A case story of chronic pain

and sexual abuse. *Can Fam Physician* 1992; 38:2864-7.

- 12. Rogers J, Durkin M. The semi-structured genogram interview. I. Protocol. II.
- Evaluation. *Fam Systems Med* 1984;2(2):176-87. 13. Rogers J, Rohrbaugh M. The SAGE-PAGE trial: do family genograms make a difference? *J Am Board Fam Pract* 1991;4(5):319-26.
- 14. Rogers J, Cohn P. Impact of a screening family genogram on first encounters in primary care. *Fam Pract* 1987;4(4):291-301.
- Rogers J, Cohn P. The genogram's contribution to family-centred care. *NJ Med* , 1988;85(4):300-6.
- Rogers J, Holloway R. Completion rate and reliability of the self-administered genogram (SAGE). *Fam Pract* 1990;7(2):149-51.
- Rogers J, Rohrbaugh M, McGoldrick M. Can experts predict health risk from family genograms? *Fam Med* 1992;24(3):209-15.
- Becker L. Issues in the adoption of a family approach by practising family physicians. In: Sawa R, editor. *Family health care*. Newbury Park, Calif: Sage Publications, 1992:189-99.
- Campbell T. Research reports: family interventions in family practice. *Fam Systems Med* 1992;10(2):227-9.

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