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## Significance of night sweats

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The decline in clinical research has been a cause of concern.<sup>1,3</sup> It is encouraging, therefore, to read the cross-sectional study of night sweats by Mold and colleagues in this issue of *JFP*. Their study adds to the existing knowledge base of night sweats and raises many questions for further research. In the multivariate model, only 3 factors were associated with pure night sweats: panic attacks (in all patients), sleep disorders (in men and older patients), and hot flashes (in women). The types of sleep disorder are not specified. A very high prevalence of night sweats from all causes was found in this population, although only a minority had mentioned them to their physician.

These findings raise questions about the natural history and clinical significance of night sweats, their predictive value for disorders such as panic attacks, and the stimulus that brings patients to consult their family physician — what Feinstein<sup>4</sup> called the iatrogenic stimulus.

A link between night sweats and panic attacks is very plausible, given that both may be produced by a surge of activity in the autonomic nervous system. A pounding heart, sweating, and trembling are the 3 most common symptoms of panic attacks, hot flashes being the least frequent.<sup>5</sup> The *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)* requires a minimum of 4 symptoms (of a list of 13) for a diagnosis of panic attacks, and the attacks must have a sudden onset and reach a peak within 10 minutes. Recurrent attacks, with behavior change or anxiety and apprehension between attacks, are required for a diagnosis of panic disorder. The *DSM-IV* does not discuss nocturnal attacks, but at least one study has described them as common.<sup>5</sup> Nocturnal panic attacks may be misdiagnosed as episodes of sleep apnea.<sup>5</sup> Very little is known about the natural history of panic disorder. The study providing most of the data for the *DSM-IV* followed cases for only 1 year.<sup>6</sup>

### Effectiveness of cohort studies

A clinical descriptive study based on the findings by Mold and colleagues could throw much light on the natural history of night sweats and associated con-

ditions. Although control groups can be part of descriptive clinical research, many of our questions can be answered by cohort studies without controls. The comparison groups are clusters of patients in the cohort with distinct clinical features and outcomes, as described by Feinstein.<sup>4</sup> With chronic diseases, the follow-up period must be long. In rheumatology, Pincus<sup>7</sup> has shown that 10-year cohort studies can provide information on outcomes and drug effectiveness that cannot be obtained from randomized controlled trials (99% of randomized controlled trials last for less than 3 years). Family physicians are well placed to do this kind of long-term research. We see patients who never reach specialty clinics. For any disorder, we see the whole range from the mildest to the most severe and, since our relationships with patients tend to be long term, we can provide important contextual details. Because we see the earliest stages of disease we can describe the whole natural history, including the circumstances surrounding the onset.

### Research issues

There are, however, problems we need to address. A cohort must be truly representative of the family practice population. Experience with network studies suggests that selection bias is difficult to avoid. In one study by 22 family physicians<sup>8</sup> there were wide differences between the number of patients enrolled by different physicians — too wide to be explained by demographic differences. Basing research assistants in practices can improve selection, but this is an expensive option if it has to be done over a long period. Keeping a cohort together for 5 years or more requires a strong commitment from the investigators. Tracing techniques are available, but network studies have tended to be of short duration and even then may have losses to follow up. With large networks it is almost inevitable that the motivation of members will vary. Long-term studies of common conditions, however, can be done by small groups working closely together or even by a single

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investigator. Finally, a clinical study may require some personal preparation on the part of the clinical observer. Standardized questionnaires can be used, but for some conditions the clinicians' own observations are necessary and their validity is important. When Livingston<sup>9</sup> embarked on his study of neck and back pain, he honed his examination skills by studying with physicians and other practitioners who had an interest in musculoskeletal disorders.

### Healing versus observing

As clinical scientists we are both healers and

observers. We cannot, therefore, avoid being involved, as well as detached. This is so in all human research and, as primatologists have shown, involvement is not a weakness. There are kinds of knowledge that can only be gained by participant observers. As clinicians and healers we are accustomed to balancing involvement and detachment. The key is always to know where we are on the scale of these complementary polarities.

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#### REFERENCES

1. Schechter, AN. The crisis in clinical research. *JAMA* 1998; 16:1440-2.
2. McWhinney IR. Why are we doing so little clinical research? Part 1: clinical descriptive research. *Can Fam Physician* 2001 47:1701-2.
3. McWhinney IR. Why are we doing so little clinical research? Part 2: why clinical research is neglected. *Can Fam Physician* 2001 47:1944-6. Also available at [www.uwo.ca/fammed/ian](http://www.uwo.ca/fammed/ian).
4. Feinstein AR. Clinical judgment. Baltimore, Md: Williams and Wilkins, 74-7.
5. Rathus JH, Asnis GM. Panic disorder: phenomenology and differential diagnosis. In: Asnis GM, van Praag HM, eds. *Panic disorder: clinical, biological and treatment aspects*. New York, NY: John Wiley & Sons, 1995.
6. Eaton WW, Keyl PM. The epidemiology of panic. In: Asnis GM, Van Praag HM, eds. *Panic disorder: clinical, biological and treatment aspects*. New York: John Wiley & Sons, 1995.
7. Pincus T. Are randomized controlled clinical trials always the best answer? Analyzing long-term outcomes of clinical care without randomized controlled clinical trials: the consecutive patient questionnaire database. *Advances: J Mind-Body Health* 1997; 13:3-32.
8. Headache Study Group of the University of Western Ontario. Predictors of outcome in headache patients presenting to family physicians - a one year prospective study. *Headache* 1986; 26:285-94.
9. Livingston M. *Common whiplash injury*. Springfield, Ill: Charles C Thomas, 1999.

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