The meaning of night sweats

I.R. McWhinney, OC, MD, FRCGP, FCFP

The decline in clinical research has been a cause of concern.\(^1-3\) It is encouraging, therefore, to read the cross-sectional study of night sweats by Mold et al.\(^4\) Their study adds to existing knowledge of night sweats and raises many questions for further research. In the multivariate model, only three factors were associated with pure night sweats (those without daytime sweating): panic attacks (all patients), sleep disorders (men and older patients), and hot flashes (women). Types of sleep disorders are unspecified. A very high prevalence of night sweats from all causes was found, though only a few patients had mentioned the sweats to their physicians.

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 physicians—what Feinstein called the iatrogenic stimulus.\(^5\)

A link between night sweats and panic attacks is plausible, given that both can be produced by a surge of activity in the autonomic nervous system. A pounding heart, sweating, and trembling are the three most common symptoms of panic attacks; hot flashes are the least common.\(^6\) The fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) requires a minimum of four of a list of 13 symptoms for diagnosis of panic attacks, and attacks must have sudden onset and reach a peak in 10 minutes. Recurrent attacks, with behaviour change or anxiety and apprehension between attacks, are required for a diagnosis of panic disorder. The DSM-IV does not discuss nocturnal attacks, but a few studies have described them as common.\(^7\) Nocturnal panic attacks are sometimes misdiagnosed as episodes of sleep apnea.\(^7\) 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.\(^7\)

A clinical descriptive study based on the findings of Mold et al.\(^4\) could throw much light on the natural history of night sweats and associated conditions. Although control groups can be part of descriptive clinical research, many questions can be answered by cohort studies without controls. The comparison groups can be clusters of patients in the cohort with distinct clinical features and outcomes, as described by Feinstein.\(^5\) With chronic diseases, the follow-up period must be long. In rheumatology, Pincus\(^8\) has shown that 10-year cohort studies can provide information on outcome and drug effectiveness that cannot be obtained from randomized controlled trials, 99% of which last for less than 3 years. Family physicians are well placed to do this kind of research. We see patients who never reach specialty clinics. We see the whole range of any disorder from the mildest to the most severe cases.
and, because 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 full natural history, including the circumstances surrounding onset.

Some problems, however, must be addressed. 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, many differences between the patients enrolled by various physicians were too wide to be explained by demographics. Basing research assistants in practices can improve selection, but is expensive if it has to be done over a long period. Keeping a cohort together for 5 years or more requires a strong commitment from investigators. Tracing techniques are available, but network studies have tended to be of short duration and even then often have losses to follow up. In large networks it is almost inevitable that members’ motivation will vary. Long-term studies of common conditions, however, can be done by small groups working closely together or even by a single investigator. Finally, a clinical study might require some personal preparation on the part of the clinical observer. Standardized questionnaires can be used, but for some conditions, clinicians’ own observations must be made, and their validity is important. When Livingston 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.

As clinical scientists, we are both observers of and healers of our patients. We cannot, therefore, avoid being involved as well as detached. This is so in all human research; as primatologists have shown, involvement is not a weakness. There are kinds of knowledge that can be gained only 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.

Dr McWhinney is Professor Emeritus in the Department of Family Medicine at The University of Western Ontario in London.

Acknowledgment

I thank Joanna L. Asuncion for preparing the manuscript and the Canadian Library of Family Medicine for bibliographic assistance.

References