

# The Symptom Intensity Scale, Fibromyalgia, and the Meaning of Fibromyalgia-like Symptoms. A Review



The article by Wolfe and Rasker in this issue of *The Journal*<sup>1</sup> would be clearer if they dropped any reference to the terms “fibromyalgia” or “fibromyalgia-like.” This paper is about chronic widespread pain, fatigue, and other symptoms, as found in 25,417 patients — nonspecific symptoms that can be found in many diseases. They do not have access to data (counts of specifically defined “tender points”) that would allow them to apply the 1990 classification criteria for “fibromyalgia.” Their data derive from patients referred from (primarily) community rheumatologists for trials of new therapeutic agents. The referring physicians supply a diagnosis, but the diagnosis could be in error, or more commonly there will be additional diagnoses, or other factors contributing to the symptoms and confounding assessments of therapy. The evidence is that some of these other disease(s) may be disabling or mortal.

To recognize “fibromyalgia-like” participants, they have evolved criteria that lack specificity. Let me review the evidence, some of which was gathered by these authors. In the 1990 Criteria Study<sup>2</sup> (their reference 4), widespread pain (carefully defined and different from “pain all over”) was present in 97.6% of those classified as “fibromyalgia,” but specificity (without tender points) was low, at 30.9% (the chosen controls also had pain). The 1990 criteria as evolved were only 81% specific. Earlier criteria sets were up to 95% specific<sup>3</sup>, but were rejected by the committee as lacking sensitivity; the label then used in practice was being applied more broadly. However, “only 1.7% of patients with fibromyalgia who meet the tender point criteria will be misclassified by the widespread pain criterion.” “Various combinations of tender point levels and groups of symptoms were tested... but none proved to be as sensitive, specific, and accurate as the combination of widespread pain and 11 of 18 tender points.”

More recently, Katz and Wolfe<sup>4</sup> compared the sensitivity and specificity of a diagnosis of fibromyalgia using 3 dif-

ferent criteria sets: the 1990 criteria, the clinical criteria of a rheumatologist with long experience in this field, and the “proposed survey criteria” (their reference 5). Of 206 cases studied, 120 were labeled fibromyalgia by at least one method. Only 60 met the 1990 criteria, and 58 of these were also recognized by one or both other methods (specificity 58 of 60, or 97%). The survey and clinician’s labels were in agreement in only 66 of 118 cases (56%). Of 83 labeled by the “survey criteria,” only 43 met the American College of Rheumatology criteria. The label was almost as likely to be incorrect as appropriate.

They mention the London (Canada) community-based studies (their reference 36). A more relevant reference would be the companion paper<sup>5</sup>: 100 patients meeting tender point criteria were compared with 76 controls who fulfilled the widespread pain criterion but had fewer tender points, and also less pain and other associated symptoms. Therefore, in this study the specificity of the widespread pain criterion was 100/176, or 57%.

In an early study, the Manchester group<sup>6</sup> reported on the relation of tender points to symptoms in 177 participants (their reference 13). They found “Most subjects with chronic widespread pain, however, had fewer than 11 tender points (27/45; 60%). Two people with counts of 11 or more were in the group reporting no pain. Mean symptom scores for depression, fatigue, and sleep problems increased as the tender point count rose (p value for trend < 0.001). These trends were independent of pain complaints.”

Disagreement is likely to be higher about the presence of fibromyalgia in patients with other diseases associated with multiple-site pain, such as systemic lupus erythematosus, rheumatoid arthritis, or osteoarthritis, the primary reason for inclusion in the National Data Bank for Rheumatic Diseases.

In Table 1 we are told that 20.8% of their subjects (about 5287) met “survey criteria” for “fibromyalgia.” The study is

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therefore mostly about their “symptom intensity scale” and its correlates. The confounding of their other research studies by pain of origins other than inflammation or bone rubbing on bone is a topic of great concern, but not relevant to this review or this study.

More relevant to their report are large-scale studies that they mention (their references 13-17) but do not discuss. The Manchester group later expanded on the earlier studies, and reported on the risk of cancer and cancer mortality in 956 subjects with widespread body pain, 3061 with regional pain, in a population of 6331 not known to have cancer at entry into an 8-year study. There were a total of 395 first malignancies recorded during followup. In comparison with subjects reporting no pain, those with regional pain and widespread pain experienced an excess incidence of cancer during the followup period<sup>7</sup>.

Even broader in scope are the series of Whitehall and Whitehall II studies<sup>8</sup> (and many others). The Whitehall study of British civil servants had begun in 1967, and showed a steep inverse association between social class, as assessed by grade of employment, and morbidity and mortality from a wide range of diseases, including back pain, “psychological” problems, coronary artery disease, and the “metabolic syndrome”<sup>9</sup>. The effects gave rise to an extensive literature about a “demand/support” model, with elaborations that have added other factors, including inadequate sleep. Alternatively, the evidence is also consistent with a socioeconomic model, for which Wolfe and Rasker used income, education, and minority status as surrogates. The diagnoses included in their Table 1 and Figure 4 include many consistent with features of the “metabolic syndrome,” and the relationships between their Symptom Intensity Scale and the risks of comorbidity, hospitalization, and death are strikingly similar to those relating the same clinical features and civil service grade in the Whitehall (and numerous other) studies.

Perhaps the depressing comment is this: in none of the studies cited here are there fully satisfactory explanations for the observed relationships, or accurate diagnoses leading to effective remedies. In the study under review, there are again no data helpful in understanding and treating individual patients with “fibromyalgia” or “fibromyalgia-like” syn-

dromes. But their extensive longterm studies add needed support and perspective to the observations of the Manchester and Whitehall initiatives.

We are thankful that they did not use the word “somatization.” Now, if they could avoid the profession’s temptation to use other Greek and Latin hybrids to label conditions that are incompletely understood, we could concentrate on the implications of their data. We can discuss “fibromyalgia” at another time.

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