

## CHAPTER 6

### CONCLUSIONS

It can be said that the results found in this study for individual symptoms of fibromyalgia largely conform to that of other published findings. Although early fibromyalgia onset (such as in late teens) is known to occur, and some surveys have shown cases where fibromyalgia has first been diagnosed in patients in their seventies, it would seem fair to describe fibromyalgia as a disease which predominates in middle age (40-49 yrs of age). Although the present study is too small to make any assumptions to this effect, and the patients' ages were largely determined by availability through a fibromyalgia clinic, the mean age of the study group is in agreement with the idea of fibromyalgia as a disease of middle age. It is generally known that a strong female predominance exists in fibromyalgia and that the symptoms of male fibromyalgia sufferers, in general, do not have a good fit with the typical profile generally associated with fibromyalgia. This is supported by the results of this study where only two men were available with one of them exhibiting a completely atypical psychoneurological profile. As would be expected, many of the patients were unable to hold down full time work. In virtually all patients, co-morbidity was found between fibromyalgia and other syndromes.

The majority of fibromyalgia sufferers in this study perceive their lives to be riddled by adverse events and some associate traumatic events with the onset of their disease. High frequency of reported traumatic events coincides with a high prevalence of allergies. Stress vulnerability appear to be high and most individuals claim to be particularly sensitive to a wide range of environmental factors. These factors were alleged to either worsen or ameliorate their fibromyalgia symptoms, but no pattern could be distinguished as to the specific effects of individual factors on fibromyalgia symptoms. Depression and anxiety formed part of the overall profile of the fibromyalgia sufferers and correlated with the severity of the fibromyalgia symptoms.

The functioning of both major stress axes would appear to be abnormal, with high cortisol levels and an inability to respond with the appropriate autonomic nervous system stress reaction to either orthostatic or emotional stress. Heart rate variability, which can be suppressed in the case of either physical or serious psychological disorders, was

significantly lower than normal, but the use of antidepressants could have contributed to this. Nevertheless, whether lower heart rate variability resulted from physical disability, psychological factors, medication, or a combination of these factors, it is present, and in turn has negative implications for the physical well-being of the patients.

The so-called right-brain thinking is the style preferred by the majority of patients and it would appear that most of them prefer emotion-based coping mechanisms and emotion-based decision taking. Stress causes a further shift towards emotion-based thinking in these patients. Almost all fibromyalgia patients in this study display insecure attachment styles, a fact that is compatible with their perception of early lives riddled with adverse events, and perhaps with a strongly emotion-influenced, rather than logical/analytical preferred way of thinking.

In summary it can be said that this work presents a psychoneurological profile of the typical fibromyalgia patient – a preliminary profile that should be further investigated and refined on larger study groups. In addition, it provides pointers for further study. For example, correlations between early experiences, adverse incidents and the psychoneurological profile derived from this study give some indications of possible causes-and-effects but should at this stage perhaps only be seen as indicators for further studies on larger population groups. It can, for instance, be speculated whether the natural emotion-based style of thinking predispose one to the development of fibromyalgia or whether early life experiences with the development of insecure attachment predispose one to both emotion-based thinking and the development of fibromyalgia. Pointers for further research can also be found in the model of probable contributors to specific aspects of the syndrome status (dependent variables versus independent variables). Another question derived from this work that may be of interest to study, is whether fibromyalgia patients have a lowered ability than the general population to grow into secure attachment behaviour.

In view of the psychological influences on heart rate variability, autonomic function and HPA-axis functioning on the one hand, and the influence of these factors on pain sensitivity and general well-being on the other, it is tempting to speculate that psychotherapy aimed at adjusting coping mechanisms, and improving attachment behaviour, could perhaps have a positive influence on the well-being of fibromyalgia sufferers.