WHAT KINDS OF PEOPLE ARE AT HIGH RISK TO DEVELOP CHRONIC STRESS-RELATED SYMPTOMS?

Sometimes it is more important to know what kind of patient has a disease than what kind of disease the patient has.
—Sir William Osler

Every affection of the mind that is attended with either pain or pleasure, hope, or fear is the cause of an agitation whose influence extends to the heart.
—Sir William Harvey

Exercitatio Anatomica de Motu Cordis et Sanguinis in Animalibus, 1628

Sir William Osler had to rely on intuition to identify subject features that could potentiate or attenuate either the symptoms or the etiology, or both, of a disease. The first goal of the present chapter is to specify a promising set of empirically identifiable individual differences and also a set of situational events that increase the risk of developing stress-related physical symptoms. The second goal is to present evidence from my clinical practice and the research literature to support this model of the patient at high risk to develop chronic stress-related illness. The third goal of this chapter is tentatively to suggest some procedures to quantify these subject dimensions and these situational conditions. The present model (Wickramasekera, 1979, 1980b,d, 1983) is based on clinical observations in an increasingly specialized clinical practice, theoretical spec-

An earlier version of this chapter was first presented at the Biofeedback Society of America, 1979, San Diego, and the International Stress and Tension-Control Society, England, 1983.

Wickramasekera (1988)
WHAT IS THE PLACEBO EFFECT AND HOW DOES IT WORK?

You should treat as many patients as possible with
the new drugs while they still have
the power to heal.
—Trousseau (1854)

What he [Bernheim] called suggestibility is
nothing else than the tendency to
transference . . . we have to admit that we have
only abandoned hypnosis in our methods to
discover suggestion again in
the shape of transference.
—Freud (1938)

The Placebo Effect

Until the twentieth century, physicians had not much more than the
placebo effect to offer their patients (Benson & Epstein, 1975). In spite of
this situation and the fact that they subjected their patients to purging,
leeching, puncturing, cutting, heating, and freezing, physicians generally occupied respected social positions. This paradox is accounted for
by the potency of the placebo effect in the history of medicine. The

A preliminary version of this chapter was first presented at the San Diego Biomedical
Symposium (invited paper), San Diego, California, November 1977. Later it was presented
at a symposium on Non-Specific Effects in Biofeedback, Biofeedback Society of America,
Albuquerque, New Mexico, February 1978. It has been published in abbreviated form in
Journal of Clinical Engineering, 1977. Additionally, another version was published as a
chapter in Leonard White, Bernard Tursky, and Gary E. Schwartz (Eds.), Placebo: Theory
Research and Mechanisms.
THE DIAGNOSIS AND PSYCHOPHYSIOLOGICAL MANAGEMENT OF CHRONIC PAIN AND ANXIETY

In many patients, chronic pain, I suspect, is an illness generated by interpersonal or social factors and is only distantly related to acute pain. It should not surprise us, then, that those therapies most effective for acute pain, such as rest or narcotics or neuro-muscular relaxants, are, in fact, detrimental to the chronic pain patient. I believe that the problems of chronic pain can only be solved if an approach to human illness broader than the biomedical model is developed by both researchers and clinicians.

—John D. Loeser, M.D.
Professor of Neurosurgery
University of Washington, 1980

Pain syndrome patients, in their desperate search for the elusive cure, often chase “windmills” and convince their doctors to perform a myriad of invasive tests and procedures. As a result of their pain behaviors, many experience iatrogenic complications, suffering, and disability.

—Gerald M. Aronoff, M.D.
Editor, The Clinical Journal of Pain, 1985

Wickramaschera (1988)
Acute and Chronic Pain

There is a growing awareness that the parameters of acute and chronic pain vary widely. Acute pain is easy to localize and recognize, and may, in fact, be mediated through different pathways from chronic pain (Sweet, 1981). These pathways include the (a) dorsal-column post synaptic system (DCPS), (b) spinocervical tract (SCT) and (c) neospinothalamic tract (NSTT), which are all rapidly conducting systems suited to convey phasic information (Melzack & Dennis, 1978). Acute pain is marked by an increase in myotonia, heart rate, blood pressure, skin conductance, and peripheral vasoconstriction together with other indicators of sympathetic activation. From a psychological or behavioral viewpoint we are seeing the same signs that indicate fear or anxiety. Chronic pain has been defined as any pain that has persisted for over 6 months and has not responded to standard medical management, including drugs, physical therapy, and surgery (Sternbach, 1974). Bonica, a pioneer in the study and therapy of chronic pain, defines it as “pain which persists beyond the usual course of an acute disease or a reasonable time for an injury to heal, or it recurs at intervals of months or years (Bonica, 1980). Studies by Johnson (1978) and Barton, Haight, Marsland, and Temple (1976) reveal that 75% of patients who complain of recent onset back pain experience spontaneous remission within 3 months. Chronic back pain is one of the most common types of chronic pain, and 80% of the population is affected by back pain at some point in their lives (Flor & Turk, 1984). Johnson (1978) found that more than one half of the 25% of patients who became chronic pain cases were ultimately medically judged to have permanent disability (total or partial). In the case of the permanently disabled people the incidence of clear physical findings was low. If disc disease is included as a physical finding, nearly 78.3% of the cases had no physical finding. If disc disease is excluded, 93.1% of the cases had no physical findings. Fords (1976) and others (Flor & Turk, 1984) concluded from the study cited that the relationship between chronic pain complaints and physical findings is “loose virtually to the point of obscurity.” Radiographic imaging techniques can document a degenerative process in the spine, but it is recognized that the correlation between clinical symptomatology and degenerative changes is low. For example, a recent study (Wiesel, Feffer, & Tsao, 1984) showed that 50% of asymptomatic subjects over the age of 40 have positive CAT scans, suggesting the need for surgical intervention. Schmorl and Junghanns (1932), in classic autopsy studies ($N = 4,353$), showed that degenerative changes in the spine are present in 50% of the population by age 50, 70% by age 60, and in 90% by age 70 years. Hult
CROCKS, QUACKS, AND SHRINKS

Pain syndrome patients, in their desperate search for the elusive cure, often chase "windmills" and convince their doctors to perform a myriad of invasive tests and procedures. As a result of their pain behaviors, many experience iatrogenic complications, suffering and disability. Those involved in their treatment must find improved ways to detect this highly susceptible population, establish a therapeutic alliance and short-circuit their pain careers... Do the health care providers truly get to know the patients and their psychosocial dilemmas which, as studies indicate, often contribute to or cause the medical complaints? Or is this lack of rapport an unavoidable consequence of the increasing depersonalization within the medical system? The new antiquated model of the physician-healer who visited the patient's home has been replaced by the all too frequent scenario of the patient who takes a tranquilizer before going to the physician's office.

—G. M. Aronoff, M.D.,
The Clinical Journal of Pain, 1985

In 1950, health care costs accounted for 4.6% of the gross national product. In 1985, health care costs accounted for 10.8% of the gross national product (Cohen, 1985). Sophisticated biomedical technology and expensive medical tests have contributed to this cost escalation (Culliton, 1978). This massive increase in health care costs appears to have occurred without a comparable increase in health status (DeLeon & Vandenbergos, 1983) of United States citizens as measured by morbidity, mortality, longevity, and so on.

It appears that another major contributor to this escalating cost is the patient who presents somatic complaints without physical findings