

Virtual Mentor

American Medical Association Journal of Ethics
May 2009, Volume 11, Number 5: 383-386.

CLINICAL PEARL

What Is the Consensus about Managing Health Risks Associated with Type-A Personality?

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Strive not to be a success, but rather to be of value.

—Albert Einstein

Anyone who has been accepted into medical school has survived one of the most competitive academic admission processes—a process that is only an introduction to further competition. What effect does this continuous competition have on the health of medical students and residents? Mindful of the dictum, “Physician heal thyself,” how well is the medical profession modeling self-awareness and healthy practices? In particular, what measures should a profession rife with driven, competitive personality types take to safeguard the health of those providing health care?

There are no simple answers to these questions. A model commonly used to study competitive behavior is that of the type-A personality. Numerous studies, for example, have examined the correlation between type-A personality disorder and cardiac disease. Although type-A personality is not an official psychiatric diagnosis, at least not in the most current edition of the *Diagnostic and Statistical Manual of Mental Disorders*, it is described by characteristics such as intolerance, impatience, hostility, and competitive behavior [1].

An obvious presupposition of studying the correlation between type-A personality and cardiac pathology is that increased psychological stress somehow translates into increased physiological stress. One theory of how this cardiovascular pathology may occur is that, in order to cope with higher levels of perceived stress, those with type-A personality tend to have habits that are more toxic to the cardiovascular system, such as smoking and other unhealthy lifestyle choices [2]. Another theory is that prolonged, increased sympathetic nervous system activity contributes to pathologic cardiac effects [3]. Still another theory proposes a relationship between debrisoquine hydroxylation (CYP2D6) capacity and type-A personality, postulating that differences in metabolism of biogenic neurotransmitter amines in the central nervous system may account for significant differences in personalities [4].

A review of these studies shows mixed conclusions [5]. Some illustrate a correlation between type-A personality and coronary risk factors including high cholesterol and blood pressure, smoking, and increased body-mass index, but others find no significant relationship between the two. A prospective study of 58 male medical students found a significantly greater increase in heart rate in the type-A behavior

subjects than in type-B, which, in combination with a rise in systolic blood pressure in both groups, resulted in a statistically significant increase in the estimated myocardial demand for oxygen in the context of exam-related stress [6]. Several other studies, however, have identified no significant change in heart rate, blood pressure, or other study parameters including muscle-sympathetic nerve activity between type-A personality and controls [7].

Some argue that this inconsistency demonstrates a lack of reproducibility and, thus, causality cannot be concluded [5]. Others argue that type-A personality does not predict *if* adverse cardiac events will occur, but rather *when* cardiac events will occur. In other words, type-A personality may result in earlier cardiac pathology in those already predisposed but will not determine the presence or absence of cardiac pathology [2]. It appears that there is no general consensus among researchers on whether those with type-A traits face increased cardiovascular risk.

Differences in personality types stem from differences in how anxiety is processed, and the type-A/type-B personality model illustrates this concept well. Anxiety is central to, if not the starting point for, many of the major psychodynamic theories, including existential, Freudian, and Jungian psychologies. These theories propose that anxiety is always present and that we all develop psychological defenses to keep it at bay. Stressful situations, such as competition, increase our awareness of stress, expose our defenses, and intensify feelings, thoughts, and behaviors that are otherwise kept in moderation. The resulting clash between anxiety and our defensive walls creates conflict that is expressed in feelings, thoughts, or actions. These conflicts often bring about a visit to the therapist, and it is no surprise that academic institutions have discovered the benefit of in-house therapists.

The goal of therapy in this situation is finding healthier ways to deal with the stress of competition and, ultimately, anxiety, since the current coping mechanisms or defenses are not working well. This close observation of one's self and reactions often provokes more anxiety, but ultimately provides relief. The more self-aware one is of his or her anxiety, the more he or she can foster mature defenses to take the place of developmentally primitive ones. The desired result is improved relationships with the self and others and increased tolerance during stressful situations.

A type-A personality at the extreme end of the type-A/type-B spectrum may attempt to decrease anxiety by controlling it, even if this is impossible. If the anxiety is an upcoming exam, this type-A personality may study at the expense of health, socializing, and overall balanced life in order to control the source of the anxiety as much as possible. The extreme type-B individual, however, may avoid studying for the exam to the detriment of his or her performance on the exam. The example of an exam may appear somewhat benign, but imagine a similar pattern when the source of the anxiety is a relationship rather than an exam. With conflicts in relationships, the extreme type-A may attempt to control the situation or the individual by irrational means; the type-B may avoid the conflict altogether through denial. The upshot of both cases is often frustration in others and in the self, intensified conflict, and

significant stress, if not dissolution, of relationships. The resulting clinical symptoms of anxiety or depression are often the presenting chief complaints to mental health professionals.

Although the scientific method is an invaluable tool to understanding the world around us, its limitations cannot be overlooked. Arguably, the information obtained about the brain is occurring at a logarithmic pace. What this knowledge means in the context of contradictory and inconsistent results in studies, however, is yet to be determined. It seems that psychological processes do not fall neatly into the scientific paradigm designed for studying physical phenomena, and it is difficult to draw any definite conclusions about the effects of competitive behavior using the gold standard of a double-blind placebo-controlled method. Can the scientific method overcome the multitude of variables present in a psychological study or will the number of participants in these studies always remain one? This inconclusiveness does not preclude the intuitive wisdom that some ways of dealing with stress and conflict are physically, mentally, and spiritually healthier than others. Discovering this optimal balance is not a scientific endeavor, but one that involves an internal journey.

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