Behavioral Correlates of Coronary Risk

E.H. Friedman

Departments of Medicine and Psychiatry, Case Western Reserve University, Cleveland, Ohio, USA

Ernest H. Friedman, MD, Departments of Medicine and Psychiatry, Case Western Reserve University, 1831 Forest Hills Boulevard, Cleveland, OH 44112-4313 (USA)

In their study of healthy Italian blue-collar workers, Sanavio et al. [1] find that the content-based Jenkins Activity Survey type A score failed to differentiate subjects who were defined as type A1, A2, and non-A by the structured interview (SI). The possible advantage of the SI in assessing both content and behavior is supported by a report that type A style but not content correlated to lower coronary risk in normal coronary-prone upper middle class Cleveland men [2]. It is also supported by SI studies demonstrating favorable survival among older type A subjects who scored the lowest in anger-hostility and depression [3], and fewer speech hesitation pauses 1 s or more in type A than in type B subjects rated by Rosenman [2]. These findings’ prompt identifying cues for prevention or treatment programs [1] by monitoring the frequency and duration of pauses in dialog, 4.79 ± 2.48/min, 1.50 ± 0.33 s (mean ± standard deviation), which correlate with a 6-fold increase in the prevalence and incidence of coronary heart disease, p < 0.05, and mood, respectively. This method is supported by the reduction of blood pressure associated with longer, less recurrent pauses [4] manifested by pauses averaging 1.18 s at > 2/min and 1.93 s at 1/min, yielding a ratio 1.18/1.93 = 0.611 approximating the golden section 0.618 (range 0.534-0.833), and the fact that even brief (1-5 s) spontaneous pauses in ongoing patterned behaviors are accompanied by an immediate decrease in 5-hydroxytryptamine neuronal activity to, or below, baseline levels. It is also supported by participatory matching of pauses in dialog at moderate arousal on the order of 1.40 s at 2 pauses/ min, a joint, mutually responsive rhythm [5], the effects of therapy (remission from depressive state) manifested by a decrease of about 25% in the average number of pauses in female patients from 7.89 to 5.88 pauses per 100 syllables, p < 0.05, about 32% in male patients from 7.58 to 5.12 pauses per 100 syllables, p < 0.05, about 59% decrease in mean pause duration from 1.94 to 1.14 s in female patients and 56% decrease from 1.80 to 1.01 s in male patients, p < 0.004 and p < 0.04, respectively [6], and the chronic influence of depression on coronary heart disease manifested by the highly significant correlation (0.67) between obvious depression scores in 1964 and 1974 Glostrup examinations [7], and (0.60, p < 0.01) between pause rates in 1965 and 1975 Cleveland examinations [2].

References


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