EDITORIAL

Anger, Hostility and Quality of Life in Patients with Coronary Heart Disease

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SUMMARY
The area of Coronary Heart Disease has been extensively studied but the relationship of the disease to psychosomatic aspects has not been regularly studied. The area is perhaps better looked at when the psychosomatic component is broken up into specific emotions and behaviour rather than personality types. There have been some recent works in this area that seem to provide better understanding of the relationship. Similarly the area of Quality of Life of Heart disease patients have been looked with varying results but the question of Quality of life related to the most common procedure in heart disease which is angiography has not been adequately addressed. A study that delves into this issue is presented here. Current understanding based on recent research indicate that specific emotions and behaviour are important relationship in heart disease and the aspect of Quality of Life in patients undergoing angioplasty are important predictors.

Keywords: Anger, Hostility, Coronary Heart Disease, Quality of Life, Angiogram

INTRODUCTION
Coronary Heart Disease (CHD) is becoming more common. Men at younger ages are experiencing it and so too are women. Many factors have been linked as risk factors and many positive health behaviours have been encouraged even if research has not proven the link. One aspect of heart disease seems to be the contribution of mental health but there has been really diverse research in this area and not focussed on specific of mental health. This edition of the journal has papers on cardiovascular risk factors and Quality of Life of patients with respiratory disorders. As this subject of psychosomatics of heart disease has recently become close to my heart, I would like to highlight some recent research findings of CHD and relationship to mental health as well as one significant research on angiography, a common procedure with outcome through the study of Quality of Life of those patients.

ANGER AND HEALTH
Anecdotaly people have been aware of a harmful association of anger with health. In the psychosomatic field, anger, hostility, and related constructs have received considerable attention as personality types that seem to relate to coronary heart disease. Early research data seemed to demonstrate that type A behaviour pattern - which is primarily characterized by hostility, intense ambition, competitive “drive,” constant preoccupation with deadlines, and a sense of time urgency—was related to the development of CHD, but these original findings were not supported by subsequent researches from 1966 to 1998 [1]. Since then there has been no evidence showing such an association. Some researchers therefore changed their focus to investigate whether anger, hostility, and related constructs - one of the key dimensions of type A behaviour pattern—would be more closely linked to the development of CHD. Hostility is typically described as a negative attitude or cognitive trait directed toward others, anger as an emotional state that consists of feelings that vary in intensity from mild irritation or annoyance to intense fury or rage, and aggressiveness as a verbal or physical behavioural pattern manifest in yelling, intimidation, or physical assaults. Despite important differences between these constructs, these terms often are used interchangeably and their inter relationship remains poorly delineated.

Over the past 25 years, the body of research investigating associations between anger and hostility and CHD development and progression has grown [2]. Several reviews have been published but have produced disparate findings. This might be partly because some reviews have not distinguished between prospective studies and cross-sectional or retrospective case control [2]. Schulman and Stromberg [3] recently compared the outcomes of 7 previous meta-analytic reviews, showing that they came to diverse conclusions about the role of anger and hostility in CHD, due to their

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varied criteria for study inclusion. The most recent of these reviews was published in 2001, and since then several new studies have been published. A systematic review and meta-analysis of prospective cohort studies in order to better explore and quantify the putative causal association of anger and hostility with CHD and to address whether associations with anger and hostility differ with methodological study facets of the psychological construct of anger and hostility was conducted by Chida and Steptoe recently in London [9]. Their current review suggests that anger and hostility are associated with CHD outcomes both in healthy and CHD populations. Besides conventional physical and pharmacological interventions, this supports the use of psychological management focusing on anger and hostility in the prevention and treatment of CHD.

QUALITY OF LIFE AND ANGIOGRAPHY

On the other hand few systematic studies too have been conducted on quality of life of CHD patients. One very common procedure nowadays related to CHD is angiograms and angioplasty. Few researchers have investigated how patients fare emotionally, physically, and socially after a diagnostic angiogram. Patients awaiting revascularization procedures reported that uncertainty and fear were more disturbing than was chest pain [5]. Focus groups revealed that patients recovering from percutaneous coronary intervention (PCI) felt a sense of powerlessness and an overwhelming feeling of uncertainty about the disease and their prognosis [5]. In a more recent study, levels of both anxiety and depression were high before the procedure, and levels of depression were even higher 6 to 8 months later [10]. Also, patients who have PCI may experience other anxiety, be absent from work, and have continuing signs and symptoms. Although no studies have reported the role of social support after angiography, social support is associated with improved outcomes in other cardiac patients.

Health-related quality of life (HRQOL) reflects the functional effect of an illness and its therapy from the patient’s point of view. Poor HRQOL has been associated with poorer outcomes, such as lower survival rates, increases in the number of hospitalizations, decreased capacity to perform activities of daily living, and decreased compliance with treatments in other populations of cardiac patients [4]. Despite a growing interest in HRQOL in cardiac patients, HRQOL has received little attention in the context of angiography. Although evidence indicates that illness-related uncertainty is an important concern in angiography patients, the relationship between uncertainty and other psychological disturbances and to overall HRQOL has not been investigated [9].

Jo-Ann Eastwood et al. [9] has studied HRQOL and angiography. They found the following: Patients with and without CHD differed by angiographic outcome on some psychosocial variables before the procedure. Overall, patients with no angiographic evidence of CHD reported more distress before the procedure. Specifically, at baseline, these patients tended to have higher illness-related uncertainty, and they reported feeling less control over their health. Also, they had lower scores on the mental health composite summary and lower overall disease-specific HRQOL scores than did patients with CHD. At one year after angiography, however, these differences had all but disappeared. At one year, no differences according to angiographic outcome existed in the number of stressful events or in levels of perceived control, anxiety, hostility, depression, or HRQOL. The only between-group difference was a trend toward lower perceived control in the patients without CHD. Groups with high and low levels of uncertainty were compared for demographics and clinical differences at baseline and for psychosocial differences one year later. Patients with higher baseline uncertainty were more likely to be female and tended to be younger and more likely to have angina than were patients with lower uncertainty. Other baseline demographic and clinical characteristics did not differ between the 2 groups. Patients with higher uncertainty at baseline had significantly lower levels of perceived control, higher levels of anxiety, and higher levels of depression at one year than did patients with lower uncertainty at baseline. Determinants of HRQOL for each relevant measure one year after angiography were studied. Overall, the dysphorias (anxiety, hostility, depression) had limited correlation with the HRQOL measures when considered with other factors. Both baseline uncertainty and life stress during the one year after angiography were influential in multiple HRQOL measures. Together, baseline HRQOL, uncertainty, and life stress explained 54% of the variance in overall disease-specific HRQOL, even when angiographic outcome was taken into account. High uncertainty at baseline was predictive of lower disease-specific HRQOL one year later even when the status of CHD was considered. Similarly, with mental health status (as indicated by the mental health composite summary of the SF-36v2), both uncertainty and life stress contributed significantly. For the 2 measures that focused more directly on physical symptoms (SF-36v2 physical health status (as indicated by the mental health composite summary of the SF-36v2), both uncertainty and life stress contributed significantly.

Apparently the psychological needs of patients faced with the potential diagnosis of CHD have been ignored. Jo-Ann Eastwood et al. [9] findings confirm their hypothesis that the possibility of CHD alone, irrespective of the ultimate diagnosis, is associated with changes in a patient’s perspective of his or her own health and that negative psychological states, specifically high levels of uncertainty and low levels of perceived control, contribute significantly to reduced HRQOL. These relationships are sufficiently strong to persist for at least one year after the initial angiography. Therefore, nurses and other clinicians should not assume that normal angiographic findings (i.e., no CHD) are entirely
Anger and hostility are associated with CHD outcomes both in healthy and CHD populations. Besides conventional physical and pharmacological interventions, this supports the use of psychological management focusing on anger and hostility in the prevention and treatment of CHD and any patient undergoing angiography whether with positive or negative results will require psychological follow-up.

REFERENCES


