Reference List


Abstract: Life stress and coping responses jointly contribute to psychological adjustment in many chronic illness populations, but their significance in multiple sclerosis (MS) has not been extensively investigated. Physical disability, cognitive status, negative life stress, coping strategies, and depressive symptoms were prospectively assessed in 27 adults with definite or probable MS. Of the original subjects, 22 provided two additional assessments at 6-month intervals. After accounting for cognitive status and physical disability, life stress was positively correlated with current as well as future depressive symptoms; the prospective relationship was replicated within the second pair of prospective data waves. Escape avoidance was the only coping strategy that added to the prediction of future mood symptoms, but this was not replicated. Results suggest that MS-related depressive symptoms are a function of prior disease-related impairment, life stress, and possibly escape avoidance coping.


Abstract: A self-report inventory for the assessment of mindfulness skills was developed, and its psychometric characteristics and relationships with other constructs were examined. Participants included three samples of undergraduate students and a sample of outpatients with borderline personality disorder. Based on discussions of mindfulness in the current literature, four mindfulness skills were specified: observing, describing, acting with awareness, and accepting without judgment. Scales designed to measure each skill were developed and evaluated. Results showed good internal consistency and test-retest reliability and a clear factor structure. Most expected relationships with other constructs were significant. Findings suggest that mindfulness skills are differentially related to aspects of personality and mental health, including neuroticism, psychological symptoms, emotional intelligence, alexithymia, experiential avoidance, dissociation, and absorption.


Abstract: This pilot study of baccalaureate nursing students explored the effects of an 8-week mindfulness-based stress reduction (MBSR) course on stress and empathy. The course was intended to provide students with tools to cope with personal and professional stress and to foster empathy through intrapersonal knowing. A convenience sample of 16 students participated in the course, used guided meditation audiotapes at home, and completed journal assignments. Stress and empathy were measured using paired sample t tests. Participation in the intervention significantly reduced students’ anxiety (p > .05). Favorable trends were observed in a number of stress dimensions including attitude, time pressure, and total stress. Two dimensions of empathy—personal distress and fantasy—also demonstrated favorable downward trends. Regular home meditation was correlated with additional benefit. Participants reported using meditation in daily life and experiencing greater well-being and improved coping skills as a result of the program. Findings suggest that being mindful may also decrease tendencies to take on others’ negative emotions. Coping with stress and fostering the affective domain are important facets of nursing education that may be facilitated by mindfulness training.


Abstract: The major goal of this study was to explore the relationship among psychological mindedness (PM) and several facets of awareness, including a general sense of mindfulness (Mindful Attention Awareness Scale; Brown & Ryan, 2003), as well as more specific awareness of self (self-consciousness scale; Fenigstein, Scheier, & Buss, 1975) and others (Interpersonal Reactivity Index; Davis, 1980). Participants were 103 undergraduate students at an urban liberal arts college. Results indicated that PM (PM Scale; Conte, Plutchik, Jung, Picard, Karasu, &
Lotterman, 1990) is related to mindfulness (r = .41, p < .01), private self-consciousness (r = .27, p < .05), as well as cognitive (r = .30, p < .01) and affective (r = .35, p < .01) indices of empathy. Self-consciousness and empathy explained a significant amount of variance in PM in a simultaneous-entry multiple regression. These findings support theoretical claims that PM involves awareness of self and others. Copyright 2004 Wiley Periodicals, Inc.


(6) Bien TH. Quantum change and psychotherapy. Journal of Clinical Psychology. 2004;60:493-501. Abstract: Deep change in psychotherapy more typically comes slowly rather than suddenly, but this difference between therapeutic change and quantum change may be one of perspective rather than substance. Psychotherapy may be understood as a kind of mindfulness practice similar to working with koans in that the client presents a life dilemma incapable of rational solution. While quantum change cannot be engineered, the psychotherapist can create an environment conducive to such transformation by producing true presence and modeling calm, concerned, sustained attention to the dilemma that precipitated treatment. Psychotherapists who also maintain a sense of their work as a high art and a way of being, and who in consequence cultivate their own emotional and spiritual development, may be more likely to create such an environment. Copyright 2004 Wiley Periodicals, Inc.

(7) Birnbaum L, Birnbaum A. In search of inner wisdom: guided mindfulness meditation in the context of suicide. Thescientificworldjournal. 2004;4:216-227. Abstract: Spiritual concerns are highly relevant, but often ignored, in psychotherapy in general and in suicide in particular. This article presents Internet data and clinical case material bearing on the topic, and describes an innovative therapeutic intervention administered in a group-workshop format with suicide survivors and mental health professionals. The technique incorporates relaxation and mindfulness meditation, with the addition of guided meditation in search of inner wisdom. Results of the group intervention are described and illustrated. Many participants reported a significant positive experience including connection to knowledge that was highly relevant to them in their current state of life. Whether such insights were experienced as coming from within (a deeper part of the self) or from an external source (a guiding figure or presence), indications are that guided meditation can be a powerful resource for therapists and their clients, suicidal and otherwise. Possible applications in diverse populations and settings, as well as the need for further research, are discussed.

(8) Bonadonna R. Meditation's impact on chronic illness. [Review] [96 refs]. Holistic Nursing Practice. 2003;17:309-319. Abstract: Meditation is becoming widely popular as an adjunct to conventional medical therapies. This article reviews the literature regarding the experience of chronic illness, theories about meditation, and clinical effects of this self-care practice. Eastern theories of meditation include Buddhist psychology. The word Buddha means the awakened one, and Buddhist meditators have been called the first scientists, alluding to more than 2500 years of precise, detailed observation of inner experience. The knowledge that comprises Buddhist psychology was derived inductively from the historical figure's (Prince Siddhartha Gautama) diligent self-inquiry. Western theories of meditation include Jungian, Benson's relaxation response, and transpersonal psychology. Clinical effects of meditation impact a broad spectrum of physical and psychological symptoms and syndromes, including reduced anxiety, pain, and depression, enhanced mood and self-esteem, and decreased stress. Meditation has been studied in populations with fibromyalgia, cancer, hypertension, and psoriasis. While earlier studies were small and lacked experimental controls, the quality and quantity of valid research is growing. Meditation practice can positively influence the experience of chronic illness and can serve as a primary, secondary, and/or tertiary prevention strategy. Health professionals demonstrate commitment to holistic practice by asking patients about use of meditation, and can encourage this self-care activity. Simple techniques for mindfulness can be taught in the clinical setting. Living mindfully with chronic illness is a fruitful area for research, and it can be predicted that evidence will grow to support the role of consciousness in the human experience of disease. [References: 96]
Abstract: The Western Collaborative Group Study (WCGS) is a prospective epidemiological study of 3,154 initially well men, aged 39059 years at intake in 1960-61, who were employed in ten participating companies in California. Clinical coronary heart disease (CHD) occurred in 257 men during a follow-up period of eight and one-half years. Coronary heart disease risk is predicted using the additive multiple logistic model with the risk factors: age, cholesterol, systolic blood pressure, hematocrit, ECG status, smoking at intake, and relative body weight. The predicted individual CHS risk levels, using the logistic results derived from the WCGS data, are highly correlated with predicted risk levels using a Framington study (FS) equation for these same risk factors with 12-year follow-up. The observed number of CHS events in the WCGS is not significantly different from the expected number of events derived from the FS logistic equation, after correction of length of follow-up. Multiple logistic analysis of the direct association between CHD incidence and behavior pattern gives an approximate relative risk of 1.9 (P = 0.0006) and 2.1 (P = 0.0015) for Type A compared to Type B men aged 39-49 and 50-59 years, respectively. It is estimated that removal of the excess risk associated with Type A behavior would correspond to a 31% (standard error = 6.6%) reduction of coronary heart disease incidence in the Western Collaborative Group Study population.

Abstract: Sleep disturbance is a very common problem for cancer patients that has largely not been addressed in the clinical intervention literature. Mindfulness meditation has demonstrated clinical benefits for a variety of patient populations in other areas of functioning. This study examined the effects of an 8-week Mindfulness-Based Stress Reduction (MBSR) program on the sleep quality of a heterogeneous sample of 63 cancer patients. Overall sleep disturbance was significantly reduced (p < .001) and participants reported that their sleep quality had improved (p = .001). There was also a significant reduction in stress (p < .001), mood disturbance (p = .001), and fatigue (p < .001). The associations among these changes and implications for improving quality of life of cancer patients are discussed.

Abstract: OBJECTIVE: To determine if psychological morbidity in youth with chronic fatigue is caused by the stress of coping with a chronic illness. STUDY DESIGN: Case-control study comparing pediatric patients with debilitating chronic fatigue and matched subjects with juvenile rheumatoid arthritis, a chronic medical illness with similar functional sequelae. SETTING: Pediatric Infectious Diseases Clinic and Juvenile Rheumatoid Arthritis Clinic of Kosair Children's Hospital. PARTICIPANTS: Nineteen children and adolescents with debilitating chronic fatigue and 19 age- and sex-matched peers with juvenile rheumatoid arthritis. Outcome. Structured Interview, Kaufman Brief Intelligence Test, Child Behavior Checklist, and Youth Self-Report. RESULTS: Intellectual functioning on the Kaufman Brief Intelligence Test Composite was average (103, standard score) for both groups. Pediatric patients with chronic fatigue had higher levels of internalizing psychological distress than patients suffering from juvenile rheumatoid arthritis, despite the fact that both groups had a similar pattern of decline in social and physical activities. Duration of illness did not explain the difference in psychological symptoms. CONCLUSIONS: Psychological factors may play a more active role in debilitating chronic fatigue in pediatric patients than can be explained by the stress of coping with a similar chronic, non-life-threatening illness.

Abstract: Part III of the study on mindfulness-based stress reduction (MBSR) describes qualitative data and discusses the implications of the findings. Study analysis revealed that nurses found MBSR helpful. Greater relaxation and self-care and improvement in work and family relationships were reported.
were among reported benefits. Challenges included restlessness, physical pain, and dealing with difficult emotions.

Abstract: Narrative is ever present in medicine and is an integral aspect of the doctor and patient relationship. Although theoretical discussions of narrative medicine and narrative ethics are important, they may serve to reify the patient's story, to make it a specific entity. In practice, the patient's story unfolds in the moment of communication depending on the individuals and the circumstances; the story is not an "object." Patients' narratives heard in clinical settings are often limited by physician behaviors, especially the tendency of physicians to control the interaction with the patient. To develop individual narratives effectively and competently, physicians must be able to help the patient tell the story that is most important, meaningful, and descriptive of the situation. If the patient's narrative is not heard fully, the possibility of diagnostic and therapeutic error increases, the likelihood of personal connections resulting from a shared experience diminishes, empathic opportunities are missed, and patients may not feel understood or cared for. The practice of mindfulness--moment-to-moment, nonjudgmental awareness--opens a doorway into the patient's story as it unfolds. Such mindful practice develops the physician's focus of attention and offers the possibility for a meaningful and important narrative to arise between patient and physician.


Abstract: The authors examined the effect of a 6-week mind/body intervention on college students' psychological distress, anxiety, and perception of stress. One hundred twenty-eight students were randomly assigned to an experimental group (n = 63) or a waitlist control group (n = 65). The experimental group received 6 90-minute group-training sessions in the relaxation response and cognitive behavioral skills. The Symptom Checklist-90-Revised, Spielberger State-Trait Anxiety Inventory, and the Perceived Stress Scale were used to assess the students' psychological state before and after the intervention. Ninety students (70% of the initial sample) completed the postassessment measure. Significantly greater reductions in psychological distress, state anxiety, and perceived stress were found in the experimental group. This brief mind/body training may be useful as a preventive intervention for college students, according to the authors, who called for further research to determine whether the observed treatment effect can be sustained over a longer period of time.

Abstract: Nitric oxide (NO) is involved in stress physiology and stress-related disease processes. Like stress, NO seems to be capable of principally exerting either beneficial or deleterious effects. The actual distinction depends on a multitude of factors. Moreover, NO counteracts norepinephrine (NE) activity and sympathetic responsivity. Thus, NO and the stress (patho)physiology are closely connected and molecular mechanisms or pathways may be shared under certain conditions. NO is involved in immunological, cardiovascular, and neurodegenerative diseases/ mental disorders. It represents a "double-edged sword", since small quantities produced by constitutive enzymes may predominantly mediate physiological effects, whereas the expression of inducible NO synthases may lead to larger quantities of NO, a situation that may be associated with cytotoxic and detrimental effects of NO. The key step for normally useful physiological mechanisms becoming pathophysiological may be represented by the loss of balance, the loss of control over the different pathways induced. A failure to terminate or shift originally protective mechanisms may lead to a vicious cycle of disease-supporting pathophysiological pathways. CONCLUSIONS: Profound connections between stress and various disease processes exist. Thereby, common pathophysiological pathways in stress-related diseases have been described, and they involve stress hormone (cortisol, NE) and, in particular, NO activity. Thus, NO has detrimental capacities. However, NO not only exerts deleterious but also strongly ameliorating effects. The balance
between both properties is crucial. Yet, nitric oxide involvement in stress-related diseases represents a common pathway, with various pathophysiological analogies, that may be accessible for strategies using stress management and relaxation response techniques. [References: 195]

Abstract: OBJECTIVE: Evidence for a connection between stress and selected cardiovascular diseases is analyzed. Does stress cause or exacerbate cardiovascular diseases? METHOD: The stress phenomenon is illustrated and the impact of stress on the circulatory system is examined. In particular, the pathophysiological significance of stress in hypertension, atherosclerosis, coronary artery disease, myocardial infarction (and others) is described. RESULTS: Stress plays a major role in various (patho)physiological processes associated with the circulatory system. Thereby, it potentially has ameliorating or detrimental capacities. However, with regard to cardiovascular diseases, stress most often is related to deleterious results. The specific outcome depends on multiple variables (amount of stress, duration of its influence, patient's history/predisposition, genetic components -- as they all may alter functions of the basic stress response components: the hypothalamic-pituitary-adrenal axis and the sympathoadrenal medullary system). CONCLUSIONS: Stress has a major impact upon the circulatory system. It plays a significant role in susceptibility, progress, and outcome of cardiovascular diseases. Subjective or individual differences have also to be taken into account. Stress, especially 'adequate' acute stress - stress that is not 'overwhelming' - may improve performance and thus be beneficial in certain cases. The close relationship between stress and cardiovascular diseases may represent an important aspect of modern medicine. New therapeutic strategies have to be set in place. [References: 85]

Abstract: Negative biases in processing information about the self have long been recognised as a central feature in the development and maintenance of clinical depression. In practice, however, it may not be easy to distinguish between patients whose negative thinking about the self is primarily an aspect of current mood state, and those for whom it represents a reflection of more enduring issues (low self-esteem). The paper speculates that, in both cases, metacognitive awareness (acceptance of the idea that thoughts, assumptions and beliefs are mental events and processes rather than reflections of objective truth) may be an important precursor to active engagement in therapy on the part of the patient, and considers what aspects of cognitive therapy might be used to promote it in clinical practice


Abstract: OBJECTIVES: To evaluate effects of Hatha yoga and Omkar meditation on cardiorespiratory performance, psychologic profile, and melatonin secretion. SUBJECTS AND METHODS: Thirty healthy men in the age group of 25-35 years volunteered for the study. They were randomly divided in two groups of 15 each. Group 1 subjects served as controls and performed body flexibility exercises for 40 minutes and slow running for 20 minutes during morning hours and played games for 60 minutes during evening hours daily for 3 months. Group 2 subjects practiced selected yogic asanas (postures) for 45 minutes and pranayama for 15 minutes during the morning, whereas during the evening hours these subjects performed preparatory yogic postures for 15 minutes, pranayama for 15 minutes, and meditation for 30 minutes daily, for 3 months. Orthostatic tolerance, heart rate, blood pressure, respiratory rate, dynamic lung function (such as forced vital capacity, forced expiratory volume in 1 second, forced expiratory volume percentage, peak expiratory flow rate, and maximum voluntary ventilation), and psychologic profile were measured before and after 3 months of yogic practices. Serial blood samples were drawn at various time intervals to study effects of these yogic practices and Omkar meditation on melatonin levels. RESULTS: Yogic practices for 3 months resulted in an improvement in cardiorespiratory performance and psychologic profile. The plasma melatonin also showed an increase after three
months of yogic practices. The systolic blood pressure, diastolic blood pressure, mean arterial pressure, and orthostatic tolerance did not show any significant correlation with plasma melatonin. However, the maximum night time melatonin levels in yoga group showed a significant correlation (r = 0.71, p < 0.05) with well-being score. CONCLUSION: These observations suggest that yogic practices can be used as psychophysioligic stimuli to increase endogenous secretion of melatonin, which, in turn, might be responsible for improved sense of well-being

Abstract: To evaluate stroke risk factors in Goteborg, Sweden, during 1970-1973 a cohort of 7,495 participating men from a general population sample of 9,998 men aged 47-55 years were examined with respect to cardiovascular risk factors. Men with hypertension and hypercholesterolemia and men who were heavy smokers were treated. We assessed stroke end points and cause-specific mortality using a stroke register and death certificates. During a mean follow-up of 11.8 years, 230 strokes occurred in the entire population sample (participants and nonparticipants) (7% subarachnoid hemorrhages, 13% intracerebral hemorrhages, 42% cerebral infarctions, and 38% unspecified strokes). Using univariate analysis, we found measured high blood pressure (systolic and diastolic), smoking, known hypertension, diabetes mellitus, stroke in either parent, severe psychological stress, marital status, atrial fibrillation, previous transient ischemic attacks, previous myocardial infarction, effort-induced chest pain, and intermittent claudication to be significantly related to all stroke. Of the stroke types, subarachnoid hemorrhage was not related to any of these indicators, and intracerebral hemorrhage was related only to measured high blood pressure. Using multivariate analyses, we found measured high blood pressure, smoking, and severe psychological stress as well as atrial fibrillation, previous transient ischemic attacks, and intermittent claudication to be independent risk factors for nonhemorrhagic stroke. Serum cholesterol concentration, occupational and leisure-time physical activity, body mass index, alcohol abuse, and low occupational class were not risk factors for stroke.

Abstract: An extensive psychosocial questionnaire was administered to 1674 coronary free individuals participating in the Framingham Heart Study between 1965 and 1967. The respondents were followed for the development of coronary heart disease (CHD) over an eight-year period. Women (aged 45-64 years) who developed CHD scored significantly higher on the Framingham Type A behavior, suppressed hostility (not showing or discussing anger), tension, and anxiety symptoms scales than women remaining free of CHD. Type A women developed twice as much CHD and three times as much angina as Type B women. In a multivariate analysis, Framingham Type A behavior and not discussing anger were independent predictors of CHD incidence when controlled for the standard coronary risk factors and other psychosocial scales. Men exhibiting Framingham Type A behavior, work overload, suppressed hostility (not showing anger), and frequent job promotions were at increased risk of developing CHD (especially in the age group 55-64 years). Among men aged 45-64 years, Type A behavior was associated with a twofold risk of angina, myocardial infarction, and CHD in general, as compared to Type B behavior. The association was found only among white-collar workers and was also independent of the standard coronary risk factors and other psychosocial scales. This prospective study suggests that Type A behavior and suppressed hostility may be involved in the pathogenesis of CHD in both men and women.


Abstract: Intractable conflict involves reoccurring patterns of ineffective communication in which issues are not resolved and build over time. These situations can lead to bad feelings, damaged relationships, depression, aggression, anxiety and substance abuse. Grounded theory methods
were used to study the processes involved in intractable conflicts and to identify ways of responding that promote growth and/or resolution. Results indicate that developing mindfulness over mindlessness is the basic social process that threads through three phases of working through intractable conflict. Phases include: growing awareness, self-realization, and regaining equilibrium. Mental health professionals can use this knowledge to support mindful practices as a means to protect against destructive conflict and mental health woes.

Abstract: Adolescents reporting persistent chronic illness at ages 16, 22, and 32 years (n = 296, limiting in daily life n = 52, non-limiting n = 244) were compared with those without any chronic illness (n = 401) in their life situation, psychosocial well-being and health habits at age 32 years. The data were drawn from a follow-up survey of a Finnish urban age cohort from age 16 until age 32 years. The group of persistent chronic illnesses included allergies (n = 249, 84%), non-allergic skin conditions (n = 10), migraine (n = 29), diabetes mellitus (n = 5), and others (n = 9). Results indicated that adults with persistent chronic illness limiting their daily life reported more depression and lower self-esteem than those with non-limiting chronic illness or healthy controls. Daily smoking was more common among females with any chronic illness than among healthy controls. No significant differences were found between adults with any persistent chronic illness (mainly non-severe allergic conditions) and healthy controls in psychosocial well-being. More attention in health care should be paid to psychological well-being in persons with limiting chronic illness. The study also raises the question how to improve health habit counselling within health care among females with chronic illness.


Abstract: Meditation is a conscious mental process that induces a set of integrated physiologic changes termed the relaxation response. Functional magnetic resonance imaging (fMRI) was used to identify and characterize the brain regions that are active during a simple form of meditation. Significant (p<10^-7) signal increases were observed in the group-averaged data in the dorsolateral prefrontal and parietal cortices, hippocampus/parahippocampus, temporal lobe, pregenual anterior cingulate cortex, striatum, and pre- and post-central gyri during meditation. Global fMRI signal decreases were also noted, although these were probably secondary to cardiorespiratory changes that often accompany meditation. The results indicate that the practice of meditation activates neural structures involved in attention and control of the autonomic nervous system.

Abstract: Previous research indicates that long-term meditation practice is associated with altered resting electroencephalogram patterns, suggestive of long lasting changes in brain activity. We hypothesized that meditation practice might also be associated with changes in the brain's physical structure. Magnetic resonance imaging was used to assess cortical thickness in 20 participants with extensive Insight meditation experience, which involves focused attention to internal experiences. Brain regions associated with attention, interoception and sensory processing were thicker in meditation participants than matched controls, including the prefrontal cortex and right anterior insula. Between-group differences in prefrontal cortical thickness were most pronounced in older participants, suggesting that meditation might offset age-related cortical thinning. Finally, the thickness of two regions correlated with meditation experience. These data provide the first structural evidence for experience-dependent cortical plasticity associated with meditation practice.

that emotionally stressful events, and more specifically, anger, immediately precede and appear to trigger the onset of acute myocardial infarction. However, controlled studies to determine the relative risk of myocardial infarction after episodes of anger have not been reported. METHODS AND RESULTS: We interviewed 1623 patients (501 women) an average of 4 days after myocardial infarction. The interview identified the time, place, and quality of myocardial infarction pain and other symptoms, the estimated usual frequency of anger during the previous year, and the intensity and timing of anger and other potentially triggering factors during the 26 hours before the onset of myocardial infarction. Anger was assessed by the onset anger scale, a single-item, seven-level, self-report scale, and the state anger subscale of the State-Trait Personality Inventory. Occurrence of anger in the 2 hours preceding the onset of myocardial infarction was compared with its expected frequency using two types of self-matched control data based on the case-crossover study design. The onset anger scale identified 39 patients with episodes of anger in the 2 hours before the onset of myocardial infarction. The relative risk of myocardial infarction in the 2 hours after an episode of anger was 2.3 (95% confidence interval, 1.7 to 3.2). The state anger subscale corroborated these findings with a relative risk of 1.9 (95% confidence interval, 1.3 to 2.7). Regular users of aspirin had a significantly lower relative risk (1.4; 95% confidence interval, 0.8 to 2.6) than nonusers (2.9; 95% confidence interval, 2.0 to 4.1) (P < .05). CONCLUSIONS: Episodes of anger are capable of triggering the onset of acute myocardial infarction, but aspirin may reduce this risk. A better understanding of the manner in which external events trigger the onset of acute cardiovascular events may lead to innovative preventive strategies aimed at severing the link between these external stressors and their pathological consequences.

Abstract: Components of stress and the stress response differ between men and women. The tend-and-befriend response, mediated by oxytocin and endogenous opioids, may be more applicable to women than the fight-or-flight response, which was based largely on studies of men. Even within the flight-or-flight response pattern there are sex-based differences. The HPA axis interacts with reproductive function, such as menstruation. For immune function there are sex differences as well as differences within the menstrual phase. Inclusion of men and women in stress response studies is critical. Further study is needed to clarify the influence of ovarian hormones on the stress and immune responses during the reproductive stages in women's lives, including menarche, pregnancy, and perimenopause.

Abstract: The authors compared characteristics of 1,012 outpatients completing a 10-week behavioral medicine intervention with 300 outpatients who dropped out. They administered the Symptom Checklist-90 Revised (SCL-90R) before and after the program. Patients who completed the treatment, compared with dropouts, tended to be more highly educated, married, and gainfully employed. Their pretreatment scores on the SCL-90R were significantly lower than those of the dropouts on somatization, depression, and obsessive-compulsive scales and on the global severity index. Multiple logistic regression analysis indicated that lower depression and higher education marked the group who completed the intervention in contrast to the dropouts. After the intervention, all of the SCL-90R scores were significantly lower among patients who completed the treatment. Pre- to postintervention score changes were not significantly associated with the number of sessions attended. The findings suggest that the intervention had salutary effects in patients with mind/body distress and that its effectiveness was not diminished by a few absences. Depressed or less educated patients might benefit from preparatory interventions or from a modified approach to their treatment.

Abstract: Chronic illness is currently the outstanding health issue in the United States. It creates increased family stress, requires constant adaptation by the family members and poses a challenge to nurses to better understand and meet the needs of the family as well as the individual.
This paper presents a psychosocial typology of chronic illness and discusses the importance of time phasing of the chronic illness. A conceptual framework for analysing the interaction of chronic illness with family and individual life-cycles is outlined. Knowledge of life-cycle stressors is essential for nurses to better delineate the relationship between the vertical and horizontal life stressors which affect the family system. [References: 29]

Abstract: As nurses, we have the unique privilege of witnessing and nurturing the healing process of the whole person—mind, body, and spirit. Teaching mindfulness meditation is a nursing intervention that can foster healing. The consistent practice of mindfulness meditation has been shown to decrease the subjective experience of pain and stress in a variety of research settings. Formal and informal daily practice fosters development of a profound inner calmness and nonreactivity of the mind, allowing individuals to face, and even embrace, all aspects of daily life, regardless of circumstances. By emphasizing being, not doing, mindfulness meditation provides a way through suffering for patients, families, and staff. This practice allows individuals to become compassionate witnesses to their own experiences, to avoid making premature decisions, and to be open to new possibilities, transformation, and healing. [References: 21]

Abstract: OBJECTIVE: This study was designed to quantify and compare the instantaneous heart rate dynamics and cardiopulmonary interactions during sequential performance of three meditation protocols with different breathing patterns. BACKGROUND: We analyzed beat-to-beat heart rate and continuous breathing signals from 10 experienced meditators (4 females; 6 males; mean age 42 years; range 29-55 years) during three traditional interventions: relaxation response, breath of fire, and segmented breathing. RESULTS: Heart rate and respiratory dynamics were generally similar during the relaxation response and segmented breathing. We observed high amplitude, low frequency (approximately 0.05-0.1 Hz) oscillations due to respiratory sinus arrhythmia during both the relaxation response and segmented breathing, along with a significantly (p<0.05) increased coherence between heart rate and breathing during these two maneuvers when compared to baseline. The third technique, breath of fire, was associated with a different pattern of response, marked by a significant increase in mean heart rate with respect to baseline (p<0.01), and a significant decrease in coherence between heart rate and breathing (p<0.05). CONCLUSIONS: These findings suggest that different meditative/breathing protocols may evoke common heart rate effects, as well as specific responses. The results support the concept of a "meditation paradox," since a variety of relaxation and meditative techniques may produce active rather than quiescent cardiac dynamics, associated with prominent low frequency heart rate oscillations or increases in mean resting heart rate. These findings also underscore the need to critically assess traditional frequency domain heart rate variability parameters in making inferences about autonomic alterations during meditation with slow breathing.

Abstract: Mindfulness-based stress reduction (MBSR) programs may mitigate the effects of stress and disease. This integrative review identified 21 clinical studies on MBSR interventions. Although preliminary findings suggest health enhancement from MBSR, controlled, randomized studies, the operationalization of constructs, and qualitative research are needed. [References: 36]

Abstract: The relation of behavior (Type A or Type B) to the morbidity and mortality of coronary heart disease (CHD) is still debated. We studied the survival of 257 male patients with CHD from the initial, 8.5-year phase of the Western Collaborative Group Study to see whether behavior type—as assessed by a structured interview before the CHD event—was related to subsequent CHD mortality. Behavior type was not related to mortality in 26 patients who died within 24 hours of the coronary event. However, of the 231 patients who survived for 24 hours, the mortality rate associated with CHD among 160 Type A patients studied during an average 12.7 years was 19.1
Aims: This paper is a concept analysis of psychological distress based on Walker and Avant's (1995) criteria that identifies the attributes, antecedents, and consequences of psychological distress based upon the findings of the literature review. In addition, empirical references are identified and constructed cases presented.

Methods: A literature search was conducted using MEDLINE, CINAHL, Ovid, PsychINFO, and CancerLit databases over the last 50 years. The purposes of this concept analysis were: (1) to establish the concept of psychological distress as a clear and distinct concept, separate from strain, stress and distress, and (2) to provide nurses with a base of knowledge from which to plan effective clinical interventions.

Findings: Content analysis of the literature revealed that, although used frequently in health care literature, the origin of the concept of psychological distress has not been clearly articulated and is ill-defined.

Conclusions: Psychological distress is a serious problem faced by many of the people whom nurses encounter on a daily basis. An understanding of the concept of psychological distress will help nurses ameliorate this problem in patients. Nursing research related to the exploration of psychological distress is also needed.

References: 51


Abstract: OBJECTIVE: Stress has been cited as a causal factor in heart disease. The objective of this study was to examine the effects of an 8-week mindfulness-based stress-reduction program on the resting levels of stress hormones, physical functioning, and submaximal exercise responses in women with heart disease.

Subjects: Random selection with the numbers 1 and 2 were used to assign 18 women (60 +/- 6.3 years old) with documented histories of heart disease to a treatment group (n = 9) or a control group (n = 9). Spielberger's state anxiety scores for the treatment (M = 37.88; standard deviation (SD) = 10.91) and control group (M = 43.22; SD = 12.26) were not significantly different prior to the start of the study. However, their scores fell in the upper percentile rank for normal adults in their age category.

Intervention: The intervention was provided one night each week for 2 hours over a period of 8 weeks. The intervention included didactic, inductive, and experiential modes of learning regarding stress responses and mindfulness skill-development training.

Design: Pre-post test hormonal measurements and physical function were analyzed using a 2 (group) by 2 (time) analysis of variance (ANOVA) with repeated measures following the 8-week program. Submaximal exercise responses were also compared between the treatment group and the control group following the 8-week program. A 2 (group) by 3 (time) ANOVA with repeated measures was used to analyze the data.

Settings/Location: Weekly meetings were held on a university medical school campus. Submaximal exercise responses were recorded while participants cycled on a stationary bike in an applied physiology laboratory following the 8-week program.
- Significant changes or differences were found for psychological, endocrine, or functional health outcomes in individuals infected with the human immunodeficiency virus (HIV).

**CONCLUSIONS:** These results provide tentative evidence that MBSR may assist in improving immunity in individuals infected with HIV.


**Abstract:** The Western Collaborative Group Study is a prospective study of 3,154 employed men aged 39 to 59 years. Ischemic heart disease occurred in 257 subjects during 8.5 years of follow-up. Risk of coronary heart disease was studied with use of the multiple logistic risk model. The incidence of coronary heart disease had a highly significant association with serum cholesterol level, behavior pattern, cigarette smoking and systolic blood pressure in younger (39 to 49 years) and older (50 to 59 years) men and also with age and corneal arcus in the younger group. Type A behavior pattern was strongly related to the incidence of coronary disease in both age groups, independent of interrelations of behavior patterns with any other risk factor.


**Abstract:** OBJECTIVES: The purpose of this study was to examine the effects of a structured, 8-week, Mindfulness-Based Stress Reduction (MBSR) program on perceived stress, mood, endocrine function, immunity, and functional health outcomes in individuals infected with the human immunodeficiency virus (HIV). DESIGN: This study used a quasieperimental, nonrandomized design. METHODS: Subjects were specifically recruited (nonrandom) for intervention (MBSR) or comparison group. Data were collected at pretest and post-test in the MBSR group and at matched times in the comparison group. Tests were performed to determine within-group changes and between-group differences. RESULTS: Natural killer cell activity and number increased significantly in the MBSR group compared to the comparison group. No significant changes or differences were found for psychological, endocrine, or functional health variables. CONCLUSIONS: These results provide tentative evidence that MBSR may assist in improving immunity in individuals infected with HIV.


**Abstract:** BACKGROUND: Medical students confront significant academic, psychosocial, and existential stressors throughout their training. Mindfulness-based stress reduction (MBSR) is an educational intervention designed to improve coping skills and reduce emotional distress.

**PURPOSE:** The purpose of this study was to examine the effectiveness of the MBSR intervention in a prospective, nonrandomized, cohort-controlled study. METHODS: Second-year students (n = 140) elected to participate in a 10-week MBSR seminar. Controls (n = 162) participated in a didactic seminar on complementary medicine. Profile of Mood States (POMS) was administered preintervention and postintervention. RESULTS: Baseline total mood disturbance (TMD) was greater in the MBSR group compared with controls (38.7 +/- 33.3 vs. 28.0 +/- 31.2; p < .01). Despite this initial difference, the MBSR group scored significantly lower in TMD at the completion of the intervention period (31.8 +/- 33.8 vs. 38.6 +/- 32.8; p < .05). Significant effects were also observed...
on Tension-Anxiety, Confusion-Bewilderment, Fatigue-Inertia, and Vigor-Activity subscales. CONCLUSION: MBSR may be an effective stress management intervention for medical students

Abstract: To assess the causal relation between acute mental stress and myocardial ischemia, we evaluated cardiac function in selected patients during a series of mental tasks (arithmetic, the Stroop color–word task, simulated public speaking, and reading) and compared the responses with those induced by exercise. Thirty-nine patients with coronary artery disease and 12 controls were studied by radionuclide ventriculography. Of the patients with coronary artery disease, 23 (59 percent) had wall-motion abnormalities during periods of mental stress and 14 (36 percent) had a fall in ejection fraction of more than 5 percentage points. Ischemia induced by mental stress was symptomatically "silent" in 19 of the 23 patients with wall-motion abnormalities (83 percent) and occurred at lower heart rates than exercise-induced ischemia (P less than 0.05). In contrast, we observed comparable elevations in arterial pressure during ischemia induced by mental stress and ischemia induced by exercise. A personally relevant, emotionally arousing speaking task induced more frequent and greater regional wall-motion abnormalities than did less specific cognitive tasks causing mental stress (P less than 0.05). The magnitude of cardiac dysfunction induced by the speaking task was similar to that induced by exercise. Personally relevant mental stress may be an important precipitant of myocardial ischemia--often silent--in patients with coronary artery disease. Further examination of the pathophysiologic mechanisms responsible for myocardial ischemia induced by mental stress could have important implications for the treatment of transient myocardial ischemia.

Abstract: Psychosocial interviews with 2320 male survivors of acute myocardial infarction, participants in the beta-Blocker Heart Attack Trial, permitted the definition of two variables strongly associated with an increased three-year mortality risk. With other important prognostic factors controlled for, the patients classified as being socially isolated and having a high degree of life stress had more than four times the risk of death of the men with low levels of both stress and isolation. An inverse association of education with mortality in this population reflected the gradient in the prevalence of the defined psychosocial characteristics. High levels of stress and social isolation were most prevalent among the least-educated men and least prevalent among the best-educated. The increase in risk associated with stress and social isolation applied both to total deaths and to sudden cardiac deaths and was noted among men with both high and low levels of ventricular ectopy during hospitalization for the acute infarction.

Abstract: This paper deals with the role of the health care professional in creating an optimal healing environment (OHE), with a special focus on which inner state and way of being in the world can create a healing intention. A core thesis is that every healing effort and every healing intention starts within the health care professional. An accepting, mindful, and warm-hearted relationship with self is primary to any healing intention. Important concepts to develop such an attitude are mindfulness, love, compassion, and awareness. The concept of a healing attitude toward the self is described, as is the mirror principle that states there is symmetry between someone’s relationship with the outer world and his or her inner world. The mindfulness concept is outlined through a set of mental and heart qualities. Mindfulness is strongly related to compassion, and it is compassion that serves as a source for all healing intentionality. Compassion connects the suffering of the patient with the healer’s own suffering, and this emotional connection instantiates a healing relationship. The power and importance of mindfulness and compassion for healing are explored along the Frank model of nonspecific therapeutic components. This is the approach whereby a health care professional can elicit self-healing powers in patients through his or her inner attitudes. Finally, a research program and some hypotheses on how to implement and research this specific approach toward the creation of an OHE are outlined. [References: 26]

Abstract: An overview of the main problems and misconceptions in the clinical application and theoretic evaluation of the stress concept reveals that the same 10 problems appear to cause the greatest difficulties in its application, irrespective of the specialty in which it is used: (1) the correct definition of stress, stressors and the general adaptation syndrome; (2) the concept of nonspecificity in biology and medicine; (3) the conditioning of stress responses by diverse endogenous (mainly genetically determined) and exogenous (environmental) factors; (4) the relation between the general and the local adaptation syndromes; (5) the difference between direct and indirect pathogens; (6) the definition of the morbid lesions in whose pathogenesis stress plays a particularly prominent role—the so-called diseases of adaptation; (7) the role of genetics versus that of factors under voluntary self-control in mastering biologic stress; (8) the mode of action of synthexic and catatoxic hormones, drugs and behavioural attitudes; (9) the so-called first mediator of the stress response, which carries the message that a state of stress exists from the directly affected area to the neurohormonal regulatory centres; and (10) the prophylaxis and treatment of stress-induced damage by pharmacologic and behavioural techniques.


Abstract: Meditation is the attainment of a restful yet fully alert physical and mental state practiced by many as a self-regulatory approach to emotion management, but the psychophysiological properties and personality traits that characterize this meditative state have not been adequately studied. We quantitatively analyzed changes in psychophysiological parameters during Zen meditation in 20 normal adults, and evaluated the results in association with personality traits assessed by Cloninger's Temperament and Character Inventory (TCI). During meditation, increases were observed in fast theta power and slow alpha power on EEG predominantly in the frontal area, whereas an increase in the normalized unit of high-frequency (nuHF) power (as a parasympathetic index) and decreases in the normalized unit of low-frequency (nuLF) power and LF/HF (as sympathetic indices) were observed through analyses of heart rate variability. We analyzed the possible correlations among these changes in terms of the percent change during meditation using the control condition as the baseline. The percent change in slow alpha EEG power in the frontal area, reflecting enhanced internalized attention, was negatively correlated with that in nuLF as well as in LF/HF and was positively correlated with the novelty seeking score (which has been suggested to be associated with dopaminergic activity). The percent change in fast theta power in the frontal area, reflecting enhanced mindfulness, was positively correlated with that in nuHF and also with the harm avoidance score (which has been suggested to be associated with serotonergic activity). These results suggest that internalized attention and mindfulness as two major core factors of behaviors of mind during meditation are characterized by different combinations of psychophysiological properties and personality traits.


Abstract: OBJECTIVE: To understand the impact of family structure on the metabolic control of children with diabetes, we posed two research questions: 1) what are the differences in sociodemographic, family, and community factors between single-mother and two-parent families of diabetic children? and 2) to what extent do these psychosocial factors predict metabolic control among diabetic children from single-mother and two-parent families? RESEARCH DESIGN AND METHODS: This cross-sectional study included 155 diabetic children and their mothers or other female caregivers. The children were recruited if they had been diagnosed with diabetes for at least 1 year, had no other comorbid chronic illnesses, and were younger than 18 years of age. Interviews and self-report questionnaires were used to assess individual, family, and community variables. RESULTS: The findings indicate that diabetic children from single-mother families have poorer metabolic control than do children from two-parent families. Regression models of children's
metabolic control from single-mother families indicate that age and missed clinic appointments predicted HbA1c levels; however, among two-parent families, children's ethnicity and adherence to their medication regimen significantly predicted metabolic control. CONCLUSIONS: This study suggests that children from single-mother families are at risk of poorer metabolic control and that these families have more challenges to face when raising a child with a chronic illness. Implications point to a need for developing strategies sensitive to the challenges of single mothers


Abstract: BACKGROUND: Research on Mindfulness-Based Stress Reduction (MBSR) has supported the utility of the technique in a number of clinical settings. This study explored whether MBSR, used as an adjunct to individual psychotherapy, would result in more rapid alleviation of symptoms, increased achievement of therapeutic goals, and a decrease in number of therapy sessions sought by clients. METHODS: A group undergoing psychotherapy coupled with training in MBSR was compared with a group undergoing psychotherapy alone. RESULTS: At the conclusion of MBSR training, the groups showed a comparable significant decrease in psychological distress. However, the MBSR group's gains on a novel measure of goal achievement were significantly greater than those of the comparison group. In addition, the MBSR group terminated therapy at a significantly greater rate than the comparison group. CONCLUSION: The effects of introducing MBSR early in psychotherapy, as well as its effect on self-directed goal attainment in non-psychotherapy contexts, deserve further attention. 2005 S. Karger AG, Basel


Abstract: This paper examines methods of adaptation among those faced with stress from chronic health problems. Studies of disabled older adults and those with muscular-skeletal disorders are described with special emphasis on the role of everyday life events, and the threats to well-being imposed by chronic stressors. Attention is paid not only to psychological distress as outcome of a failure to adapt, but also to indices of psychological well-being which provide evidence of the benefits for those who cope successfully with chronic illness. The paper examines evidence for the proposition that everyday stressors can influence physiological processes linked to disease course. The implications of these findings for social interventions are discussed from community and health psychology perspectives