

STRESS AND STRESS ASSOCIATED psychophysiological difficulties:

A PSYCHOTHERAPEUTIC MULTI-MODAL ARABIAN PERSPECTIVE¹.

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By focusing on personal practice experiences and research developed by the current author, this report aims to assist psychological health practitioners to become aware of the role of the psychological health practitioner in dealing, directly or indirectly, with stress and stress related problems underlying psychosomatic disorders (PD). The writer has practiced professional psychology for over three decades both in Michigan, USA and in a number of Arabian countries. One of his work activities, in addition to university teaching, research, writing, was in psychotherapy. This presentation reviews major research findings in dealing with patterns of PD and stress associated difficulties in Arab patients. As in any Anglo-American culture, Psychological health practices in Arab countries consist, , of assessment and intervention. For both assessment and intervention processes the model of my choice relied heavily on a multi-modal, culturally adapted, cognitive therapy approach. More specifically, the main points of this article can be outlined as follows: (1) A review of major patterns of PD and related stress difficulties among Arab patients are reviewed (2) Assessment techniques developed for practice with psychosomatic symptomatic patterns are explained with emphasis on assessment tools developed and standardized for practice in Arabia are explained. (3) The importance of integrating cognitive therapy and positive psychology principles with medical approaches of treatment are discussed and (4) The need to incorporate cultural values into the treatment process will be identified.

Psychosomatic disorder (PD), more commonly referred to as psycho-physiological illness, represents an interdisciplinary medical field concerned with studying symptoms of illnesses and health problems caused, at least in part, by psycho-behavioral factors related to the sufferer rather than immediate physiological causes. The parts of the body most commonly affected by psychosomatic disorders are: 1.) gastrointestinal and respiratory system including gastric and duodenal ulcers, ulcerative colitis, and irritable bowel syndrome; 2.) respiratory problems caused or worsened by psychological factors include asthma and hyperventilation syndrome; 3.) cardiovascular complaints include coronary artery disease, hypertension, tachycardia (speeded-up and irregular heart rhythm), and migraine headaches; 4.) psychosomatic disorders also affect the skin (eczema, allergies, and neuro-dermatitis) and; 5.) genitourinary system including menstrual disorders and sexual dysfunctions).

One stream of thought flowed into the area of psychosomatic medicine which we will be following, provides fertile ground for the growth of psychology and related psychosocial disciplines in the study and management of psychosomatic disorders. This school emphasized the effects of stress on the body, and contends that psychological stress affects bodily organs that are constitutionally weak or weakened by stress.

The multimodal approach adopted by the current writer takes a multiple synthesizable causative view of psychosomatic disorders (PD) as pathological expression of combined bio-psycho-socio-ecological factors, i.e., biological, psychological and socio-ecological parameters of human health and illness. In

fact, the role of the practicing psychologist, may be correctly identified as that of cooperative nature with psychiatry, internal medicine, and social work to achieve coordinated management of individuals who are suffering from PD and related stress difficulties. By focusing on personal practice experiences and research developed by the current author, we aim here to assist psychological health practitioners to become aware of the role of psychological health practice in dealing, directly or indirectly, with stress and stress related problems underlying PD. The writer has practiced professional psychology for over three decades both in Michigan, USA and in a number of Arabian countries including Egypt, Saudi Arabia and Kuwait. One of the main work activities in this regard, and in addition to university teaching, research, writing, was in psychotherapy namely multimodal cognitive-behavior therapy (MCBT.)

This presentation reviews major research findings and practice insights related to both assessment and intervention activities in dealing with PD symptoms and stress associated difficulties in Arab patients. Some cultural considerations facilitating or hindering intervention effectiveness will also be discussed.

Assessment And Evaluation Activities

For assessment purposes, three kinds of assessment activities are usually carried out: A.) Initial comprehensive assessment, B.) Assessment techniques developed for identifying specific psychosomatic symptoms and related stress difficulties, and C.) Cognitive assessment to evaluate dysfunctional vs. positive thoughts. A word and more specific explanation of the assessment process is in order.

Initial Assessment:

Initial clinical interviewing assessment throughout the course of this stage followed the general outlines of clinical assessment specified in general text books of clinical psychology and cognitive therapy (see Freeman, Pretzer, Fleming, & Simon, 3rd ed. 1991). The initial clinical interviewing assessment forms the foundation for understanding of the processes that produce and maintain the client's difficulties and, consequently guides the basis for identifying treatment strategies and the choice of therapy techniques.

In addition to interviewing, a battery of self report questionnaires have been developed and/or translated into Arabic for use in the initial assessment of our patients; those are typically self-administered by clients and have numerical scoring systems intended to permit easy interpretations of responses. For our purpose here, the author has developed the following instruments in Arabic to tap several areas of psychological functioning. They are as follows:

The Biography Questionnaire (BQ): The BQ consists of items concerning major demographic and biographic aspects, including age, marital status, educational level, etc. Test retest reliability for the BQ was 0.89 (n=50).

The Symptom Inventory (SI): This inventory is designed to tap differences in general psychopathology. The SI consists of 27 items selected by Abdel Sattar Ibrahim (Ibrahim & Alnafie, 1991) from major psychological tests of psychopathology, which were validated in Arabic Cultures, including the Minnesota Multiphasic Personality Inventory (MMPI) and the Eysenck Personality Questionnaire (EPQ) (Eysenck & Eysenck, 1975). Items on this inventory represented a number of psychopathological behaviors that describe major psychiatric disorders such as sleep disturbances, social withdrawal, delusional thinking, hallucinations, and drug use.

The General Symptomatology Scale (GSS): This scale consists of 18 items each represents a pathological symptom of psychiatric nature. In scoring the GSS, the individual is asked to rate each item on a scale ranging from not troubled (1) to highly troubled (3). The reliability and the validity of the GSS have been reported elsewhere (Ibrahim, 1990; Ibrahim & Alnafie, 1991). Both the SI and the GSS were estimated for reliability by using Cronbach's alpha as a measure of internal consistency. Alpha coefficients for the SI and the GSS were 0.88 and 0.90, respectively.

The Multiple Affect Adjective Check List (MAACL): The Multiple Affect Adjective Checklist consists of negative adjectives such as unhappy and listless, as well as positive adjectives such as strong, lucky, and free. The scale requires the subjects to respond by checking every adjective that describes "how they feel today." In scoring the MAACL, we used the scoring keys for depression (D), Anxiety (A), and hostility (H) scales (Zuckerman & Lubin, 1965).

The Cronbach's Alpha was computed as a measure of internal consistency. The mean correlation for the three subtests was found to be 0.76, well above the limit accepted for the scale reliability. In a comprehensive validation study carried out by Abdel-Mawgoud & Mofthah, (1995), the same group of scales were found to discriminate significantly between a total of 110 psychiatric inpatients and a comparable non patient control group.

Also, in another item analyses study (Abdel-Mawgoud and Mofthah, 1995), the items have shown an overall significant decrease following an intensive eclectic psychotherapy program presented to a total of 45 hospitalized psychiatric and drug addicts in Saudi Arabia, confirming the validity of these scales as measures of psychopathology.

Stress tests

Needless to say, stress is implicated directly or indirectly in the development and clinical course of a host of psychosomatic ailments, from common colds to coronary heart disease. Stress is also seen as of a major role in the development and maintenance of risk factors for physical disease such as smoking, obesity, and physical inactivity, post-traumatic stress disorder, depression, and anxiety disorders.

For the purpose of studying and measuring life stress, the author has decided to adopt the definition of Stress used by Cooper and Marshall (1976), and by Holmes & Rahe (1976). More specifically, life stress refers to negative factors or stressors associated with life negative events and excessive life changes that make adjustments difficult and thus produce stress (Holmes & Rahe, 1967). Negative life stressors include, but not limited, to events such as separation, divorce, work overload, role conflict/ambiguity, poor social conditions, poor health condition..

Cumulative stress from the impact of life events has become an important variable in psychosomatic and psychological research. Well documented studies on the International level including Arabian cultures show that stressful life events were linked to psychosomatic illnesses such as cardio-vascular disease (Friedman & Rosenman, 1970), sudden cardiac arrests and death (Rahe & Lind, 1971), serious illnesses (Wyler, Masuda & Holmes, 1971; Vinokur & Seizer, 1975), pregnancy and birth complications (Gorsuch & Key, 1974). To assess life changes stressors, the life events questionnaire developed by [Holmes & Rahe \(1967\)](#) has been translated into Arabic and been standardized in Saudi Arabia. This test helps to identify the sources and amount of stress we may encounter in our life. The list of stress inducing events, in the order of their Life Change Unit (LCU), from high to low. Each individual was asked to indicate which listed events had occurred during the year prior to his/her visit to therapy, the outcome of each event (i.e., joyful or painful) and the relevance of each event from an emotional point of view. The responses to this questionnaire were evaluated according both the number of stressful events and to the intensity of either joyful or painful feelings associated with them. Cardiac patients reported a higher number of painful events than controls (3.9 ± 3.8 vs 2.6 ± 2.2 ; $p < 0.05$) and experienced them in a more negative fashion (10.3 ± 9.9 vs 6.0 ± 5.7 ; $p < 0.01$).

Cognitive Assessment of Dysfunctional and Positive Thinking:

The practicing therapist in Arab cultures will find the following two tools quite useful as part of the assessment preceding therapy and monitoring progress in most stages of the intervention process.

The Arabian Dysfunctional-Cognitions Scale (ADC): The Arabian Dysfunctional-Cognitions Questionnaire (ADC) has been developed by the speaker to provide a systematic way of evaluating several individual dysfunctional thoughts, i.e., distorted thoughts, beliefs, cognitions that cause mood and anxiety disorders including but not limited to those pioneered by Beck (Beck, 1975.)

The ADC covers 11 cognitive distortions 6 of which were mainly hypothesized by Beck. The client is requested to rate each of its sixty statements on a scale of 1 to 5, with 1 representing the least applied to his/her life and 5 representing the most relevance to his/her life. The eleven cognitive distortions covered by the ADC included: 1) Overgeneralization, 2) Disqualifying the positive, 3) Mind reading, 4) all or nothing thinking, 5) Catastrophisation, 6) Personalization, 7) Negative self-labelling, 8) Generalization of negative interpretations, 9) Negative Attention Selectivity, 10) Preoccupation with competition and comparison with others, and 11) Over positive expectations. Examples of statements used in this test are: "I know in advance that things will go wrong," "I can tell what others are thinking," "When things go wrong, I always feel it is my responsibility," "I get in trouble because of overconfidence."

The Arabian Positive-Cognitions Questionnaire (APC): The Arabian Positive-Cognitions Questionnaire (APC) on the other hand is based on the theory (Taylor & Brown, 1988;) that positive self-evaluations, optimism, good contact with reality, and perceptions of mastery are normal and supportive of good mental health. They help people care about others, be happy and content, and to be productive and creative. This works because the cognitive mind has filters that distort information in a positive direction and represent negative information as non-threatening as possible. The eight positive thoughts covered by this test are: 1) Optimism and Positive Expectations, 2) Emotional Control, 3) Satisfaction, 4) Health Awareness, 5) Tolerance and Acceptance of Differences, 6) Self Acceptance, 7) Positive Time Perspective, and 8) Emotional Intelligence.

Each dimension is measured by at least ten items, and each item consists of two statements (A) or (B). The respondent is requested to choose only one statement A or B. Each answer in the test corresponds to an attribute that is classified as positive. Thus, a reply implying optimism in one question is nullified by another reply that implies pessimism. Here are two example questions measuring optimism:

1. When I look at the future, I think:
 - A) Tomorrow is much better than today,
 - B) I don't see any good luck

I think, I am :

- A) Tomorrow is much better than today,
- B) Pessimis

Psychometrically speaking, both the ADC and APC were given to volunteering 150 students representing three departments at the University in petroleum and Minerals in Saudi Arabia along with some other tools including the Arabic Beck Symptomatology Depression Questionnaire, and Ibrahim's List of Psychiatric Symptomatology scale. A test re-test administration of the ADC and the APC yielded reliability for the ADC (negative thoughts) to be $r = .93$; the test re-test reliability for the APC (positive cognitions) to be $r = .81$. The correlation between the two questionnaires was -0.62 . Further informative data and validity information obtained in Egypt, Italy and Emirates are in the process and will be reported elsewhere. Generally speaking initial indications are in support of high reliability and validity indicators for both instruments.

Multimodal Cognitive Behaviour Therapy Interventions

The Multimodal Cognitive Behaviour Therapy (MCBT) is based on the idea that how we think (cognition), how we feel

(emotion), and how we act (behavior) all interact together. Specifically, our thoughts influence our feelings and our behavior. Therefore, negative and unrealistic thoughts can cause us distress and result in emotional problems. Cognitive behaviour therapy can provide a non-judgmental and supportive environment where self-defeating philosophies can be processed openly and the self tendencies caused by them can be explored. As can be seen in the following, numerous MCBT techniques have been found easily adaptable and proved very useful for cultural use in our Arabian psychological practice. Those will be described as: Stress Management, Cognitive coping, and Social coping.

Stress Management

Our adopted stress management approach emphasises teaching patients skills that can help relieve them from harmful effects of stress. First, the patient is encouraged to learn to identify thought patterns and social situations that increase feeling of stress. Second, patients are trained to practice relaxation techniques that cultivate low states of arousal. A host of relaxation techniques exist and our patients are encouraged to experiment with them under our supervision, including progressive muscle relaxation, and autonomic relaxation techniques. Breathing exercise are very important especially in cases of gastrointestinal and respiratory systems including gastric ulcers, irritable bowel syndrome, asthma, hyperventilation and headaches. Some of the relaxation techniques are deep breathing, imagery, and muscle progressive. Patients are encouraged to practice each technique for a week before she/he switches to the next technique. The practice of each technique is advised to be daily for 3 times. Altogether, full and effective relaxation techniques requires about 3-5 weeks. It is most helpful to provide the patient with an audiocassette version of the instruction to ease practice and encourage awareness of the calming effects of relaxation..

Cognitive Coping

Cognitive therapy presents an information processing model to aid patients in understanding how they characteristically incorporate data that support their belief about healthy self while excluding or discounting data that are contrary. Thus, cognitive coping involves teaching a patient to identify negative thoughts and behaviours that increase their stress burden and the situations where stress occurs. Positive coping strategies include, for example, positive reappraisal, diverting attention, positive self talk. Rehearsal of coping strategies during therapy sessions are critical for the effective application in the natural environment. Patients are encouraged to start using cognitive coping strategies at the first opportunity. Self monitoring tools such as diaries and checklists are used first to assess maladaptive coping and then to monitor progress and to refine coping strategies as needed.

From the multimodal cognitive approach, our first step is a thorough evaluation to ascertain the presence of any emotional difficulties including depression, anxiety, and anger that may need immediate psychiatric and medical attention. In such cases, treatment may need a combination of standard psychiatric intervention along with a modified standard cognitive therapy to address emotional and mood disturbances issues that interfere with coping with therapy itself.

Changing core beliefs represents a main target for cognitive coping. Several techniques to achieve such goal include:

disputing dysfunctional thinking, thought stopping, reinforcement of positive thinking, self monitoring, reinterpretation. This is most often accomplished by weekly sessions. According to Beck, a person with BPD,

Social Coping

patients afflicted with psycho-physiological illness may exhibit skills deficit and need to be directly taught new ways of interacting with others and managing themselves. Smoking cigarettes, for example, need not only to modify such beliefs as but also to learn skills of assertion. A diabetic patient or hypertensive one who is warned against fatty food or smoking cigarettes, requires help in evaluating a dysfunctional belief such as "If I say no or refuse to share eating a fatty food or entertaining drug, people will not love me," or "If I openly express my true feeling, I'll be rejected," but also to learn skills of assertion and also need guided practice in controlling the dramatic expression of their emotions and in taking a somewhat more subdued role in group or one-to-one interactions.

Cultural Considerations in the Treatment Process

The current state of affair in research and practice in psychotherapy and counseling seems to focus on how and in what way culturally determined behavioral patterns may influence the psychological treatment processes. In the last two decades, these *culturally oriented trend* of psychological treatments have been enriched by many Arabian scholarly writings addressing the topic of cross-cultural and multicultural factors in professional practice (e.g., El-Dawla, 2001; El-Islam, 2001; Fish, 1995; Ghubash, 2001; Ibrahim, 2001; Jilek, 2001; Jenkins, 1985; Kiesler, 1966; Sue, 1981).

Basically, it is assumed that Individuals in Arabian cultures, as in any other culture, are forced into different life experiences, and, therefore, deliberately and inadvertently, develop many different and unique cultural values and perspectives. In practice, we have found that these differences must be taken into account to achieve maximum success in therapy. This presentation concentrates on exactly this premise.

The benefits of information about the role of cultural factors in Arabian mental health practice are numerous. By modifying treatment styles according to cultural norms, the therapist will be provided with with a framework to better comprehend the systems of relationships involved in multicultural practice. Additionally, awareness of cultural patterns plays an important role in determining the relevancy and effectiveness of any therapeutic relationship. Also, the inability to offer culturally relevant treatment is seen by Sue and Zane (1987, p. 45) as the single most important reason individuals in any culture are inadequately served. Further, well gathered knowledge of culture, will alert mental health practitioners to possible problems of credibility.

Based on my own personal practice, anthropological studies, psychosocial research, and personal observations, at least four major modal personality and behavioral patterns that are relevant for better understanding of Arab patients can be hypothesized as follows: 1.) Religious orientation, 2.) Affiliation, and communal attachments, 3.) Family and kinship Orientation, 4.) Attitudes, relationships, and dealing with authority figures. The role of such dimensions proved very effective in terms of facilitating the selection of treatment techniques; and identifying treatment goals and prognosis criteria on a more culturally acceptable ground. Examining the role of each of these 4 characteristics in practice is in order.

Religious Orientation:

Culture has strong impact not only on the beliefs we hold about the supernatural powers and the religion we adopt but also on the way we allow these beliefs and religious faith to impact our daily practices, the way we think, and styles of communication with others including therapeutic relationships.

Generally Arabs ; Muslims and/or Christians, are religious. Islam is the major adopted religion in all Arab countries. Arabs' domestic world of relations is deeply affected by Islam in both its great and little traditions. Q'uraan (the *Islamic Holy Book*), and a prayer rug is almost in every Muslim house. Because religion has such a pervasive influence, the practitioner with a working knowledge of Islamic values and assumptions can capitalize on such part of awareness.

In practice, it is easy for any practitioner to identify the vital roles of religion in the treatment process starting from identifying the chief complaints through to the choice of effective treatment techniques.

For example, psychosomatic disorders such as headaches, insomnia, and many physical ailments are either colored by rigid religious knowledge, or attributed to factors of religious and supernatural nature such as spirits, evil eye, or envy (*hasad*).

Because of their strong religious orientation, Arab patients seek professional mental health providers only after they have sought the help of traditional and religious types of healing (Dwairy, 1998; El-Islam, 1982; Okasha, 1977).

Some therapists may mistakenly call for, and may adopt, strong religious tones in their therapeutic practices by using, for example, Q'uraanic verses, the prophet Mohamed sayings (*ahadeeth*), and theological interpretations (*fiqh*.) Although this strategy can, at times, be effective, it may be seen less credible especially by the patient who has already sought help with religious healers. It may be more effective to avoid religious arguments altogether and to reframe the client's problem on a *medicalized* ground. This approach is found to be an effective recognized treatment policy with non Anglo – American ethnic minorities in the US (Sue, Zane, 1987), and can positively influence Arab patients, as well.

2. Affiliation, and communal attachments:

Arabs show their concern for others in many unique positive and/or negative ways. For example,, research has shown that in Saudi Arabia, an Arabian culture which encourages strong family ties and kinship, respondents avoided expressing feelings of hostility or aggression toward others. Instead, feelings of hostility are disguised by niceties of behavior (*mujamala*), affiliation, and conformity (*musayara*). *Musayara* means to get along with others' attitudes, wishes, and expectations through conformity and hiding one's real feelings, thoughts, and attitudes (Dwairy, 1998, p. 83).

It is very important for the mental health practitioners to be aware, for example, of role played by stressed relationships between husbands and wives, parents and children, superiors and employees when they are involved in treating both physical difficulties and psychological ones.

Some behavioral therapeutic techniques such as training for assertiveness, confrontation, encouragement of or refusal of responses, and anger-expression should be practiced wisely and carefully. If the basic goal of treatment is to get the client to believe that treatment is realistic and rational, then it would not

enhance the therapist's credibility to encourage an Arab to be aggressive toward others such as spouses, superiors, friends, and community.

4. Dealing with Authority Figures:

Both research and casual observations agree that relationships with authority figures in Arabian cultures are vital (Ibrahim, 1982, 1985; Melikian, 1977). Such relationships form a major part of the interpersonal relationships system in Arab countries. Arabs show deep respect and obedience to authority values more than Western cultures.

One major implication of authority orientation is an external locus of control (Phares, 1979); that is the belief to be dominated by outer forces and circumstances. Arab children as well as adults are guided by strict external rules. External authority such as parents and teachers are the agents that ensure fulfillment of the societal norms (Dwairy, 1998, p. 29). Therapeutically speaking, psychosomatically ill -externals vs. internals are more likely to seek structured and direct types of treatment. Therefore, the more structured and the more directive the therapy is the better. This conclusion is, indeed, consistent with results extracted from other views of health specialists (e.g., Badri, 1979; Cheleby, 1992; West & Al-Kaisi, 1985) who do also agree that structured types of mental health intervention such as behavior therapy, cognitive therapy, medical- chemotherapy, hypnotherapy are more effective than those based on nondirective techniques. Chaleby (1992) has found that many Arab mental health specialists, for example, chose cognitive therapy, as the preferred modality of psychological treatment because of its clarity and suitability to the Arabian culture mainly due to its directive role. Some research is badly needed in this part of the world to test the validity of this result.

In summary, the practitioner who is not aware of the Arabian individual's cultural belief system may find himself *targeting* minor or irrelevant *behavioral problem*. Hence she/he may lose her/his effectiveness and sacrifices her/his credibility. The treatment process will, also, suffer if the practitioner requires from the client to practice some *treatment technique* that are culturally unacceptable.

The credibility will also suffer if *goals of treatment* if treatment goals of the therapist for his patient are different from those of the patient, the treatment credibility will suffer. Indeed, many patients may prematurely terminate treatment altogether because of the uncomfortable feeling and the embarrassment caused by formulating different goals.

Family Intervention:

Family oriented behavioral modalities of treatment can play a major and positive role in solving both psychological and social problems among Arab patients. Involvement of husbands and parents can particularly enhance the credibility of behavioral approaches of treatment and would find a fertile environment in Arab countries. This is due to the traditional strong feelings of obligation toward others in the family.

Pathways by which families influence physical health and a typology of family interventions are well documented. In fact, There is growing research on the role of the family in chronic physical illness. At the same time, family therapists and family researchers have become increasingly interested in physical illness. In Arab countries, substantial evidence demonstrates that the chronic and serious physical illness has profound effect on other family members and on the family as a whole. In addition, there is a growing body of evidence demonstrating that

families can have a beneficial or harmful effect on a family member's physical health (Campbell, 1986. Campbell & Patterson, 1995; Doherty & Campbell, 1988). Families have a powerful influence on health, equal to traditional medical risk factors. The strongest evidence for this statement comes from the social and family support literature. Numerous large epidemiologic studies have demonstrated that social support, particularly from the family, is health promoting (Berkman, 1995, 2000). In a 1988 Science journal article, sociologist James House (House, Landis, & Umberson, 1988) reviewed this research and concluded:

Studies have shown that family support affects the outcome of many chronic medical illnesses. Berkman, Leo-Summers, and Horwitz (1992) found that after suffering a myocardial infarction, women who are isolated and have few or no family or social supports have 2 to 3 times the mortality rate compared to other women. Many stresses within the family, such as loss of a spouse and divorce, significantly impact morbidity and mortality.

2. Emotional support is the most important and influential type of support provided by families. Social and family support has been divided into different types of support: instrumental, informational, emotional, and a sense of belonging (Cohen & Syme, 1985). Instrumental support is the actual provision of services (e.g., driving the patient to the hospital) or caregiving (e.g., giving insulin injections) provided by family members. Informational support usually involves giving health-related information, such as advice on whether to seek medical care. Emotional support is providing a listening ear, empathy, and the sense that one is cared about and loved. A sense of belonging is the feeling that one is part of a family or other group that cares about its members. Although there is obviously overlap between these categories, research suggests that emotional support has the most important influence on health outcomes (Kiecolt-Glaser & Newton, 2001). This would suggest that it is not possible to replace family support with services that provide only instrumental and informational support.

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