OVERVIEW AND IMPLICATIONS

The frequent intense pain of a migraine headache attacks has been described throughout the medical and psychological literature for many years. Though migraine is an episodic condition, features of the illness often extend beyond the acute attack. At the biological level, there is an enduring predisposition to attacks which may take the form of a reduced threshold to the development of headaches. At the psycho-social level, there may be changes in behavior, long term adoption of the sick roles with disruption at work, school, and social life. Many questions still surround migraine. One of these, derived from consideration of the psychological aspect of the migraine headache syndrome, concerns the personality profile or type of migrainous people. While considerable knowledge of the physiological manifestations of an attack has been acquired empirical evidence for psychological correlates is lacking.

The profile of a migraine subject which emerges from the present study is that of a person who differs considerably from normal healthy individual on certain personality traits. The current exploration revealed that female migraine patients experience higher depression than their normal counterparts. Depression may destabilize the already tenuous existence of the migraine sufferers. This highlights the importance of recognizing both conditions, because patient’s health status and the perception of pain are significantly worse when migraine is accompanied by depression. This has important implications for patient management. Studies have documented greater difficulties in treating migraine when depression is coexistent. Presence of depression along with migraine leads to higher medical costs as compared to migraine alone.

Another prominent finding of the present study is that migraine sufferers have higher level of anxiety as compared to controls. Physicians who treat patients with migraine should be cognizant of the possibility of
anxiety and when these two conditions occur together, therapeutic options should be evaluated for treating both conditions. So once diagnosed, anxiety and depression should be treated, both to enhance the success of migraine treatment and to improve the patient’s quality of life. A careful investigation and an adequate therapy for eventual psychiatric comorbidity are essential in migraine sufferers.

The association between migraine and defense mechanisms was also explored in the present investigation. It is evident that migraine sufferers uses more of maladaptive, image-distorting, and self-sacrificing defense styles and less of adaptive defense style. Measurement of adaptive style of the DSQ may be useful adjust to other measures of psychopathology and can assist in assessment of risk, treatment planning, and treatment progress. Though defense mechanisms are universal and normal and it is difficult to cope with the vicissitudes of life without them. Still it is wiser to use healthier defense mechanisms (more adaptive and more functional). Excessive dependence on maladaptive defense styles may lead to poor adjustment and well being and may help in exacerbating and maintaining migraine. It is important for sufferers to become aware of their defense mechanisms and learn more effective coping skills and eliminates negative defenses. Migraine sufferers may benefit from psychotherapy. It encourages healthy defenses such as suppression, humor, anticipation, sublimation, and altruism, while helping patients overcoming anxieties and fears which may lead to maladaptive defenses.

Present study also revealed that migraine sufferers are higher on rigidity and orderliness as compared to normal people. It has been firmly established that excessive orderliness can be seen as a distraction from anxiety, guilt, or antisocial tendencies. This has its roots in excessive parental punishment during early childhood. Orderliness can sometimes lead to excessive stress and disturbed interpersonal relationship. Likewise, rigidity can also be understood as action to counteract
unexpressed anger and frustration. It gives a person a sense of security and comfort. An excessive rigidity may have physiological effect which may directly causes migraine or indirectly, excessive rigidity leads to unnecessary strain, adjustment problems, disturbed interpersonal relationship which can cause migraine in susceptible persons. The affected person may benefit from group and behavioral therapy.

Present results also revealed that migraine with aura and migraine without aura have different personality characteristics. Migraine with aura sufferers are higher on state anxiety, trait anxiety, depression and lower on rigidity as compared to migraine without aura sufferers. Migraine with aura sufferers tend to use more of maladaptive defenses and less of adaptive style as compared to migraine without aura sufferer. Whereas migraine without aura sufferers tend to use more image-distorting and self-sacrificing defenses than migraine with aura. It can be concluded that they are two different entities or distinct subgroups of migraine which have different epidemiological characteristics, familial aggregation, varying pathophysiologic findings and different personality characteristics. Migraine with aura sufferers are at greater risk, so a careful investigation and an adequate therapy for eventual psychiatric comorbidity are essential in migraine with aura sufferers.

To prevent the development of chronic migraine, psychiatric comorbidity should be detected early and treated adequately. This may render prophylactic and acute treatment of headache more effective and economical.

As it is evident that migraine headaches are result of an interplay between physiologic and psychological factors. So there is a need to have a comprehensive treatment approach, one that includes both psychological and pharmacological intervention. A mental health specialist such as psychologist, psychiatrist or clinical social worker can facilitate successful headache management. There is need to assess the role of psychological factor or personality styles in triggering or
maintaining migraine. The psychological evaluation enhances the understanding of emotional and behavior problems of migraine sufferers. Those who do not show any emotional and behavioral problems of clinical significance may benefit from minimal therapeutic intervention, including improvement of acute pharmacological therapy, control of individual trigger factors. In contrast, those who have along with headaches, emotional/behavioral problems of clinical relevance need special psychiatric therapy which focuses on individual psychopathology in addition to medical management of their headache.

Over the years, some alternative medicine approaches like aerobic exercise, acupuncture, relaxation training, mental imagery technique, yoga, and meditation have become popular treatment for migraine. Cognitive behavior therapy and biofeedback are among the most widely used behavioral treatment approaches for headache. Cognitive behavior therapy helps patients monitor their thoughts, emotions, and behavior and it enables them to identify patterns associated with pain and disease. Headache causation is multifactorial, and a patient’s headache may depend on specific pathophysiologic mechanisms that may be triggered by numerous interactions, some of which the patient can learn to control or anticipate. These include the patient’s physiologic status, environmental factors, the patient’s ability to cope with environmental factors, and the consequences of the headaches.

Cognitive behavior therapy comprises five stages: education, skills acquisition, cognitive and behavioral rehearsal, generalization, and maintenance. Education clarifies the relationship between triggers and headache and underscores the importance of treatment compliance. Acquired skills include headache monitoring, relaxation, biofeedback (temperature and electromyographic), and other stress management methods. Behavioral goal setting and the matching of strategies to situations appropriately constitute cognitive and behavioral rehearsal.
In addition, making life-style changes to reduce the frequency and/or severity of attacks and knowing how and when to use their medication, gives patients a sense of control over their migraine and does improve outcomes. Those whose past experiences of medical consultation and treatment for migraine have been unrewarding may benefit from this comprehensive treatment. Patients must accept that causes of their headaches are multiple and complex and not entirely physiological and that an alternative form of treatment may be required.

As migraine is heterogeneous in frequency, chronicity, and intensity of symptoms, the management should be tailored to patients’ needs. Results on chronicity suggest that over the years migraine sufferers accept their pain and learn to live with it. So it is essential that special attention should be given to migraine sufferers in the initial years when they start having migraine headaches because this is the time they are more vulnerable to depression and anxiety. Migraine sufferers having intense and incapacitating headaches are higher on psychopathology than those who have very severe headaches but can do undemanding jobs whereas headache severity was not associated with any of the variables in migraine with aura group. Present study also highlights that number of days with migraine per month is a key determinant of anxiety and depression in migraine with aura not in migraine without aura. So the optimal management of migraine requires a systematic evaluation of the patients and then develop an individual management plan.

Number of studies suggest that family history of headache may be a strong predictor of headache activity. Though there is a genetic predisposition influence in migraine, family members also serve as powerful models of pain behavior. Therefore family history may represent both genetic as well as early learning influences. Headache may be an attempt to elicit care-taking from a preoccupied mother, it may be due to modeling, experiencing a family atmosphere which enforces pain or it may be a result of genetic predisposition. Family behavior has a potential
either for diminishing a pain problem or for exacerbating it and nurturing into chronicity. It is also evident that deteriorating family situations and conflicts do play an important role in exacerbating head pain. It is required that the family members of migraine sufferer are supportive and understanding and ready to help the sufferer.

Although migraine does not reduce life expectancy, but it can have considerable impact on the sufferer. If the major family care-giver (spouse or parent) is having migraine, it threaten or destabilize the whole family. Migraine can interfere with women ability to work and/or to be an effective parent. Migraine can also put a strain on marriages and other relationship because of lack of understanding on the part of others. In order to provide optimal treatment to the migraine patient, it is helpful if the caregiver has an understanding of the population seeking help. It is important for family members to ignore pain behavior and reinforce well behavior.

**LIMITATIONS OF THE PRESENT STUDY**

For a number of reasons, this study must be regarded as preliminary one. Few of its limitations are as following:-

1. One of the shortcomings of the present study is that group of subjects with frequent severe headaches without migraine features was not included for comparison. It is therefore not possible to say whether the psychological features observed in the migraine group are also shared by chronic tension headache sufferers.

2. Migraine patients were also not compared with other pain patients. It could have revealed whether the personality features typically of migraine sufferers were also shared by other pain patients.

3. In the present study ambition was measured with the help of questionnaire which measures sensitivity to social incentives
associated with achievement. Whereas Thematic Apperception Test could have measured another dimension of achievement motive (intrinsic, task-related achievement incentives).

4. In the present investigation some of the other important psychological constructs assumed to be associated with migraine like anger, hostility, type-A behavior, hardiness were not studied.

5. As it was cross-sectional study, it did not yield any possible causal direction for the association of migraine and various personality variables and defense mechanisms.

6. Though DSQ gave insight into various defense styles and defense mechanisms used by migraine sufferers, yet it didn’t measure repression which is one of the key defense mechanisms.

7. Lastly, as far as various parameters of headache were concerned, the actual hours of headache was not studied, reason being that patients continued to have headaches at bed time and were unable to report the time at which the pain ceased.

**SUGGESTION FOR FUTURE RESEARCH**

In the back drop of the present study, some suggestions for future research are given below:-

1. Studies are needed to consider the factors that are related to migraine in population that differ in socio-demographic variables like rural-urban, migration, socio-economic status, family status, age, education, and profession.

2. Research is needed to identify the role of other personality variables like anger, hostility, locus of control, hardiness, type-A behavior, vis-à-vis migraine.

3. Studies are needed for a comprehensive understanding of the development and progression of migraine headaches.
4. Longitudinal studies could provide an excellent vehicle to investigate the nature of association between migraine and personality variables. It will also determine the causal direction and affirm etiological relationships.

5. In case of severe disabling migraine and other chronic severe headache particularly when there is a poor response to treatment, family dysfunction could be examined as a possible contributing cause.

6. It needs to be further investigated that whether migraine have a symbolic and communications function within the family system.

7. Efforts should be made to study personality variables like ambition and defense mechanism using projective techniques.

8. Little is known about the role of various situational mediators such as social support vis-à-vis migraine headaches. So research in this direction is called for. So research in this direction is called for and social support could be studied as moderator.

9. Researches are needed to investigate further into the various parameters of aura (duration of aura, nature of aura etc.) and see whether migraine patients with different types of aura have different personality profiles.

10. Further probe is required into the role of stress or conflict preceding and maintaining the migraine.

11. In addition to monitoring the personality variables and headache parameters, it is essential to note the way in which headache is evolving (improving, worsening or unchanged).

12. Lastly, results of the present study need to be replicated with other population like children, adolescents, men, and geriatric population.