



GNITED MINDS
Journals

*Journal of Advances and
Scholarly Researches in
Allied Education*

*Vol. IV, Issue VIII, October-
2012, ISSN 2230-7540*

STUDY ON STRESS ASPECTS IN MIGRAINE

Study on Stress Aspects in Migraine

Arun Kumar Shukla¹ Dr. Parul D. Shukla²

¹Research Scholar, CMJ University, Shillong, Meghalaya

²Lecturer, Department of Psychology, Smt. R.R.H. Patel Mahila Arts College, Vijapur, Distt.-Mahesana, Gujrat

Abstract – Some significant consequences occur for the wider community in terms of time lost from work and treatment costs due to headache. The headache disorder is mainly classified in two types- (i) primary headache disorders and (ii) secondary headache disorder. Primary headache disorders are again classified as migraine headache, tension-type headache and cluster headache. Migraine is a painful neurological condition and its symptoms are intense, throbbing and disabling episodic pain. Migraine headaches are usually characterized by severe pain on one or both sides of the head and the pain usually last from 4 to 72 hours duration and are often accompanied by hypersensitivity to light and sound and feelings of nausea. It is a condition that has always plagued the human race.

Key Words; Neurological, Intense, Throbbing, Disabling, And Episodic.

INTRODUCTION

Primary Stabbing Headache: Episodic localized stabs of head pain occurring spontaneously in the absence of any structural cause (formerly referred to as “jabs and jolts”) are diagnosed as primary stabbing headache. Pain is exclusively or predominantly in the distribution of the first division of the trigeminal nerve (orbit, temple, and parietal area). It lasts for up to a few seconds and recurs at irregular intervals with a frequency ranging from one to many per day (Pareja, Ruiz, de Isla, al-Sabbab and Espejo, 1996).

i. Primary Cough Headache: This headache is characterized by coughing and straining (Sjaastad, Pettersen and Bakkeiteig, 2003).

ii. Primary Exceptional Headache: This disorder is triggered by physical exercise and is distinguished from primary cough headache and headache associated with sexual activity. Primary exertion headache is pulsating and lasts from 5 minutes to 48 hours (Green, 2001).

iii. Primary Headache Associated with Sexual Activity: Headache precipitated by sexual activity usually begins as a dull bilateral ache as sexual excitement increases and suddenly becomes intense at orgasm. Two subtypes are classified: preorgasmic headache, a dull ache in the head and neck and orgasmic headache, explosive and severe, and occurring with orgasm (Lance and 1976).

iv. Hemicrania Continua: This is daily, continuous and strictly unilateral headache. Pain is moderate, with exacerbations of severe pain and

autonomic symptoms accompany these exacerbations (Bigal, Sheftell, Rapoport, Lipton and Tepper, 2002).

REVIEW OF LITERATURE

1. Headache attributed to head and neck trauma: This category includes headaches that occur for the first time in close temporal relation to a known trauma. If there is remission within three months after the trauma, the headache should be classified as acute post-traumatic headache. Otherwise, chronic post-traumatic headache is the diagnosis. The same rule applies to acute and chronic post-whiplash injury headache. The ICHD-2 also classifies under this group those headaches secondary to intracranial hematoma and postcraniotomy (Packard, 1999).

2. Headache attributed to cranial or cervical vascular disorders: This category encompasses a large group of headaches that fulfill the following criteria: symptoms or signs of a vascular disorder; appropriate investigations indicating the vascular disorder and the headache developing in close relationship with the vascular disorder. This group includes headaches related to (i) ischemic stroke and TIAs; (ii) nontraumatic intracranial hemorrhage; (iii) unruptured vascular malformations; (iv) arteritis (including giant cell arteritis); (v) carotid or vertebral artery pain (including arterial dissection, ostendarterectomy headache, etc.); (vi) cerebral venous thrombosis; and (vii) other intracranial vascular disorders, including CADASIL (cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy), MELAS (mitochondrial encephalopathy, lactic acidosis, and

stroke-like episodes), etc. (Gorelick, Hier, Caplan and Langenberg, 1986).

3. Headache attributed to nonvascular intracranial disorders: This category includes an extensive and heterogeneous group of disorders. They are: (i) high cerebrospinal fluid pressure; (ii) low cerebrospinal fluid pressure; (iii) noninfectious inflammatory diseases; (iv) intracranial neoplasm; (v) headache related to intrathecal injections; (vi) postseizure headache; (vii) Chiari malformation type-I (CM1); and (viii) syndrome of transient headache and neurologic deficits with cerebrospinal fluid lymphocytosis (Ramadan, 1996).

4. Headache attributed to a substance or its withdrawal: When new headaches occur in close temporal relation to substance use or withdrawal, they are coded to this group. The ICHD-2 classifies in this group those headaches following acute exposure to (i) nitric oxide donor substances; (ii) phosphodiesterase inhibitors; (iii) carbon monoxide; (iv) alcohol; (v) food components and additives; (vi) monosodium glutamate; (vii) cocaine; (viii) cannabis; and (ix) other acute substance use. In addition, chronic medication overuse is a risk factor for the development of chronic headache disorders (Bartleson, Swanson and Whisnant, 1993).

5. Headache attributed to infection: This is a very straightforward group where headaches secondary to intracranial and extracranial (systemic) infections are classified. This group also includes headaches related to HIV/AIDS and chronic post infectious headaches (Gomez-Arada, Canadillas and Marti-Masso, 1997).

6. Headache attributed to disorders of homeostasis: This group of headaches was formerly referred as headaches associated with metabolic or systemic diseases. They include the following headaches: (i) headache attributed to hypoxia and/or hypercapnia (high altitude, diving, and sleep apnea); (ii) dialysis; (iii) arterial hypertension; (iv) headache attributed to hypothyroidism; (v) headache attributed to fasting; (vi), cardiac cephalgia; and (vii) headache attributed to other disturbances of homeostasis. (Antoniazzi, Bigal, Bordini, Speciali, 2003).

7. Cranial neuralgias and central causes of facial pain: Finally, the last of the ICHD-2 codes the cranial neuralgias and facial pain, including (i) trigeminal neuralgia; (ii) glossopharyngeal neuralgia; (iii) nervus intermedius neuralgia; (iv) superior laryngeal neuralgia; (v) nasociliary neuralgia (Charlin); (vi) supraorbital neuralgia; (vii) other terminal branch neuralgias; (viii) occipital neuralgia; (ix) neck-tongue syndrome; (x) external compression headache; (xi) cold stimulus headache; (xii) constant pain caused by compression, irritation, or distortion of cranial nerves or upper cervical roots by structural lesions; (xiii) optic neuritis; (xiv) ocular diabetic neuropathy; (xv) herpes zoster; (xvi) Tolosa-Hunt syndrome; (xvii)

ophthalmoplegic migraine; and (xviii) central causes of facial pain (Terrence, Jensen, 2000).

1. Presumptive Stressful life Events Scale (PSLE Scale) (Singh, Kaur and Kaur, 1983).

MATERIAL AND METHOD

A sample of seventy five patients was selected. Only those patients having at least two attacks in a fortnight period and scored three or more on a five point scale on the perceived intensity of pain scale were selected for psychological intervention. But some patients were dropped out in between and only sixty patients were remaining for intervention. These sixty patients were randomly assigned to the three groups. Thus, there were twenty participants in each of the three groups. The three groups were randomly assigned to three treatment conditions. One group was given Jacobson progressive muscular relaxation training (JPMR). The second group was given EMG-biofeedback training and the third group was taken as the control group. The participants in the JPMR relaxation group were given relaxation training as designed above in every alternative day for fifteen days. Similarly, the participants in EMG-biofeedback group were also given training for every alternative day for fifteen days. The patients were also taking medication during psychological intervention. All the patients were retested on perceived intensity of pain and severity of attack scale after the end of the psychological intervention.

CONCLUSION

- Females were found to experience impersonal events, desirable and undesirable stressful events more than males. However, male and female participants did not differ in the experience of personal and ambiguous stressful life events.

- For males (n=108) personal stressful events, impersonal events, undesirable events and ambiguous events were found to be significantly and positively correlated with perceived intensity of migraine pain. As far as the frequency of migraine attack is concerned the personal stressful events, undesirable events and ambiguous events were found to be significantly and positively correlated with perceived frequency of migraine attack. However, desirable events were not found to be significantly associated with either perceived intensity of migraine pain or frequency of migraine attack.

- In case of females, (n=92), personal stressful events, impersonal stressful events and undesirable stressful events were also found to be significantly and positively correlated with perceived intensity of migraine pain. As far as the frequency of migraine attack is concerned the personal stressful events, impersonal events and undesirable events

were found to be significantly and positively correlated with perceived frequency of migraine attack. However, desirable events and ambiguous events were not correlated with either perceived intensity or frequency of migraine attack.

REFERENCES

- Abu-Arafeh, I. and Russel, G. (1995). Prevalence and clinical features of abdominal migraine compared with those of migraine headache. *Archives Distribution Child*, 72, 413-417.
- Abu-Arefeh, L., and Russell, G. (1994). Prevalence of headache and migraine in schoolchildren. *British Medical Journal*, 309, 765-769.
- Alexander, F.G. and French, T.M. (Eds.). (1948). *Studies in psychosomatic medicine: An approach to the cause and treatment of vegetative disturbance*, New York: Ronald.
- Anderson, C.A. and Bushman B.J.(2002). Human aggression. *Annual Review of Psychology*, 53, 27-51.
- Blanchard, E.B. (1992). Psychological treatment of benign headache disorders. *Journal of Consultant Clinical Psychology* , 60, 537-551.
- Blanchard, E.B. and Andrasik. F. (1985). Management of chronic. *Headaches: A psychological approach*, Elmsford, NY: Pergamon Press.
- Blanda, M. and Wright, J.T. (2006) (website) <http://emedicine.medscape.com/article/1144656overview>. On 24/12/10
- Crick, N.R. and Grotpeter J.K. (1995). Relational aggression, gender, and social psychological adjustment. *Child Development*, 66, 710-722.
- Critchley, M. (1967). Migraine: From Cappadocia to Queen Square. In:
- Deffenbacher, J. L., McNamara, K., Stark, R. S. and Sabadell, P. M. (1990). A combination of cognitive, relaxation, and behavioral coping skills in the reduction of general anger. *Journal of College Student Development*, 31, 351-358.
- Deffenbacher, J.L. (1992). Trait anger: Theory, findings, and implications. In: Spielberger C.D., Bucher J.N., (Eds.). *Advances in Personality Assessment*, LEA, Hillsdale. 1, 177-201.
- Diener, H.C. and May, A. (1996). Positron emission tomography studies in acute migraine attacks. In: Sandler M, Ferrari M, Harnett S, eds,
- Dodick, D.W., Brown, R.D., Britton, J.W., Huston, J. (1999). Nonaneurysmal thunderclap headache with diffuse, multifocal, segmental and reversible vasospasm. *Cephalalgia*, 19, 118-123.
- Dodick, D.W., Rozen, T.D., Goadsby, P.J., Silberstein, S.D. (2000). Cluster headache. *Cephalalgia*, 20, 787-803.
- Douglas, V. (1972). Stop, look, and listen: The problem of sustained attention and impulse control in hyperactive and normal children. *Canadian Journal of Behavioural Science*, 4, 259-282.
- Eliany, M., and Rush, B. (1992). How Effective Are Alcohol and Other Drug Prevention Program and Treatment Programs?: A Review of Evaluation Studies. Canada: Health and Welfare Canada.
- Elkin, Allen. (1999). *Stress for Dummies*. New York: For Dummies.
- Fozard, J.R., (1996). 5-Hydroxytryptamine and nitric oxide: the casual relationship between two endogenous precipitants of migraine. In: Sandler M, Ferrari M, Harnett S, eds, *Migraine Pharmacology and Genetics*.
- Goleman, D. (1987), *The Mind over the Body*, New York Times.
- Goleman, D. and Gurin, J. (1993). Mind-body medicine: How to use your mind for better health. Yonkers, NY: Consumers Union of United States, Inc. Web Page: (<http://www.thefreelibrary.com/Access+to+biofeedback+therapy+for+women+suffering+from+headache+in+...+a0174057634>) as on 24/12/10)
- migraine headache. *Health Care Policy and Research*, 27, 580-583.
- Graham, J.R. and Wolff, H.G. (1938). Mechanisms of migraine headache and action of ergotamine tartrate. *Archives Neurology Psychiatry*, 39, 737-63.
- Hammen, C. (2009). Stress exposure and stress generation in adolescent depression. In S. Nolen-Hoeksema and L. Hilt (Eds.), *Handbook of depression in adolescents*: New York. Taylor & Francis Group.
- Holroyd, K.A., Lipchik, G.L. and Penzien, D.B. (1998). Psychological management of recurrent headache disorders: Empirical basis for clinical practice. In K.S. Dobson & K.D. Craig (eds), *Best Practice: Developing and promoting empirically supported interventions*, Newbury Park: Sage Publishers.

Holroyd, K.A., Penzien, D.B. and Hursey, K.G.,