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Cognitive, Personality, and Family Factors in Patients with Migraine Headache

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Quantitative Study

Abstract

Migraine is a disorder that has debilitating pain, and affects all aspects of life, including the academic, social, and family life of patients. In addition, studies show the effects of migraine on patient's relationships with family members such as spouse, children, and other family members. In addition to physical pain, migraines are tied to significant psychological and economic costs. Migraineurs tend to have high levels of depression and anxiety, and migraine headaches have a profoundly negative impact on sufferers' quality of life. In the present research, we investigated the correlations and regressions of cognitive, personality, and family factors with migraine headache, to find predictor factors of migraine. In this study, the following questionnaires were used: For migraine: six-item Headache Impact Test (HIT-6), and Specific Quality of Life Questionnaire Version 2.1.; for cognitive factors: Irrational Beliefs Test and Dysfunctional Attitudes Scale; for personality factors: NEO Personality Inventory; and for family factors: Family Assessment Device. This project was on 58 women with migraine headaches, diagnosed by neurologist. The findings show that, there is a significant regression between cognitive, personality, and family factors and HIT-6. In cognitive factors, frustration reactivity and anxious overconcern, in personality factors, extraversion trait, and in family factors, affective involvement are significant. Moreover, there is a significant regression between cognitive, personality, and family factors and MSQ. In cognitive factors, frustration reactivity, anxious overconcern, and helplessness, in personality factors, agreeableness and consciousness, and in family factors, affective involvement and general functioning are significant. This project showed that cognitive, personality, and family factors have a correlation with migraine headache.

Keywords: Migraine headache, Cognitive, Personality, Family system, Psychosomatic, Migraine specific quality of life questionnaire (MSQ), Headache impact test (HIT)

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Introduction

The experience of chronic pain, such as migraine headache, is the product of a complex interaction of many factors, including biological, social, psychological, environmental, and familial factors (Lewandowski, Morris, Draucker, & Risko, 2007).

Migraine is a disorder with debilitating pain, and affects all aspects of life, including the academic, social, and family life of patients.

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Smith (1996) has also shown the effects of migraine on family members of migraineurs, such as patient's relationships with spouse, children, and other family members.

In addition to physical pain, migraines are tied to significant psychological and economic costs. Migraineurs tend to have high levels of depression and anxiety (Stewart, Shechter, & Liberman, 1992), and migraine headaches have a profoundly negative impact on sufferers' quality of life. Lost labor costs due to migraines are estimated at $13 billion per year (Hu, Markson, Lipton, Stewart, & Berger, 1999).

Migraineurs appear to have greater psychosomatic sensitivity to stress. Huber and Henrich (2003) compared 30 migraineurs and 30 healthy controls, and found that although migraineurs do not have more daily stress, they do report elevated feelings of depression and anxiety in response to that stress. Compared to controls, migraineurs had greater difficulty relaxing and experienced increased restlessness and ill feelings during stressful situations (Huber & Henrich, 2003). Not only do migraineurs report greater anxiety than non-headache controls, they also report that anxiety (57.9%), worry (58.6%), and irritation (55.3%) can trigger migraine attacks (Lanteri-Minet et al., 2003).

Clinical findings have reported special psychological and personality traits for patients with migraine, such as perfectionism, ambition, discipline, and extreme accuracy in everyday activities (Johari Fard, 2011, 2013). We can divide effective factors in migraine headaches into the following three factors:

Cognitive Factors

Pain appraisal refers to the meaning ascribed to pain by an individual (Sharp, 2001). In accordance with the transactional stress model (Lazarus & Folkman, 1984), a distinction can be made between primary appraisal (evaluation of the significance of pain in terms of it being threatening, benign, or irrelevant) and secondary appraisal (evaluation of the controllability of pain and one's coping resources). Beliefs refer to assumptions about reality that shape how one interprets events and can thus be considered as determinants of appraisal. Pain beliefs develop during the lifetime as a result of an individual's learning history and cover all aspects of the pain experience (e.g., the causes of pain, its prognosis, and suitable treatments). Appraisal and beliefs about pain can have a strong impact on an individual's affective and behavioral response to pain. If a pain signal is interpreted as harmful (threat appraisal) and is believed to be associated with actual or potential tissue damage, it may be perceived as more intents and may evoke more escape pr avoidance behavior. For instance, pain associated with cancer is rated as more unpleasant than labor pain, even the intensity is rated as equivalent (Price, Harkins, & Baker, 1987; Gatchel, Peng, Peters, Fuchs, & Turk, 2007).

Irrational beliefs, central idea in cognitive theory and therapy, have been shown to play a primary role in numerous disorders, including depression and anxiety (Haaga, Dyck, & Ernst, 1991; Chawick, Trower, & Dagnan, 1999). Because of these beliefs, depressed and anxious persons systematically distort the meaning of events to interpret their experiences in a sustained, negative, self-defeating way (Lefebvre, 1981). Given the importance of irrational beliefs in the etiology of these disorders, we submit that clinicians and researchers should use the most psychometrically sound tests when measuring this construct (Bridges & Harnish, 2010).

Personality Factors

The basic assumptions are that (1) migraineurs share personality traits, (2) these traits are enduring and measurable, and (3) these traits differentiate migraineurs from control subjects (Schmidt, Carney, & Fitzsimmons, 1986). The notion of a "migraine personality" first grew out of clinical observations of highly selected patients seen in subspecialty clinics (Silberstein, Lipton, & Breslau, 1995).

Touraine and Draper (1934) reported that migraineurs were deliberate, hesitant, insecure, detailed, perfectionist, sensitive to criticism, and deeply frustrated emotionally. They were said to lack warmth and to have difficulty making social contacts. Wolff (1937) found migraineurs to be rigid, compulsive, perfectionistic, ambitious, competitive, chronically resentful, and unable to delegate responsibility.

Most investigations have used psychometric instruments such as the Minnesota Multiphasic Personality Inventory (MMPI) (Hathaway and McKinley, 1943) or the Eysenck Personality Questionnaire (EPQ) (Eysenck & Eysenck, 1975). The EPQ is a well standardized measure that includes four scales: (1) psychoticism (P), (2) extroversion (E), (3) neuroticism (N), and (4) lie (L).

Brandt, Celentano, Stewart, Linet, & Folstein (1990) used the Washington County Migraine Prevalence Study to conduct the first population-based case-control study of personality in patients with migraine. More than 10,000 12- to 29-year-olds who were selected through random-digit dialing received a diagnostic telephone interview. Subjects who met the criteria for migraine with or without aura (n = 162) were compared with subjects without migraine. Each subject received the EPQ, the 28-item version of the General Health Questionnaire (Goldberg, 1975), and a question about headache laterality. Subjects with migraine scored significantly higher than control subjects on the neuroticism scale of the EPQ, indicating that they were more tense, anxious, and depressed than the control group. In addition, women with migraine scored significantly higher than control subjects on the psychoticism scale of the EPQ, indicating that they were more hostile, less interpersonally sensitive, and out of step with their peers. Rasmussen (1992) screened a population-based sample to identify patients with migraine and those with tension-type headache (TTH). Tension-type headache occurring alone was associated with high neuroticism scores on the EPQ. Persons with pure migraine (i.e., without TTH) did not score above the norms on the neuroticism scale, although persons with migraine, with and without TTH, tended to score above the norms on the neuroticism scale.

Merikangas, Merikangas, & Angst (1993) investigated the cross-sectional association between personality, symptoms, and headache subtypes as part of a prospective longitudinal study of 19- and 20-year-olds in Zurich, Switzerland. Subjects with migraine scored higher on indicators of neuroticism than subjects without migraine.

Many investigators (Invernizzi, Gala, Buono, Cittone, Tavola & Conte, 1989); Kudrow and Sutkus, 1979; Sternbach Dalessio, Kunzel, & Bowman, 1980; Weeks, Baskin, Rapoport, Sheftell, & Arrowsmith, 1983) have used the MMPI to investigate the personalities of migraineurs. These studies have been limited by several factors (Stewart, Linet, Celentano, Van Natta, & Ziegler, 1991). The MMPI studies have usually been clinic-based, limiting their generalizability and creating opportunities for selection bias. Most have not used control groups, relying instead on historical norms. Many have not used explicit diagnostic criteria for migraine. Despite these limitations, most studies have shown elevation of the neurotic triad, although this is not statistically significant (Silberstein et al., 1995).

Breslau and Andreski (1995) examined the association between migraine and personality, taking into account a history of concurring psychiatric disorders. Data came from their epidemiologic study of young adults in Detroit, Michigan. Migraine was associated with neuroticism, but not with extroversion or psychoticism, as measured by the EPQ. The association remained significant when the authors controlled for sex and history of major depression and anxiety disorders. More than 25% of persons with migraine alone, uncomplicated by psychiatric comorbidity,

scored in the highest quartile of neuroticism. The results suggest that subjects with migraine are more likely to have psychopathology and to adjust poorly to their medical condition. The findings also suggest that the association between migraine and neuroticism is not attributable to comorbid depression or anxiety disorders.

Family Factors

As mentioned, the chronic pain experience is the product of a complex interaction of many factors including biological, social, psychological, environmental, and familial. The presence of chronic pain can impact the family system with significant, negative consequences; the family may also be responsible, in part, for maintaining and perpetuating pain problems (Lewandowski et al., 2007).

Ehde, Holm, and Metzger (1991) showed the role of family structure, functioning, and pain modeling in headache and suggested that there are important differences in headache subjects' (particularly migraine) reports of their family.

Therefore, in the present research we want to investigate the simple and multiple regressions of cognitive, personality, and family factors of patients with migraine headache.

Methods

In this study, we used three categories of factors.

Migraine Tests

Six-item Headache Impact Test (HIT-6)

The six-item Headache Impact Test (HIT-6) was designed to provide a global measure of adverse headache impact (Ware, Bjorner, & Kosinski, 2000; Kosinski et al., 2003). This test was developed to use in screening and monitoring patients with headaches in both clinical practice and clinical research (Kosinski et al., 2003). The HIT-6 items measure the adverse impact of headache on social functioning, role functioning, vitality, cognitive functioning, and psychological distress. The HIT-6 also measures the severity of headache pain. The six items were selected from 89 items (54 from an existing adverse headache impact item pool and 35 items recommended by clinicians) (Kosinski et al., 2003). The HIT-6 shows good internal consistency and test-retest reliability, and construct validity and responsiveness in general headache patients (Ware et al., 2000; Bjorner, Kosinski, & Ware, 2003). Since its initial development and validation, the HIT-6 has been well received and widely utilized in clinical practice, and applied to clinical trials for patient screening and treatment monitoring of headaches, including migraine (De Diego & Lanteri-Minet, 2005; Lanteri-Minet, Massiou, Nachit-Ouinekh, Lucas, Pradalier, Radat, et al., 2007). The HIT-6 was developed among headache sufferers with different headache day frequency and severity levels. Given the increasing use of the HIT-6 in clinical management of patients, as well as in clinical research, it is necessary to provide evidence for the reliability and validity of the HIT-6 in migraine patients who suffer varying headache day frequency. The purpose of this study was to evaluate the reliability and validity of the HIT-6 among migraine patients, and its ability in discriminating headache impact and the level of disability between episodic migraine (EM) and chronic migraine (CM) disorders.

Specific Quality of Life Questionnaire (MSQ) (Version 2.1)

MSQ is one of the most frequently utilized disease-specific tools assessing impact of migraine on health-related quality of life (HRQL). The MSQ is a reliable and valid questionnaire in the CM population that can differentiate the functional impact between CM and EM. The MSQ can assist researchers in evaluating treatment effectiveness by obtaining input directly from the patients on multidimensional aspects other than frequency of headache days (Bagley, Rendas-Baum, Maglinte, Yang, Varon, Lee, et al., 2012).

Cognitive Factors

Beck (1976) emphasized on two aspect of cognition: cognitive processing (such as attention biases or memory biases); and cognitive content (such as irrational beliefs or

negative automatic thoughts or dysfunctional attitudes; Dalgleish, Neshat-Doost, Taghavi, Moradi, Yule, Canterbury, et al, 1998).

In this study, we want to investigate cognitive content with below questionnaires:

Irrational beliefs test

Developed by Jones (l969), it is designed to measure the amount of agreement respondents have with each of Ellis' ten irrational beliefs. The test consists of l00 Likert-type items, ten per belief. Sample items are: "I hate to fail at anything" and "I want everyone to like me". Jones named the l0 subscales as follows: demand for approval, high self-expectations, blame proneness, frustration reactivity, emotional irresponsibility, anxious overconcern, problem avoidance, dependency, helplessness, and perfectionism. Jones (l969) reported internal consistency estimates for the individual scales ranging from .66 to .80, a test-retest reliability coefficient of .92, and a concurrent validity coefficient of .6l obtained with ratings of psychiatric problems.

Dysfunctional Attitudes Scale

Developed by Beck, Brown, Steer, and Weissman, this scale has three versions. The original version has 100 items. Moreover, there are 40-item and 25-item versions (Weich, Churchill and Lewis, 2003). In this research, we used 40-item version, which has 5 subscales include: "vulnerability", "need for approval", "success-perfectionism", "need to please others" and "need to influence others".

Personality Factors

Anxiety, depression, perfectionism, ambition, discipline and extreme accuracy in everyday activities are reported traits in patients with migraine (Johari Fard, 2013). Furthermore, other findings show that people with migraine headaches, show blame and fault model of self and others and of extreme anger and aggression (Levor, Cohen, Naliboff, McArthur, & Heuser, 1986). However, we could not find any deliberative research about the personality traits of these patients with NEO inventory. Therefore, in this research we want to investigate personality traits by the NEO inventory (Mccrae & Costa, 1987) in the five main personality traits of neuroticism, extraversion, openness, agreeableness, and consciousness.

Family Factors

In an initial attempt to examine relationships between family functioning and structure, and chronic headache disorders, generally, the present study examined:

a) Family structure characteristics,
b) family functioning, and
c) family pain modeling by below assessments:

Family Assessment Device (FAD)

The authors of this test are Epstein, Baldwin, & Bishop (1983). It measured family functioning and system factors. The purpose of this test is to assess the six dimensions of the family functioning outlined in the McMaster Model of Family Functioning (Epstein, Bishop, & Levine, 1978). These 6 dimensions of family functioning are problem solving, communication, roles, affective responsiveness, affective involvement, and behavior control. Additionally, a general functioning scale assesses overall health pathology. The instrument currently has 60 items (Originally, 53 items). For each statement, there are four possible responses from 1 (Strongly agree) to 4 (Strongly disagree).

Reliability

Coefficient alphas for the 7 dimensions: General Functioning scale: .83-.86; Problem solving: .74-.80; Communication: .70-.76; Affective responsiveness: .73-.75; Affective involvement: .70-.78; Behavior control: .70-.73; and Roles: .57-.69.

Test-retest reliability for the FAD scales are: Problem solving (.66); Communication (.72); Roles (.75); Affective responsiveness (.76); Affective involvement(.67); Behavior control (.73); and General functioning (.7 1).

Validity

(1) Low correlations with social desirability (-0.06 to -1.5).

(2) Moderate correlations with other self-report measures of family functioning.

(3) Differentiates significantly between clinician-rated healthy and unhealthy families.

Results

In this section, we present the simple correlations between cognitive, personality, and family factors with HIT-6 and MSQ. Then, we present the multiple regressions between these factors.

Descriptive Statistic

This project was a pilot study on 58 women with migraine headache, diagnosed by a neurologist. The mean ± standard deviation of their age was 35.53 ± 9.41, with a minimum of 18.00 and maximum of 55.00.

Correlations

In the following tables (table 1 to 6), we show the correlations between cognitive, personality, and family factors with HIT-6 and MSQ.

Table 1. Correlation between cognitive factors and headache impact test (HIT-6)

		IBTF1	IBTF2	IBTF3	IBTF4	IBTF5	IBTF6	IBTF7	IBTF8	IBTF9	IBTF10	DAS
E	Pearson Correlation	0.137	-0.023	0.154	-0.223	0.015	0.230	0.223	0.114	0.035	0.064	-0.184
	Sig. (2-tailed)	0.304	0.864	0.249	0.093	0.909	0.083	0.093	0.393	0.797	0.635	0.167
	N	58	58	58	58	58	58	58	58	58	58	58

IBT: Irrational belief test

There is no significant correlation between cognitive factors and HIT-6 in 5% error, but in 10% error we have 3 irrational beliefs (frustration reactivity, anxious overconcern, problem avoidance).

Table 2. Correlation between personality factors and headache impact test (HIT-6)

		Neuroticism	Extraversion	Openness	Agreeableness	Consciousness
E	Pearson Correlation	-0.246	0.034	-0.041	0.010	0.130
	Sig. (2-tailed)	0.063	0.799	0.760	0.938	0.329
	N	58	58	58	58	58

There is a significant correlation between personality factors and HIT-6 in 5% error; neuroticism.

Table 3. Correlation between family factors and HIT-6 (Headache impact test)

		Problem Solving	Communication	Roles	Affective Responsiveness	Affective Involvement	Behavior Control	General Functioning
E	Pearson Correlation	-0.005	0.034	0.124	-0.055	0.021	0.099	0.086
	Sig. (2-tailed)	0.973	0.799	.354	0.683	0.876	0.459	0.520
	N	58	58	58	58	58	58	58

As can be seen, there is no significant correlation between family factors and HIT-6.

Table 4. Correlation between cognitive factors and Migraine specific quality of life questionnaire (MSQ)

		IBTF1	IBTF2	IBTF3	IBTF4	IBTF5	IBTF6	IBTF7	IBTF8	IBTF9	IBTF10	DAS
Q	Pearson Correlation	-0.086	-0.069	0.048	-0.071	-0.166	0.272*	0.108	-0.070	-0.033	0.153	-0.015
	Sig. (2-tailed)	0.522	0.606	0.719	0.596	0.212	0.039	0.421	0.602	0.806	0.251	0.910
	N	58	58	58	58	58	58	58	58	58	58	58

As can be seen, there a significant correlation between cognitive factors and MSQ in 5% error and the irrational belief is anxious over concern.

Table 5. Correlation between personality factors and Migraine specific quality of life questionnaire (MSQ)

		Neuroticism	Extraversion	Openness	Agreeableness	Consciousness
Q	Pearson Correlation	-0.176	0.177	0.167	-0.049	0.178
	Sig. (2-tailed)	0.185	0.183	0.211	0.716	0.181
	N	58	58	58	58	58

As can be seen, there is no significant correlation between personality factors and MSQ.

Table 6. Correlation between family factors and Migraine specific quality of life questionnaire (MSQ)

		Problem Solving	Communication	Roles	Affective Responsiveness	Affective Involvement	Behavior Control	General Functioning
Q	Pearson Correlation	-0.023	0.019	0.000	-0.164	0.071	0.246	0.044
	Sig. (2-tailed)	0.862	0.887	0.998	0.218	0.598	0.063	0.743
	N	58	58	58	58	58	58	58

There isn't any significant correlation between family factors and MSQ in 5% error, but in 10% error, behavior control is significant.

Table 7. Regression between cognitive, personality, and family factors with HIT-6 (Headache impact test)

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.257	0.183		-1.403	0.182
	IBTF1	-0.220	0.318	-0.205	-0.692	0.500
	IBTF2	-0.193	0.234	-0.183	-0.824	0.424
	IBTF3	0.268	0.240	0.247	1.117	0.283
	IBTF4	-0.447	0.209	-0.458	-2.137	0.051
	IBTF5	-0.126	0.349	-0.101	-0.360	0.724
	IBTF6	0.728	0.308	0.675	2.367	0.033
	IBTF7	0.236	0.305	0.184	0.772	0.453
	IBTF8	-0.335	0.310	-0.324	-1.081	0.298
	IBTF9	0.152	0.309	0.114	0.494	0.629
	IBTF10	-0.234	0.253	-0.195	-0.927	0.370
	DAS	-0.341	0.312	-0.293	-1.091	0.294
	Neuroticism	-0.073	0.257	-0.064	-0.283	0.781
	Extraversion	-0.491	0.272	-0.432	-1.803	0.093
	Openness	-0.230	0.274	-0.246	-0.838	0.416
	Agreeableness	0.576	0.377	0.467	1.528	0.149
	Consciousness	-0.133	0.394	-0.115	-0.338	0.741
	Problem Solving	-0.094	0.593	-0.068	-0.159	0.876
	Communication	0.110	0.319	0.096	0.344	0.736
	Roles	0.206	0.273	0.168	0.754	0.463
	Affective Responsiveness	-0.028	0.290	-0.023	-0.097	0.924
	Affective Involvement	-0.825	0.339	-0.804	-2.438	0.029
	Behavior Control	0.194	0.262	0.172	0.739	0.472
	General Functioning	-0.713	0.517	-0.628	-1.379	0.189

IBT: Irrational belief test; DAS: Dysfunctional Attitude Scale

a. Dependent Variable: E

As can be seen, there is a significant regression between cognitive, personality, and family factors and HIT-6. In cognitive factors, frustration reactivity and anxious overconcern, in personality factors, extraversion trait, and in family factors, affective involvement are significant.

Table 8. Regressions between cognitive, personality and family factors with Migraine specific quality of life questionnaire (MSQ)

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.350	0.151		-2.314	0.035
	IBTF1	-0.249	0.266	-0.270	-0.935	0.364
	IBTF2	-0.067	0.196	-0.074	-0.342	0.737
	IBTF3	0.157	0.186	0.172	0.846	0.411
	IBTF4	-0.342	0.167	-0.420	-2.051	0.058
	IBTF5	-0.300	0.285	-0.284	-1.053	0.309
	IBTF6	0.531	0.258	0.574	2.054	0.058
	IBTF7	0.212	0.247	0.196	0.861	0.403
	IBTF8	-0.177	0.218	-0.203	-.814	0.429
	IBTF9	0.518	0.249	0.453	2.079	0.055
	IBTF10	0.078	0.209	0.076	0.373	0.714
	DAS	-0.234	0.262	-0.233	-0.893	0.386
	Neuroticism	0.210	0.216	0.221	0.973	0.346
	Extraversion	0.008	0.227	0.008	0.034	0.973
	Openness	-0.330	0.195	-0.413	-1.692	0.111
	Agreeableness	1.154	0.268	1.112	4.302	0.001
	Consciousness	-0.625	0.304	-0.628	-2.052	0.058
	Problem Solving	0.297	0.436	0.250	0.681	0.506
	Communication	0.210	0.236	0.213	0.891	0.387
	Roles	0.240	0.225	0.227	1.063	0.305
	Affective Responsiveness	-0.019	0.242	-0.019	-0.081	0.937
	Affective involvement	-1.062	0.259	-1.202	-4.094	0.001
	Behavior Control	0.324	0.219	0.334	1.478	0.160
	General Functioning	-1.087	0.376	-1.114	-2.888	0.011

IBT: Irrational belief test; DAS: Dysfunctional Attitude Scale

a. Dependent Variable: Q

As can be observed, there is a significant regression between cognitive, personality, and family factors and MSQ. In cognitive factors, frustration reactivity, anxious overconcern, and helplessness, in personality factors, agreeableness and consciousness, and in family factors, affective involvement and general functioning are significant.

Inferential Statistic

In this section, we present the multiple regressions between cognitive, personality, and family factors with HIT-6 and MSQ (see table 7 and 8).

Discussion

The purpose of this pilot study was to investigate some of the cognitive, personality, and family factors with the severity of headache by HIT-6 and quality of life of patients with migraine headache by MSQ.

Although this study was performed in a limited clinical setting, it has many interesting findings. We will discuss cognitive, personality, and family factors separately.

Cognitive Factors

In this study, we used Irrational Beliefs Test (Jones, 1969) and Dysfunctional Attitude Scales (Beck et al., 1991), to investigate cognitive factors.

Our findings show that two irrational beliefs have correlations with severity of headache; frustration reactivity and anxious over concern. However, an interesting finding is that if a patient has another irrational belief, namely helplessness, these three irrational beliefs affect his/her quality of life. Hence, this finding has a very important application; by treating the irrational beliefs of patients with migraine headache, we can decrease their severity of headache and improve their quality of life.

Personality Factors

In this research we used the NEO inventory (Mccrae & Costa, 1987) to investigate five main personality traits of neuroticism, extraversion, openness, agreeableness, and consciousness.

The findings show that if a patient with migraine headache, has extraversion trait, it has correlation with severity of headache, but if he/she has the two personality traits of agreeableness and consciousness, it affects his/her quality of life.

Family Factors

In this study, we used Family Assessment Device (Epstein el al., 1983), which measured family functioning and system factors. The findings show that if a family system has affective involvement, it affects the severity of headache, but if affective involvement and general functioning of the family is impaired, it affects quality of life.

Limitations

Studies of migraine are generally not controlled for drug use, headache frequency, and headache-related disability. Furthermore, they are not controlled for major psychiatric disorders (such as major depression or panic disorder), which occur more commonly in migraineurs. The association between major psychiatric disorders and personality disorders may confound the assessment of the relationships between these disorders and migraine. Neuroticism, in particular, is associated with depression and anxiety, which occur with increased prevalence in migraineurs. Differences in neuroticism across studies might reflect variations in the role of comorbid psychiatric disease. The available data suggest that subjects with migraine may be more neurotic than those without migraine. The stereotypical rigid, obsessive migraine personality might reflect the selection bias of a distinct subtype of migraine that is more likely to be seen in the clinic.

Conflict of Interests

Authors have no conflict of interests.

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