

Perceived stress, coping strategies and quality of life among working women with migraine

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ABSTRACT

The study was conducted with the aim to find the relationship between Perceived stress, coping strategies and quality of life among working women with migraine. Correlational Research Design was used in current study. Total sample of 100 participants suffering from migraine from last six months and consulting neurologists were recruited from different Public hospitals of Lahore, Pakistan (Department of Neurology, Mayo Hospital Lahore, Ganga Ram Hospital Lahore and General Hospital) from July 2019 to January 2020. All participants were doing job and were not diagnosed with any severe psychiatric and physical illness. The measures employed in the study to assess stress, coping and quality of life were Perceived Stress Scale of Seldom Cohen, (1983), Brief Cope Inventory Scale of Craver (1989) and Quality of Life of Flanagan, (1970s) respectively. Findings indicated that Perceived Stress, Coping Strategies among Working Women with migraine were positively associated with each other ($p < .001$). Coping strategies and Quality of Life had highly significant positive relationship with each other ($p < .001$). Perceived stress and quality of life among working women with migraine were positively associated with each other ($p < .001$). Linear regression showed that perceived stress significantly predicted quality of life among women with migraine. Coping Strategies also emerges as a significant predictor of Quality of Life among women with migraine.

Keywords: *Perceived Stress, Coping Strategies, Quality of life, Migraine*

Now-a-days migraine or headache complaints have been reported frequently in Pakistan. According to the national survey, 60 percent women are affected with migraine in Pakistan (Shaikh, 2004). The main reason or triggering point of migraine is perceived stress and people take stress both from internal and external environment. When people face stress from environment it affects their mind and the pain of migraine occurs and it badly impacts their life (Dumas, 2020). They encounter more stressful situations and take more stress in different areas of life such as in (home, job, family issues, and economic issues) (Dumas, 2020). Migraine has many types and each type has its own causes, level of severity and its symptoms. Migraine headache is a serious and

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frequent stabbing pain that occurs on one or both sides of the brain and that is accompanied by nausea and vomiting. It also increases individual sensitivity to light, their resistance to noise, and results in dizzy and blurred vision and sometimes mental impairment (Dumas, 2020). The classification scheme of the International Headache Society Migraine (ICHD3) has declared seven types i.e. Aura-free migraine, Headache-free Migraine, Aura migraine, Brainstem Aura migraine, Hemiplegic Migraine, Retinal Migraine, Chronic Migraine. Some causes of migraine are Hormonal changes, Emotional Issues, Physical Issues, Diet Issues, Medications and Environmental changes (Dumas, 2020). Perceived stress is defined as an individual's feelings or opinions about how much pressure he/ she has taken in a given situation in time. Perceived stress combines feelings about the uncontrollability, unpredictability of person's life that how often a person has to deal with irritation, hassles and how much changes are occurring in person's life along with ability of a person to deal with difficulties and problems. Perceived stress has two types i.e. internal stress and external stress (philips,2015).

Coping strategies are comprised of two basic components: engagement which mean usage of effort to control, take action, change or handle the stressful situation and disengagement which involves strategies that divert attention from stressor and connects individual with isolation and pessimism (Tobin, 1989). Coping strategies have some psychological and behavioral patterns through which individuals manage their feelings, thoughts and actions. Coping styles are defined as a certain effort of behavioral and mental pattern through which people work to master, to reduce, to control frustration or depressive events or situations (Craver, 1989). There are many types of coping strategies including Problem Focused Strategy, Emotion Focused Strategy, Active Coping Strategy and Avoidant Coping Strategy. First two coping strategies are based on the different areas of focus and other two are based on goals.

Quality of life (QOL) is subjective and focus on all domain of a person's life. It is multidimensional concept that defines level of physical, emotional and social wellbeing of a person (Flanagan, 1970). Individuals focus on all features of life i.e. positive or negative both and also focus on health, wealth, education, societies, safety, etc. Through assessing the quality of life, we can find out a person's satisfaction toward his or her life in all domains (Flanagan, 1970). Previous studies reported that Perceived stress badly affects the QOL of migraine patient. Chronic TTH patients reported worse quality of life and had marginally depressive symptoms. Some of the healthy people more frequently use techniques primarily based on avoidance and denial coping compared to patients with depression and in tension they encounter more difficulty in finding positive elements (Fumal,2008) Some studies revealed that headache-type pain patients experience more severe headache symptoms than migraine patients (Teixido,2014).

Rationale of Study

The aim of the present study was to find out the relationship among Perceived Stress, Coping Strategies and Quality of Life in Working Women with Migraine. In previous studies, it was observed that females were more prone to migraine than males (Buse, 2013). According to previous researches, individuals suffering from migraine usually have more exposure to environmental stress which in turn affects their quality of life (Yadav, 2015). People who suffered from migraine also experience difficulties in coping with their daily problems which leads to disturbed regular functioning. More specifically work-related issues can arise as a result (Jordan, 2016). There is lack of data in Pakistan regarding the psychological condition of females who have migraine. Therefore, the current study has

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been planned as it will be helpful in spreading awareness about issues regarding migraine in individuals so that they can find appropriate ways to cope with migraine and enhance their life quality by seeking psychological consultation.

Objectives of the Study

1. To find out the relationship between perceived stress and coping strategies among women.
2. To find out the relationship between coping strategies and quality of life among women
3. To find out the relationship between perceived stress and quality of life among women
4. To find out the predicting role of perceived stress and coping strategies on quality of life among women.

METHODOLOGY

Study Design

Correlational Research Design was used in current study.

Sampling Strategy

Non-Probability Purposive sampling method was used to collect data. A total of 100 participants were taken and all were women suffers with migraine. Sample was taken from general population visiting hospitals in Lahore, Pakistan.

Inclusion Criteria. Women lying in the age bracket of 25 to 40 years and doing job for past 1 year were included. Both married and unmarried women suffering from migraine from last six months, consulting neurologist and taking treatment were recruited.

Exclusion Criteria. Women diagnosed with severe psychiatric illness (schizophrenia, bipolar, bulimia, depression, anxiety etc.) or other medical conditions were excluded.

Instruments

1. **Perceived Stress Scale:** Perceived Stress Scale evolved by Cohen (1983) comprised of 14-items and each item of scale measures level of perceived stress and each rated on a four-point scale was employed in the study to assess stress. The questionnaire has been shown to have a strong internal reliability, construct validity and test-accuracy (Cohen, 1983).
2. **Brief COPE Inventory Scale:** Brief COPE Inventory Scale developed by Craver (1989) was used in the study to evaluate coping strategies. The questionnaire consisted of 28-items and each item of scale measures level of coping strategies and each rated on a four-point scale. It has been shows that the questionnaire has a strong internal consistency, constructs validity and tests- accuracy testing (Craver 1989).
3. **Quality of Life Scale:** Quality of Life was developed by (Flanagan, 1970). The questionnaire contains 14-items and each rated on a seven-point scale to measure level of quality of life. It has been shows that the questionnaire has a strong internal consistency, constructs validity and tests- accuracy testing (Flanagan, 1970).

Procedure

This correlational study was conducted in Neurology Departments of Mayo Hospital, Ganga Ram Hospital, General Hospital Lahore, Pakistan from July' 2019 to January' 2020. Prior to the data collection, permissions were taken to use assessment tools from the respective

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authors through mails. Authors were told that the use of questionnaires is for academic and research purposes only and the questionnaire will not be forwarded to any third party without their consent. Also, permissions were taken from concerned hospitals to collect data. After taking the consent from authorities of hospitals and clinics, participant's verbal consent was taken while explaining the aim of the study to them to elicit their interest and cooperation. Instructions were given to the participants about the assessment measures. Participants were assured about the confidentiality concerning the results and information that would not be used for any other purpose other than the study. A total of 130 participants were approached and 100 filled the questionnaires complete. The response rate was 76%.

RESULTS

Table No. 1 Descriptive Characteristics of Study Participants

Demographic Variable	f (%)
Age	
Education	
Under Graduate	16 (16.0)
Graduate	56(56.)
Post graduate	28(28.0)
Family System	
Nuclear	44(44.0)
Joint	56(56.0)
Birth order	
First born	25(25.0)
Middle born	38(38.0)
Last born	30(30.0)
Only child	7(7.0)
Socio economic Status	
Lower	14(14.)
Middle	51(51.)
Upper	35(35.)
Marital Status:	
Married	44(44.0)
Unmarried	31(31.0)
Divorced	9(9.0)
Single	7(7.0)
Separated	9(9.0)
Widow	0(0.0)
Profession	
Doctor	12(12.0)
Engineer	13(13.0)
Lawyer	31(31.0)
Teacher	24(24.0)
Other	20(20.0)
Type of migraine	
With Aura	5(5.0)
Without Aura	15(15.0)
Classic	43(43.0)
Other	37(37.0)

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Demographic Variable	f (%)
Causes of migraine	
Genetic	24(24.0)
Stress	41(41.0)
Sleep disturbance	27(27.0)
Environmental change	8(8.)
Frequency of migraine attack	
Weekly	25(25.0)
Monthly	35(35.0)
Other	40(40.0)
Intensity of migraine pain	
6 months	8(8.0)
6 months to 1 year	32(32.0)
More than one year	60(60.)
Intensity of migraine pain	
High	8(8.0)
Low	39(39.0)
Normal	50(50.0)
Duration of Migraine Attack	
Less than an hour	8(8.0)
1-3 hours 32	32(32.)
More than 3 hours	60(60.0)
Treatment sought for migraine	
Herbal	6(6.0)
Psychological	10(10.0)
Medication	56(56.0)
More than one treatment	28(28.0)
Since when you take treatment	
Months	27(27.0)
One year	49(49.0)
Above one year	24(24.0)
Perceived effectiveness of treatment	
Strongly disagree	7 (7.0)
Disagree	9(9.0)
Strongly agree	21(21.0)
Agree	46(46.0)
Neutral	17(17.0)
Perceived negative impact of migraine on working life	
Strongly disagree	6 (6.0)
Disagree	6(6.0)
Strongly agree	11(11.0)
Agree	59(59.0)
Neutral	18(18.0)
Perceived negative impact of migraine on family life	
Strongly disagree	11(11.)
Disagree	11(11)
Strongly agree	9(9.)
Agree	54(54.)
Neutral	15(15.)

Note: M=Mean, f=Frequency, %=Percentage

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Table 1 revealed that the participant's mean age was 33(65.1) years participants. Most of the participants belonged to middle socioeconomic status and had joint family system, most of them were graduates. Most of the participants were married and experienced migraine for more than 1 year, and most of them had classic migraine, which was due to stress. Most of the participant faced migraine attacks having duration more than 3 hours and migraine can mostly be cured by medication and many women felt that migraine had an impact on their work and family life.

Table No. 2 Pearson Product Moment Correlation Analysis Among Study Variables

Variables	1	2	3	4	5	M	SD
PS	-	.46**	.35**	.36**	.19**	34.	7.3
CSAP	-	-	.62**	.42**	.48**	37	6.2
CSAV		-	-	.49**	.41**	45.	5.5
CS			-	-	.32**	21	7.2
QL			-	-	-	72	8.6

Note: PS=Perceived Stress, CSAV= Coping Strategies Avoidant, CSAP= Coping Strategies Approach, CS=Coping Strategies, QL= Quality of Life * $p < .05$. ** $p < .01$, *** $p < .001$.

Pearson Product Moment Correlation was conducted to determine the relationship between study variables. Results revealed that Perceived stress had highly significant positive relationship with Coping Strategies Approach in women with migraine. Perceived stress has highly significant positive relationship with Coping Strategy, Avoidant in women with migraine. Coping strategies had highly significant relationship with quality of life among women with migraine. Perceived stress had highly significant relationship with Quality of Life in women with migraine. It indicated that women with migraine who experience stress also had good quality of life. It indicates that women who used coping strategies had good quality of life. Perceived stress was highly correlated with approach coping strategies and avoidant coping strategies were highly correlated with Quality of life.

Table No. 3 Linear Regression among Study Variable

Predictor	B	SE	β	t	R ²	P
PS	.22	.11	.19	1.9	.03	.00
CS	.46	.07	.50	5.8	.25	.00

Note =PS $R = .20$, $\Delta R^2 = .03$, $F = 74$, CS $R = .19$, $\Delta R^2 = .25$, $F = 3.7$

Table 3 shows that Regression analysis showed perceived stress is significant predictor on quality of life. ($\beta = .19$, $R^2 = .03$). Regression analysis showed Coping Strategies is significant predictor among migraine women on quality of life. ($\beta = .50$, $R^2 = .25$)

DISCUSSION

The present study found out the relationship between perceived stress, coping strategies and quality of life among women with migraine. Migraine is neurological condition and it causes a lot of symptom that vary from individual to individual. Mostly Migraine occurs due to perceived stress from environment. The current research study aimed to find out how migraine occurs and through which coping strategies an individual makes his/her Quality of Life healthy and good.

Current study highlighted that majority of participants who were suffering from migraine belonged to 25 to 40 years of age. According to the previous study mostly 8.6% (males),

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17.5% (females) got affected by migraine and females faced this illness from mid of 20s to 42 year and after 42 it increases more rapidly (Victor, 2010).

In current study, most of participant belonged to middle class socioeconomic status suffered from migraine. According to the previous research 23% low middle class suffered from migraine in both genders and 12% upper class suffered from migraine in both genders (Ranjith, 2016). The current study showed that mostly married women face migraine as compared to single, widow and separated women. According Lipton and Bigal (2003) research, 85% married people face migraine due to stress and due to family pressure. Another research showed that 67% migraine hit the married as compared to children and their family members (Buse, Scher & Dodick, 2016). Current study demographics showed that stress causes migraine in women. According to research migraine mostly occurred or trigger due to perceived stress and it affected the Quality of Life (Moon, 2017). After analyzing result of the study, it was revealed that there was positive relationship between perceived stress and life quality among working women with migraine. The results of current study were well supported by previous researches such as there was positive relation among stress and quality of life (Thokchom, 2017). Another research supported current study that there was positive relationship among stress and quality of life

Result of this study revealed that there was positive relationship between positive coping styles and quality of life among working women with migraine. The results of current study were well supported by previous researches such as coping styles had a relation and was significant predictor of quality of life. Another research supported positive association among coping strategies and quality of life (Gattino, 2015). After analysis, result of this study revealed that perceived stress and coping strategies were predictor of quality of life. The results of current study are supported by previous research such as perceived stress, coping styles played a predicting role on quality of life if people used good coping skill then they had good quality of life or is they had maladaptive coping manners then they had bad quality of life (Ravindran,2019).

CONCLUSION

The current study indicates that Perceived Stress and coping strategies and quality of life among women were highly correlated with each other and perceived stress and coping strategies played predictor role among migraine women quality of life.

Quality of Life among Working Women with migraine were positively associated with each other ($p < .001$) Coping strategies and quality of life had highly significant relationship with each other ($p < .001$) and perceived stress, coping strategies played predicting role for quality of life with migraine.

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Conflict of Interest

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