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Effectiveness of family-oriented psychological intervention on acceptance of chronic pain in married women with migraine

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Abstract

Abstract

A migraine pain affects all aspects of life, including physical, mental, and social conditions and relationships between couples. The objective of this study was to determine the effectiveness of family-oriented psychological intervention in the acceptance of chronic pain in married women with migraine. This study was a semi-experimental study with a three-month follow-up. In this study, 40 married women with migraine were assigned into two intervention and control groups randomly. Chronic Pain Acceptance Questionnaire (McCracken et al., 2004) was used in the evaluation stages. The intervention group underwent intervention during eight sessions and the control group was on the waiting list and received their usual interventions. Data analysis was conducted by repeated measurement variance analysis method using SPSS (version 24) software. The results showed a significant difference between the two groups in terms of chronic pain acceptance (F = 46.622, P = 0.001); 55% observed differences in the pain acceptance were observed. Chronicity was caused by the intervention. The results of the follow-up phase showed that the mean differences between pretest and posttest, pretest and follow-up, and posttest and follow-up were significant only in the intervention group (P < 0.05). Indeed, the chronic pain acceptance score increased over time in the intervention group compared to the control group. The results of this research study showed that family-oriented psychological intervention could be effective in accepting the chronic pain of women with migraine.

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Introduction

A migraine headache is a recurrent throbbing headache with transient neurological symptoms. Headache attacks are usually accompanied by nausea, vomiting, and aversion to light and sound. Migraine is a complex neurological disorder that affects all aspects of a person's life, including physical, psychological, and social conditions. Chronic pain caused by migraine disrupts daily functioning and quality of life. Pharmacological treatments are the first option in the management of migraine, but many patients continue to experience pain due to the chronic nature of the disease (Pei et al., 2020). In this vein, psychological interventions, especially family-oriented psychological interventions, can help to better manage pain and increase its acceptance (Esteves et al., 2022). Considering the importance of family support in improving migraine symptoms, the objective of this study was to investigate the effectiveness of family-centered psychological intervention in chronic pain acceptance in married women with migraine.

Methods

This study was conducted using a quasi-experimental method and a pretest-posttest design with a control group. The statistical population included all married women with migraine who referred to the Dard Mehr Clinic in Rasht in 2022 (December to February). After initial examinations and tests, the subjects were diagnosed with migraine disorder. Then 40 individuals were selected through purposive sampling method. They were randomly assigned to two experimental (n = 20) and control (n = 20) groups. The research instrument included the Chronic Pain Acceptance Questionnaire (McCracken et al., 2004).

The inclusion criteria included an age range of 40-55 years (20 participants for each of the experimental and control groups; effect size = 0.5, alpha = 0.50), migraine disorder (which was diagnosed based on the clinical diagnosis of migraine in patients), higher education level than the cycle, no history of neurological and mental illness and history of hospitalization, no substance abuse, ability to participate in group therapy sessions, and willingness to cooperate. In addition, the exclusion criteria for the experimental group were failure to attend more than two intervention sessions and unwillingness to continue attending intervention sessions. They were assigned to an experimental group and a control group through randomization (i.e., using a random number table). The intervention group participated in eight sessions of training in pain management skills and family-centered interactions, while the control group received only pharmacological treatments and current education. Data analysis was performed using the Repeated Measures ANOVA method using SPSS (version 24) software.

Results

The results showed that there was a significant difference between the two groups in terms of chronic pain acceptance ($F = 46.622$, $P < 0.001$). The level of pain acceptance in the intervention group increased compared to the control group. Bonferroni Post-Hoc Test showed that the mean differences between pretest and posttest, pretest and follow-up, and posttest and follow-up were significant only in the intervention group ($P < 0.05$). Moreover, 55% of the changes in pain acceptance were due to the implementation of the intervention. These results indicate the stability of the intervention effect over time. Statistical analyses also showed that the participants who received more support from their families experienced a faster recovery process. The results of descriptive and inferential statistics are provided in Table 1 and Table 2, respectively.

Table 1. Descriptive statistics of the experimental and control groups

Variable	Assessment phase	Intervention group	Control group
		Mean, SD.	Mean, SD.
Acceptance of the chronic pain	Pretest	75, 5.45	74.4, 4.41
	Posttest	89.40, 6.55	75.85, 5.02
	Follow-up	93.40, 4.95	76.45, 7.62

Table 2. Inferential statistics comparing the experimental and control groups

Groups	Assessment phases			**Bonferroni post hoc test**		
	pretest	posttest	Follow-up	Pretest to posttest	Pretest to follow-up	Posttest to follow-up
	Mean, SD.	**Mean, SD.**	**Mean, SD.**			
Intervention group	74.4, 40.41	75.5, .45	74.4, 40.41	(P.0001) 14.400	(P.0001) 18.400	(P .010) 4.000
Control group	75.5, 85.02	89.6, 40.55	75.5, 85.02	(P.710) 1.450	(P.233) 2.05	(P 1.000) -.600

Conclusion

The results of the study showed that the family-centered psychological intervention was effective in the acceptance of chronic pain in married individuals. The results of some previous studies have also indicated the importance of psychological interventions in pain symptoms in individuals with migraine (e.g., Guralnick et al., 1991; Rauh et al., 1988; Norman et al., 2013; Rauh et al., 1988). The results of previous studies have also indicated the importance of compassion-based therapeutic intervention in reducing stress in individuals with tension-type headaches (Parsapour & Raeisi, 2019), reducing pain intensity and emotional control (Barchakh et al., 2021), migraine symptoms and stress (Ashharian Dokht et al., 2018), as well as improving physical function and reducing physical pain in people with chronic diseases (Vahedian-Azimi et al., 2018).

In the explanation of research based on the third-wave approaches in psychology, it can be stated that these approaches play an important role in improving the quality of life of patients by focusing on accepting unpleasant experiences and changing the individuals' relationship with pain, rather than trying to eliminate it (Lazaridou et al., 2020). In family-centered interventions, these theories help strengthen pain acceptance by teaching communication skills and increasing empathy among family members, especially spouses (Esteves et al., 2022). This process provides a more supportive environment for the patients by changing maladaptive interaction patterns and reducing stress caused by faulty communication. One of the fundamental concepts in third-wave approaches to psychology is acceptance, which emphasizes the conscious and non-judgmental acceptance of internal experiences, including physical pain and its associated emotions (Hayes & Linehan, 2018). In married women with migraine, non-acceptance of pain may lead to social isolation and reduced positive interaction with the spouse. Therefore, family-centered psychological interventions help patients and their spouses to better understand each other using techniques such as effective communication and emotion regulation.

Based on the findings of this study, family-centered psychological intervention had a significant effect on increasing acceptance of chronic pain in married women with migraine. This intervention helped to increase acceptance of pain by improving interpersonal interactions, increasing social support, and reducing disease-related stress (Gilbert2009). Moreover, the role of the family in strengthening the psychological adjustment of patients was highlighted. It is suggested that in future studies, this intervention be examined in other age and gender groups and longitudinal studies be conducted to assess the stability of its effects. It is suggested that in future studies, quasi-treatment programs (placebo programs) be implemented to control the expectation effect. It is also suggested that larger samples be used to achieve the true effect size of the program. It is suggested that researchers implement family-centered psychological intervention programs on similar patients in other hospitals to expand the findings of this study.

Conflict of Interest

The authors declare that there is no conflict of interest in conducting this research study.

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References

Esteves, I. M., Coelho, M. S., Neves, H., Pestana-Santos, M., & Reis Santos, M. (2022). Effectiveness of family-centered educational interventions for anxiety, pain and behaviours of children and adolescents and anxiety of their parents during the perioperative journey: A systematic review and meta-analysis. *Journal of Perioperative Nursing*, 35(1), e-3. https://doi.org/10.26550/2209-1092.1153

Gilbert, P. (2009). Introducing compassion-focused therapy. *Advances in Psychiatric Treatment, 15(3),* 199-208. https://doi.org/10.1192/apt.bp.107.005264

McCracken, L. M., Vowles, K. E., & Eccleston, C. (2004). Acceptance of chronic pain: Component analysis and a revised assessment method. *Pain, 107(1-2),* 159-166. https://doi.org/10.1016/j.pain.2003.10.012

Pei, J. H., Wang, X. L., Yu, Y., Zhang, Y. B., Gou, L., Nan, R. L., & Han, Z. J. (2020). Prevalence of suicidal ideation and suicide attempt in patients with migraine: A systematic review and meta-analysis. *Journal of Affective Disorders, 277,* 253-259. https://doi.org/10.1016/j.jad.2020.08.019

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