

Examining Counseling Needs of Headache Patients: An Exploratory Study of Wellness and Perceived Stress

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Abstract:

Headaches are a complex medical problem that results in significant health expenditures, lost employee attendance and productivity, and relationship disturbance. Further, psychological counseling is one of the basic components of treatment of sufferers of chronic headache. A study of 60 adults seeking medical care at a headache specialty clinic was conducted to provide preliminary information on levels of wellness and perceived stress in this population. Not surprisingly, overall levels of wellness were low and perceived stress was high compared to a norm group of adults. Specific components of wellness varied with spirituality being higher among the headache population and nutrition, exercise, and locus of control being lower. A case study is presented from practice in a medical clinic, and implications for mental health counselors as providers in medical settings are discussed.

Article:

Although headaches represent a significant health problem, producing an annual loss in employee productivity of \$17 billion a year (Osterhaus, Gutterman, Plachetka, 1992), they are often treated as less than legitimate illnesses by employers, family members, and friends as well as health care providers who often view headaches as having a psychosomatic etiology (Mueller, Gallagher, Steer, & Ciervo, 2000), or as Barolin (1997) noted, "there is no headache without a psychogenic component" (p. 71). Although many headache sufferers first seek treatment for their headaches from medical practitioners, for decades traditional recommendations for headache management have specifically included a component of psychological counseling (Carney, Dietrich, Eliassen, Owen, & Badger, 1999; Kennedy & Barter, 1994; Ludin, Diener, & Mumenthaler, 1996). This information suggests that mental health counselors should have a basic understanding of the relationship between physical and emotional well being and be prepared to assist clients who are referred for treatment of chronic pain associated with headaches.

Headaches can be debilitating and negatively impact the individual, his or her family (Smith, 1998), and society. Compared to non-headache control groups, headache sufferers are more likely to be mildly anxious and depressed (Hatch et al., 1991; Deffenbacher et al., 1996) or to exhibit and experience simply more general, nonspecific distress (Venable, Carlson, & Wilson, 2001). It is well established that physical pain can create stress; recent studies have documented that pain may also be a result of stress (Gamsa & Vikis-Freibergs, 1991). Numerous studies report that both those who experience chronic headaches and their families suffer from compromised family functioning including less openness about feelings, greater instability, and diminished marital and sexual satisfaction (Basolo-Kunzer, Diamond, Maliszewski, Weyermann, & Reed, 1991; Terwindt et al., 2000).

Awareness of these issues from a holistic perspective led one of the authors, a neurologist heading a community-based headache specialty clinic, to request a mental health counselor on staff on a trial basis to address psychological issues in patients presenting with headaches. This clinic had adopted a holistic approach to medical care, consistent with a paradigm shift in medicine toward viewing wellness models as an alternative paradigm for practice (Armentrout, 1993; Randall, 1996). To our knowledge, this was the first time that holistic

wellness models, depicting a philosophical approach integral to the practice of mental health counseling (Palmo, Shosh, & Weikel, 2001; Smith, 2001), have been applied to headache treatment. The negative and pervasive impact headaches have on daily life and relationships, and the connection between stressors and headache onset, have been well established. We hypothesized that assessment and treatment of headache patients from a mental health and wellness perspective, in combination with traditional medical interventions, could result in more effective outcomes than those resulting solely from use of the traditional medical model.

The present study was undertaken as an exploratory examination of the levels of wellness and perceived stress among a group of patients receiving care at the specialty headache clinic. Following a discussion of the nature of and treatment for headaches and an overview of the wellness model used the research questions, methodology, and results are presented and discussed. A case study is described. The results and case example underscore the benefits described by Barker (2001) of incorporating mental health counseling in medical settings.

HEADACHES: NATURE AND IMPACT

Headaches represent a complex medical problem with causality attributed to a variety of factors (Silberstein, Lipton, & Goadsby, 1998). There are two distinct types of headache that are particularly common, migraine and tension. Migraine headaches usually begin when a person is between 10- and 40-years-old, and are characterized by moderate to severe pain of a throbbing nature (Silberstein et al.). The headache may be triggered by environmental factors (e.g., certain foods, odors, bright sunlight, and irregular sleep patterns), psychological factors (e.g., ongoing stressful life situations), or physiological factors (e.g., hormonal changes). The Centers for Disease Control (1999) reported that the lifetime incidence of migraine headache has increased almost 70%, to a rate of 43.7 per 1,000 people. For women aged 45 to 64, this rate more than double. Over 85% of women and 82% of men who suffer migraine experience some headache-related disability, with roughly one-third reporting severe disability or requiring bed rest.

Tension-type headaches usually do not begin until a person is between 20- and 50-years-old, and are characterized by a dull ache similar to a vise-like, band-like pressure, and are often caused by psychological and physiological stress and tension (Silberstein et al., 1998). These headaches have been estimated at incidence levels of up to 86% of all women and 63% of all men (Rasmussen, Jensen, Schroll, & Olesen, 1991). The impact of tension-type headaches includes a limitation of functioning for 44% of individuals and discontinuation of normal activities for 18%.

The primary causes and consequences for both tension-type and migraine headaches include psychological and interpersonal factors, both of which affect the total well being of the client. Research into the psychological aspects of headache indicates that headache patients have poorly developed coping strategies for dealing with their condition (Wise, Mann, Jani, & Jani, 1994). Compared to a control group of patients hospitalized for other illnesses, head-pain patients show higher affective inhibition, indicating difficulty expressing negative feelings; an increased use of denial in that they minimize the stressors in their lives; and increased irritability which indicates elevated hostility and interpersonal difficulties. Rollnik, Karst, Fink, and Dengler (2001) reported that poor coping skills (specifically with pain) contribute to the transformation of occasional tension-type headache into a chronic condition.

Holm, Lokken, and Myers (1997) found a significant positive connection between life stress and incidence of headaches. Further, it has been shown that the frequency of serious illnesses, as well as both the frequency of serious and non-serious symptoms, is positively correlated with levels of perceived stress (Spacapan & Oskamp, 1987). Overall, numerous recent studies reveal a strong, positive relationship between health and individual lifestyle factors that can be modified (Shannon & Pyle, 1993). These lifestyle factors have been conceptualized in models of wellness, such as the Wheel of Wellness (Myers, Sweeney, & Witmer, 2000, 2001), and have been proposed as a basis for both assessment and intervention from a counseling perspective.

MODELS OF WELLNESS

Wellness was first conceptualized in ancient Greek society as a holistic concept incorporating aspects of body, mind, and spirit. More recently, Heter (1984) a public health physician, developed a multidimensional model to promote health in university and community settings. Heter's model included six dimensions—social, occupational, physical, intellectual, spiritual, and emotional wellness—based in the belief that individuals make choices for successful existence as a process towards achieving wellness. Shortly after the publication of Heter's model, Ardell (1986) developed a multidimensional model that incorporated stress management and individual meaning and purpose as important aspects of wellness. This model was comprised of five broad dimensions: self-responsibility, nutritional awareness, stress awareness and management, physical fitness, and environmental sensitivity.

More recently, Ryff and Keyes (1995) noted that most of the extant models of wellness were driven by the deficit-based medical model, in contrast to the "abundant accounts of positive functioning in subfields of psychology" (p. 720). For example, as Ryff and Keyes noted, the work of humanistic psychologists depicted adult development as a course of expanded personal growth and enhancement. Ryff (1989, 1995) developed a multidimensional model of well-being comprised of six distinct components of positive psychological functioning. These include self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. Ryff's model is consistent with other writings in the area of positive psychology (e.g., Seligman, 2002a, 2002b, Snyder & Lopez, 2001), which address the psychological components most closely associated with overall wellness. Interestingly, the positive psychology models fail to incorporate physical aspects of wellness, limiting their usefulness in addressing the headache population.

Sweeney and Witmer (1991), Witmer and Sweeney (1992), and Myers et al. (2000) developed the Wheel of Wellness as an interdisciplinary and holistic model that explores both wellness and prevention over the lifespan. It incorporates theoretical concepts beyond psychology including anthropology, sociology, religion, and education as well as medical research in areas such as psychoneuroimmunology and cardiology. In reviewing the literature as a prelude to this model, the authors sought to identify characteristics of human behavior and functioning that were positively correlated with health, quality of life, and longevity.

Adlerian theory (1927/1954), emphasizing personal growth and development combined with Maslow's (1970) tenets of self-actualization provide the foundation for this model which codifies wellness as realized through five basic life tasks: spirituality, self-direction, work and leisure, friendship, and love (Myers et al., 2000). Because these tasks involve interaction with one's sociocultural context, including "family, community, religion, education, government, media, and business/industry" (Myers et al., p. 252), the effects of cohort-specific events such as national disasters or historic events will be evident in one's engagement in these life tasks. The Wheel of Wellness was conceptualized as a wheel with spokes that are interrelated and interconnected, which implies that changes and shifts in one part of the wheel influence the balance of the other sections. The spokes of the wheel represent the twelve subtasks of self-direction: sense of worth, sense of control, realistic beliefs, emotional awareness and coping, problem solving and creativity, sense of humor, nutrition, exercise, self-care, stress management, gender identity, and cultural identity.

Research using the Wheel model supports both the components of the model and the fact that wellness in the various dimensions differs across populations and subpopulations (e.g., Hattie, Myers, & Sweeney, in press; Myers, Mobley, & Booth, 2003). However, the circumplex model was not supported in two recent studies (Hattie et al.: Myers, Luecht, & Sweeney in press). The Indivisible Self Model (Myers & Sweeney, in press), in particular, includes each of the components of the original wheel model; however the organization of the components is based on a new, five-factor structure of well being. These factors are defined as the Creative Self, Coping Self, Social Self, Essential Self, and Physical Self. The newer model was used in the present study due to its foundation in counseling theory and because it incorporates physical as well as emotional and social aspects of well being. In addition, this model incorporates stress management, an established factor in headache management (Lipchik & Nash, 2002), as a specific wellness dimension.

The assumption underlying the present study was that understanding of the relationships between wellness and perceived stress in a clinical headache population could contribute to more holistic treatment planning for persons seeking medical treatment for headaches. We hypothesized, first, that levels of wellness would be lower and perceived stress would be higher in headache patients than in a comparable norm group of adults not seeking headache treatment. Secondly, we hypothesized that wellness would be negatively related to perceived stress in this population.

METHODOLOGY

Procedure

Participants were volunteers recruited from a new patient appointment list at an outpatient medical headache treatment clinic in a large metropolitan city in the Southeast. Each person making an appointment was invited to participate through a letter signed by the researchers and the chief physician in the practice. A total of 147 packets were disseminated in a rolling, non-exclusionary process over a period of approximately 4 weeks. Sixty-four surveys were returned, yielding a response rate of 43.5%. Four of the surveys contained incomplete or missing data, making them unusable. Thus, the final *n* for the study was 60, or a usable response rate of 41%.

Participants

Females comprised 84% of the participants, males 13%, and 3% did not specify gender. Reported ages of the participants were from 18 to 82 years, with a mean age of 38.6 (*SD* = 13.14) and median age of 37.0 years. The cultural background of the participants was reported as: Caucasian (69%), African American (13%), American Indian (6%), Alaskan Native (3%), Hispanic (4%), and Other or did not respond (5%). The majority of the participants did not live alone (83%), and two-thirds were married. A majority (62%) worked full time, and 15% reported working part time. Almost one-third (28%) were students.

Instruments

The participants each received a single form that included three measures. The first measure requested demographic data (e.g., gender, age, cultural background, community size, and education level). In addition, the Five Factor Wel inventory (Myers & Sweeney, 1998, in press) and the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983) were used.

Five Factor Wel Inventory (5F Wel). The 5F-Wel (Myers & Sweeney, 1999) is comprised of 73 Likert-scale items that measure the 8 dimensions of wellness included in the Indivisible Self model. The items (e.g., "I look forward to the work I do each day.") are statements rated on a 5-point scale, from 1, "strongly agree" to 5, "strongly disagree." Scores are provided for 17 discrete scales, 5 composite scales, and total wellness.

The 5F-Wel was developed through a series of seven studies over a 12-year period using the Wellness Evaluation of Lifestyle (Myers, Sweeney, & Witmer, 1996), an instrument based on the Wheel of Wellness model. Exploratory and confirmatory factor analyses provided support for the 17 original components of the Wheel model as discrete factors (Hattie et al., in press). A second order factor structure revealed five factors through which the original 17 components derive meaning. One higher order, or total wellness factor, was identified, which represents the sum of all items on the instrument. Only the first order (total wellness) and third order (17 scales) factors were included in the present study.

Test-retest reliability coefficients for all scales of the 5F-Wel for a 2-week interval exceeded .35, with most exceeding .85; and Alpha coefficients ranged from .66 to .89 for all scales (Hattie et al., in press). For the current sample, the alpha coefficient was .94 for the 5F-Wel. Analysis of results for approximately 6,000 respondents revealed that the instrument discriminates among and within various subgroups on each of the scales (i.e., factors; Hattie et al.). For this study, only the general adult sample in the 5F-Wel norm group was used for comparative purposes. This group included 486 individuals, 40% of whom were female. They ranged in age from 18 to 101, with a mean age of 44 (*SD* = 19).

Perceived Stress Scale (PSS). The PSS (Cohen et al., 1983) was designed to measure the degree to which situations in one's life are appraised as stressful, based on the hypothesis that perceived stress provides a more accurate measure of life stress than instruments that are simple checklists of major life events that typically generate stress (e.g., death of a loved one, loss of a job.) The PSS measures the relationship between the individual and daily events that are perceived as stressful and compromise wellness (Lazarus Folkman, 1984). Respondents are asked to report the degree to which they felt or thought certain things over the past month that could be perceived as stressful. The items (e.g., "In the last month, how often did you feel unable to control important things?") are questions that are answered using a 5-point scale, from 1, "never" to 5, "very often."

Cohen et al. (1983) provided three versions of the PSS, including 14, 10, or 4 items, with comparable reliability for each of the versions. The abbreviated 4-item inventory (PSS4; Cohen et al.) was used in this study. The coefficient alpha reported for the PSS4 is .72, with a 2-month test-retest reliability of .55. For this study, the PSS4 had an alpha of .75. Cohen et al. reported both convergent and divergent validity for the PSS4 relative to depressive and physical symptomatology, utilization of health services, social anxiety, and smoking-reduction maintenance. The PSS4 norm group used in this study is comprised of 2,230 adults, of whom 58% are female.

Data

Frequencies were computed for the participants for the first and third order factors of the 5F-Wel and the PSS4. Two-tailed t-tests and Pearson Product Moment Correlations were computed to test the hypotheses. A follow-up MANOVA was computed to account for additional error in examining the results.

RESULTS

The means and standard deviations for participants for the first and third order factors of the 5F-Wel and PSS4 are shown in Table 1, along with data for the respective norm group for each instrument and the results of the t-test analyses. To analyze hypothesis one, two-tailed t-tests were computed to examine differences among the means between the participants and the respective norm groups for the instruments. An alpha level of .05 was used to determine statistical significance, and effect sizes were computed for each analysis using Cohen's d (Cohen, 1988). Significant differences were found between the headache patients and the norm group on several scales. Headache patients had greater spiritual wellness than the reference group, though the effect size was small. Mean scores for the norm group were higher than those of the headache patients on four of the 5F-el factors: Sense of Control, Nutrition, Exercise, and Leisure. The effects were medium for the latter three factors. In addition, the Total Wellness score of the headache patients was significantly lower than that of the norm group; again the effect was medium. Reported levels of perceived stress of the participants were significantly higher than those of the norm group. There was a large effect for this difference.

To analyze hypothesis two, Pearson Product Moment Correlations were computed between Total Wellness (the higher order wellness factor), Stress Management (a third order wellness factor), and perceived stress. The correlation coefficients are shown in Table 2. Significant negative correlations were found between Total Wellness and Perceived Stress and between Stress Management and Perceived Stress. A MANOVA was computed to provide further analysis of these scores due to the high correlation among them. This analysis indicated that there was no significant relationship between the Total Wellness score and the PSS4 ($F(46) = 1.17, p < .05$). However, there was a significant relationship between the Total Wellness score and Stress Management ($F(46) = 182.06, p < .000$).

DISCUSSION

New patients requesting medical management of headaches at a private clinic were invited to participate in this study of the relationship between perceived stress and wellness. Sixty volunteers completed the Five Factor Wellness Inventory and the Perceived Stress Scale. In comparison to adult norm groups for both instruments, participants scored higher on Spirituality. Participants scored lower on Sense of Control, Nutrition, Exercise, Leisure, and Total Wellness, and higher on perceived stress. Significant negative relationships were found between Total Wellness, Stress Management, and perceived stress.

Table 1. Descriptive Statistics and t-tests for 5F-Wel Scales and PSS for Headache Patients and Adult Norm Groups

	Headache Patients		Norm Group		<i>t</i>	Cohen's <i>d</i>	
	Mean	<i>SD</i>	Mean	<i>SD</i>			
5F-Wel Scales							
Spirituality	81.67	14.38	75.11	19.48	-2.532	* 0.38	
Self-direction							
Sense of Worth	81.17	11.55	82.75	13.39	.878	-0.13	
Sense of Control	77.17	11.66	80.76	11.99	2.208	* -0.30	
Realistic Beliefs	58.13	13.08	57.84	13.30	-.164	-0.02	
Emotional							
Awareness	80.00	11.27	80.41	12.17	.247	-0.03	
Problem Solving	78.00	10.01	80.42	11.79	1.529	-0.22	
Sense of Humor	79.25	11.60	82.32	13.67	1.673	-0.24	
Nutrition	62.97	16.15	72.33	18.51	3.760	** -0.54	
Exercise	67.20	15.36	76.41	17.43	3.924	** -0.56	
Self-care	87.75	13.76	85.34	15.48	-1.153	0.16	
Stress							
Management	73.86	8.16	73.34	16.52	-.242	0.04	
Gender identity	81.42	11.01	80.57	12.17	-.513	0.07	
Cultural identity	74.78	14.16	76.52	14.87	.863	-0.12	
Work	74.08	12.90	76.42	14.40	1.203	-0.17	
Leisure	68.60	15.78	77.42	14.02	4.559	* -0.59	
Friendship	82.83	12.77	85.84	12.79	1.729	-0.24	
Love	88.67	13.24	88.55	14.10	-.061	0.01	
Total Wellness	74.67	8.03	77.81	8.70	4.016	* -0.55	
Perceived Stress	10.62	3.16	4.49	2.96	15.805	* 0.71	

* $p < .05$. ** $p < .01$.

Table 2. Pearson Product Moment Correlations between Measures of Total Wellness, Perceived Stress, and Stress Management

	Total Wellness	Perceived Stress	Stress Management
Total Wellness	--		
Perceived Stress	-.51**	--	
Stress Management	-.99**	-.54**	--

** $p < .01$ (2-tailed).

An examination of the characteristics of the participants reveals that the sample was small, predominantly white, and largely female, and that minorities were underrepresented in comparison to national population statistics. However, the participants in the present study—primarily young, married women—reflect the typical profile of patients seen in medical clients for migraine and pain management (Silberstein et al., 1998). Thus, the results may be interpreted as exploratory data for examining wellness in a typical headache treatment program, and provide a basis for discussing wellness and stress in headache patients, implications for headache management, counseling services for headache populations, and, more generally, mental health counselors as service providers in medical settings.

The one area in which the participants scored higher than the norm group, spirituality, is defined by the authors of the 5F-Wel as the awareness of a being or force that transcends material life and offers a deep connection to the universe (Myers et al., 2000). We have often worked with clients who state that it is their faith that has helped them cope with their illness, and a variety of recent studies have linked faith to improved medical outcomes (e.g., Koenig, 1991; Leek & Blacconiere, 1991). These studies do not explain why a clinical population would express greater spiritual wellness, but they do raise the question of how clinical and non-

clinical populations differ in this area. It is possible that the geographic region in which the sample was collected, known to have a preponderance of strong fundamental faith beliefs, was a factor influencing this finding. The current sample size was too small to provide definitive conclusions, and the small effect size may reflect unique characteristics of the sample rather than true population differences. Additional studies with larger and more representative samples are needed to verify or refute the current findings. Additional measures of spirituality may be useful for further examining aspects of belief systems with clinical populations.

Physicians who treat chronic headache sufferers have two goals: to prevent future headaches and to terminate existing headaches. Preventive measures include both behavioral changes and medications. Behavioral recommendations typically consist of improved nutritional behaviors and choices, daily exercise, better management of stress through relaxation training, and increased leisure time activities. These areas have been implicated as critical components of successful headache management (Huodin, Brines, Lake, Wilson, & Saper, 2000). The participants in the current study scored significantly lower than a comparable, non-clinical adult norm group on the Nutrition, Exercise, and Leisure components of the 5F-Wel. Thus, the results support both the importance of these areas and the need for better education of headache patients. These are key areas in which individuals can take control of their own health and possibly minimize the frequency and severity of their headache bouts. This is an area of opportunity for mental health counselors who can provide individuals with training in areas such as behavior and habit change, life balance, establishing priorities, the importance of taking time for oneself, and strategies for satisfying use of leisure time, all of which address important issues in lifestyle management.

An interesting contrast with the high spiritual wellness reported by the participants is the lower sense of control scores and, hence, lower perceptions of control over the circumstances of their lives. Beckingham and Watt (1995) summarized the results of numerous studies which indicated that people experience (a) positive outcomes when they perceive themselves as having an impact on what happens to them and (b) negative outcomes (e.g., depression) when they perceive a lack of personal control. Myers et al. (2000) summarized additional studies demonstrating that perceived control is positively correlated with emotional well-being, successful coping with stress, better physical health, and better mental health. Moreover, multiple studies cited in this review revealed that higher levels of perceived self-control predict healthier behavior, including exercise participation. Conversely, perceptions of control are affected by participation in positive health practices such as exercise (Fontane, 1996).

It may be conjectured that the individuals who participated in this study are not maximizing their ability to control their lives as evidenced in their poor nutritional, exercise, and leisure time choices. At the same time, their inability to control their pain without outside intervention may contribute to low scores in this area. Additional studies using measures of health locus of control might be useful to discriminate feelings of control, in general, from feelings of control specifically associated with health issues such as chronic pain and headache.

Passchier, de Boo, Quaak, and Brienen (1996) reported that the emotional aspects of pain, rather than actual physical pain, have the greatest effect on quality of life. Related research indicates the incidence of chronic headaches, as opposed to sporadic severe headaches, is associated with increased psychological distress, including symptoms of depression such as hopelessness (French et al., 2000). Illness often leads individuals to feel helpless and powerless, and these feelings may generalize to other areas of their lives. Thus, the services offered by mental health counselors could greatly benefit these individuals by providing them with the tools to gain a greater sense of empowerment and perceived control over their choices and their feelings.

The opposite sequence of events may also occur in that success in life management through factors such as exercise participation, better nutrition, and participation in leisure can promote the dual outcomes of better overall health and better headache management (i.e., reduced incidence and severity of headache pain). If mental health counselors can assist these patients in developing a sense of self-efficacy in regard to their ability to positively affect wellness through improved choices, they might experience an improved sense of control

over their own lives. Moreover, Rollnik et al (2001) demonstrated that poor life management and coping skills (e.g., avoidance) can escalate an episodic headache problem into a chronic-type headache illness. For patients who follow their physician's advice and seek mental health counseling, interventions that go beyond acute pain relief can be implemented that may prevent acute conditions from becoming chronic.

The earlier in the pain-management process that effective life management skills can be taught and implemented, the greater the potential for success in headache treatment and outcomes. Headache sufferers who feel competent to manage their headaches may also feel capable of exerting control over those factors that cause their headaches (French et al., 2000). Thus, helping pain sufferers find more proactive ways of handling their pain may increase their sense of control over the pain and decrease the frequency or severity of their headaches.

The fact that the participants reported greater levels of perceived stress than the norm group was not surprising, and no doubt is an important factor in the etiology of their chronic pain. In addition, the negative correlation between perceived stress and stress management was an expected result. The correlation between total wellness and perceived stress also was negative, reflecting the fact that lower perceived stress scores are found among those respondents who experience greater overall wellness. It may be implied from these results that strategies affecting holistic or total wellness will help headache patients experience less stress, thus contributing to better headache management. Such strategies may originate with any aspect of wellness. For example, providing headache patients with more information regarding their ability to control headache onset, and giving them additional information about their illness itself, may decrease the amount of perceived stress they feel. Through patient education, mental health clinicians may empower clients to assume increased control over their headaches. In addition, counseling interventions such as thought stopping, cognitive reframing, and related techniques may be useful in helping patients gain a sense of control over their pain and its management.

For headache sufferers, it is especially important to feel that others support and understand their illness (Basolo-Kunzer et al., 1991). A variety of authors have described the importance of family support for headache sufferers and the negative impact of headaches on family members (Basolo-Kunzer et al.; Smith, 1998; Terwindt et al., 2000). By educating family members and other supportive individuals about the causes, prognosis, and treatment of chronic headache, headache sufferers may feel an increased sense of family support which can help lead to improved wellness and, in turn, can be an important factor in overall pain management. The importance of family and social support in headache management may indicate that marriage and family counseling can be important components of an inclusive treatment plan.

Current literature indicates that a holistic approach to headache management may be more effective than a strictly pharmacological approach (Andrasik, 1996; Mannix, 1999; Martin, 1993; Rollnik et al., 2001; Scharff & Marcus, 1994). Future research, specifically outcome research, is needed to determine whether mental health counseling interventions could help to reduce the frequency and severity of headaches as well as the psychosocial consequences of this medical problem. If such interventions were successful, the potential role of counseling as an adjunct to medical care could be strengthened, and a stronger argument made with managed care companies for including mental health counselors in the cadre of allied health service providers. A case example illustrates this potential.

CASE STUDY

In this case example of a female chronic migraine headache sufferer the treatment plan included a three-session intervention appropriate for a managed care setting.

Presenting Psychological Concerns

Martha was a 46-year-old woman, married for 24 years with two children. Her 18-year-old daughter was a high school senior and her 21-year-old son lived and worked in a nearby city. Martha worked part-time as a secretary and was very involved with organizations at her own church and her daughter's high school. She was also overseeing her mother-in-law's move from her hometown 75 miles away to an assisted-living center just a few

minutes away from Martha's home. Martha's husband had a good job at a manufacturing plant where he worked second shift.

Martha had suffered from headaches off and on since her early teen years. She had menstrual migraines in her late teens and early twenties, but those were generally managed on occurrence by medication before they became overwhelming. Lately, however, Martha's headaches had gotten much more frequent and severe. During the 5 months immediately preceding referral, Martha had to miss work, two church events, and her long-anticipated family reunion due to the severity of her headaches. Her family was especially worried because Martha had previously always been able to cope with her headaches, and she had never had more than a few severe migraines each year. When she had suffered from a continual severe headache for approximately 4 weeks, going to sleep and awaking each morning with the same pain, her family was able to convince Martha to schedule an appointment with her physician to make sure that she did not have something more serious than a migraine.

When Martha went to her appointment with her family doctor, she explained the symptoms she was having and shared with him the news about her current activities, the events she'd had to miss due to her headaches as well as her conflicting feelings about her daughter's upcoming graduation and her mother-in-law's move to their town. Her doctor listened carefully to Martha and referred her to a headache specialist to rule out any underlying physiological causes for the problem. Upon intake in the headache facility, the physician referred Martha for a wellness evaluation and counseling to assess and help her manage the multiple stressors she was experiencing.

Intervention

Martha was somewhat skeptical of a visit to a mental health practitioner, but she followed through on the referral. Before their initial session, Martha completed the 5F-Wel to assist in treatment planning. In the first session, Martha was asked to provide a brief history of her headache suffering and any other pertinent health information, which indicated (a) that the severity of Martha's current headaches had no physical predecessor, and (b) that there was a time when Martha had experienced a similar pattern of continual headaches. Martha was asked to describe the events in her life at that time. In reflecting on this history, Martha came to see important similarities in the episode from 15 years previous and the current episode.

Fifteen years ago, Martha had been very involved in her children's activities with one child in first grade and another in preschool; there was always an activity needing a parent at school. Additionally, there were financial pressures that required Martha to work half-time in the mornings while the children were in school. As Martha was describing this time in her life, she kept repeating the phrase, "It's always up to me to take care of the details." This struck the mental health counselor as pertinent to Martha's current situation, because the first thing she said when she entered the counseling office was that the receptionist at her doctor's office has given her the wrong appointment date and she had shown up the previous day. "But," as Martha added, "that's pretty normal, as I always have to take care of the details." The mental health counselor recognized that Martha felt responsible for everything running smoothly and that there was both resignation and anger in her voice as she spoke about these situations.

It is not uncommon for chronic headache sufferers to have external loci of control and to put pressure on themselves to "do it all." They often experience multiple and conflicting role commitments, as was the case with Martha, and put themselves last when it comes to addressing these multiple role demands. Thus, Martha's low wellness scores in the areas of Sense of Control, Realistic Beliefs, Exercise, and Leisure were not surprising. These scores served as the basis for three interventions: cognitive behavioral, relaxation training, and lifestyle management to incorporate exercise into her leisure-time activities.

Cognitive behavioral interventions were designed to revise Martha's negative thinking. First, she was helped to recognize the automatic negative thoughts she used to respond to events as well as the "all or nothing" thinking she used that kept her feeling overwhelmed. At first, Martha was reluctant to admit that she ever had a negative

thought, because she prided herself on her "can-do attitude" that she felt was essential to her success in her world. She was helped to understand the many ways in which her negative thoughts were getting in the way of her feeling that she was a "can-do person." Martha used the example of when her husband threw up his hands at helping her choose the best location to which his mother should move. When her husband got frustrated with her for trying to shoot down all of his suggestions, he simply let go of the issue and told her she could make the decision by herself. Her mental response had been "Everyone always gives up and leaves me holding the bag. I'm the only one who can handle the details." Martha then shared that this was probably the day her now 6-week-old headache had first begun. Martha related that she was having to handle the whole move alone, while also trying to be a good employee, good church member, good mother, good graduation party planner, and the list went on.

During the second session, the focus was on Martha's negative thinking patterns and how other people influenced her well-being. Martha was encouraged to talk about how her negative thoughts about her husband's choice affected her behaviors and emotional well-being. She said that when he gave up, he was free not to worry about things anymore and that he was in a better place. She was reminded to talk about herself, not her spouse. Martha then noted that by having negative thoughts, she carried the whole responsibility, when what she really wanted was to share the responsibility. She was tired, and then realized that her negative attitude towards others' contributions often resulted in their walking away from a project leaving her to have the bulk of the work left to do. This outcome was what she always expected to have happen, based on her self-admitted negative thinking.

By gaining a better understanding of how negative thoughts were sabotaging her, Martha was able to begin finding ways to replace her negative thoughts with positive thoughts. She knew that what she wanted was cooperation from others, but by setting up a negative expectation of this she was limiting her ability to actually receive their assistance. Martha's understanding of this dynamic would allow her to change her expectations and, therefore, change the level of responsibility she would have to carry alone. Martha also realized that her initial negative response to the mental health counselor's suggestion of learning some relaxation exercises could be replaced by a more positive and open response which would open her up to the possibility of actually letting herself believe she could positively influence her health. With the mental health professional, she practiced some basic relaxation exercises in conjunction with thought stopping, and Martha was assigned homework to practice these activities when she found herself thinking in negative ways.

The mental health practitioner was able to see a change in Martha at their third, and final, session. Martha shared that she had woken up without the headache the day before and that, when she had first felt it come on later that morning, she'd tried one of the relaxation exercises recommended by the mental health counselor. The headache did not stop completely, but it was much less severe, and left Martha feeling that she had the resources necessary to better manage her life. Martha also stated that she had seen the headache specialist and he had ruled out any serious physical disorder, which greatly relieved Martha and her family. At this point, the suggestion of increased physical exercise, which also had been met with an initial negative response, was met with more openness to change and a desire for more information. Consistent with her changing thoughts in other areas, Martha observed that she really was the only one" who could help her feel better about her body and her health. In addition to written information, she was provided with a referral to the local YMCA for assistance with an exercise plan.

Martha was proud to tell the mental health counselor that she was consciously letting go of her need to control everything, and she found that this gave her more peace than feeling that she had to take care of every detail of an event. She reported that if someone was getting frustrated with a shared task due to Martha's tendency to control, she now replaced the once-automatic negative thoughts with the positive thought of "many hands make little work." Martha was encouraged to continue reading about the relationship between physical and emotional well-being, to continue pursuing an exercise plan in addition to using relaxation methods, and to continue replacing negative thoughts with positive responses until these became automatic as the negative thinking had become. She agreed that she felt less tired and stressed when she minimized the pressure she put on herself and

allowed herself to receive assistance from others. Most importantly, practicing relaxation and using cognitive techniques such as thought stopping and refraining had interrupted the headache cycle and helped her experience headache-free hours and days for the first time in months. These results were confirmed when Martha met with her physician, who noted in her chart both the importance and success of counseling in managing her headaches successfully.

CONCLUSION

The results of a study of wellness and perceived stress are presented using a group of 60 persons seeking outpatient medical care for chronic headaches. Those who seek specialized medical care for headaches constitute a diverse group in demographic characteristics; however, the results indicate that compromised overall wellness is one unifying factor. Differences in several components of wellness reflect a need to develop specific interventions to help headache patients achieve a greater sense of control, perhaps through exercise, nutrition, and leisure activities—areas of wellness which also are lower in headache patients. At the same time, the greater spiritual wellness reported by these patients may be a resource that has been underutilized in pain management efforts. Additional research with larger samples is needed to determine whether the relationships found between wellness areas for clinical and non-clinical populations in this study are universal among headache patients or reflective of special characteristics or circumstances of the current participants.

The case example described here underscores the important role mental health counselors may play in working with individuals who suffer from chronic headaches or other types of chronic pain. Standards of care for headache include referrals to mental health counselors; however, there is little empirical evidence to show the efficacy of counseling interventions. Studies of the effectiveness of mental health counseling for headache management are needed, and may provide a foundation for advocacy for mental health counseling in medical settings. In this regard, our study supports Barker's (2001) conclusion that "successful [mental health] counselors in the future will be those who can carve out specialty practices that are needed and show the effectiveness of their work ... Medical settings will be exciting and challenging places for professional counselors to work" (p. 388). Certainly our work at the headache facility was exciting and challenging as well as rewarding for mental health counselors in addition to patients and the medical staff.

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