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RESEARCH ARTICLE

AWARENESS AND APPROACHES OF FAMILY PHYSICIANS ABOUT CHRONIC PAIN

Tuba Erdem Sultanoğlu [1], Zerrin Gamsızkan[2], Safinaz Ataoğlu [1], Hasan Sultanoğlu [3]

[1] Department of Physical Medicine and Rehabilitation, School of Medicine, Düzce University, Düzce, Turkey
[2] Department of Family Medicine, School of Medicine, Düzce University, Düzce, Turkey
[3] Department of Emergency Medicine, School of Medicine, Düzce University, Düzce, Turkey

Address for Correspondence: Tuba Erdem Sultanoğlu **E-mail:** drtubaerdem@gmail.com
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ABSTRACT

Purpose: We aimed to investigate family physicians' awareness and approaches to chronic pain in its management.

Methods: This study was planned as a descriptive, crosssectional study to investigate family physicians' awareness and approaches to chronic pain between September and November 2020.A questionnaire were used as data collection tools.The physicians sociodemographic characteristics, the number of registered patients, the percentage of patients with chronic pain, the status of participation in training activities on pain management, the most common cause of chronic pain, initial approach to chronic pain management were recorded. They were also questioned about the medical treatment option that they preferred for the treatment of patients with chronic pain, the most commonly demanded medication group by their patients and their practice of prescribing those medications, their views on traditional and complementary medicine, and the most effective treatment option for chronic pain.

Results: 81 family physicians participated in the study. The mean age was 34.2±7.3.58% of the participants are women;42% of them were male.Half of the family physicians participating reported that low back pain was the most common cause of chronic pain. In our country, the responses given to the question about the most common causes of chronic pain were psychiatric problems and low back pain. Initial approach to a patient presenting with chronic pain, the most the physicians responsed 'I treat the patient'.66.7% of the physicians agreed with multidisciplinary approach.

Conclusion: Developing algorithms for chronic pain management, structuring specialist training and planning continuous training after graduation will contribute significantly to increasing awareness of chronic pain.

Keywords: Family Physicians; Chronic Pain; Awareness

INTRODUCTION

Chronic pain is a pain type that lasts longer than three months, is continuous or intermittent, does not involve protective mechanisms involved by acute pain, is very difficult to define, and negatively affects someone's quality of life (1,2). Chronic pain originating from musculoskeletal diseases may cause loss of workforce, and particularly accompanies psychiatric

disorders such as depression and anxiety disorder (3). The causes of chronic pain include fibromyalgia syndrome, myofascial pain, rheumatoid arthritis, osteoarthritis, back, and low back pain, neck pain, headache, and pelvic pain. Patients with chronic pain frequently present to healthcare facilities to find a solution to chronic pain because of its negative effects on their daily life, having no adequate strategies for coping with pain, loss of workforce, stress, concerns, and despair. In our country, approximately 80% of patients who present to primary care facilities complain of pain, and 20% of the general population complain of chronic pain. Repeated hospital presentations negatively affect an individual and his/her family, and place a significant burden on society through increased health expenditures (4,5). Management of chronic pain requires physical, cognitive, behavioral, and psychosocial evaluations performed with interdisciplinary cooperation. It should be aimed to teach the patient the methods of coping with pain rather than suppressing it, to increase his/her quality of life, and to integrate him/her into social life (6,7). Chronic pain, which may cause a significant loss of workforce and disability in all societies, is a condition that a family physician commonly encounters in daily practice. Creating a patient-physician relationship based on the trust established by repeated contacts between the family physician and the patient and ensuring patient cooperation and treatment compliance are important aspects of chronic pain management (8,9). Literature reports have pointed out that family physicians are reluctant to prescribe treatment to patients with chronic pain and have difficulties in accessing expert opinion and support; in addition, patients with chronic pain can not reach the relevant branch physician as a result of an inadequate referral system and insufficient physicians' training on chronic pain (8-10). In our study, it was aimed to investigate family physicians' awareness and approaches to chronic pain in its management, which requires a multidisciplinary approach.

MATERIALS AND METHODS

This study was planned as a descriptive, cross-sectional study to investigate family physicians' awareness and approaches to chronic pain in its management between September 2020 and November 2020. The study was approved by the local institutional ethics committee (Desicion no: 2020/178; Date:17 August, 2020). Prior to the evaluation, we applied to the Ministry of Health for permission. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Study inclusion criteria included working actively as a family physician in Düzce province, Turkey, and agreeing to fill out the study questionnaire form. Eighty-one of 120 family physicians participated in the study. In order to rate the physicians' awareness at the time of the study, they were not informed about the subject of the questionnaire beforehand. The questionnaire was administered by a single practitioner. The physicians were asked about their sociodemographic characteristics (sex, age, number of years worked in medical practice, educational status, the institution of work), the number of registered patients, the average number of patient visits per day, the percentage of patients with chronic pain seen in daily practice, the status of participation in training activities on pain management, the most common cause of presentation of patients with chronic pain, and the most common cause of chronic pain in our country. They were asked about their initial approach to chronic pain management, their views on the multidisciplinary approach, the branch physician that they preferred to refer patients with chronic pain in their practice, and the adequacy of clinical resources allocated to them to provide medical care. They were also questioned about the medical treatment option that they preferred for the treatment of patients with chronic pain, the most commonly demanded medication group by their patients and their practice of prescribing those medications, their views on traditional and complementary medicine (T&CM), and the most effective treatment option for chronic pain.

Statistical Analysis

The data were analyzed with IBM SPSS (Statistical Package for Social Sciences) V23. Analysis results were presented as mean and standard deviation for quantitative data. Categorical data were presented as frequency (percent).

Table 1. Sociodemographic characteristics of the family physicians

	Minimum-Maximum	**Mean**	**Standart deviation**
Age	(25-59)	34.2	7.3
Number of years worked in medical practice	(1-26)	8.9	5.9
The number of registered patients	(0-4267)	1936.2	1493.9
The average number of patient visits per day	(0-200)	43	26.9
The percentage of patients with chronic pain seen in daily practice	(1-35)	9.9	6.5
		N	**%**
Gender	Female	47	58
	Male	34	42
The institution of work	University Hospital	27	33.3
	Family Health Center	46	56.8
	State Hospital (integrated)	8	9.9
Expertise	Family doctor specialist	6	7.4
	Family physician	44	54.3
	Specialization continues	31	38.3
The rate of physicians' training on T&CM applications	Yes	18	22.2
	No	63	77.8
Did you attend any post-graduate congress, course, symposium, or in-service training on pain management after graduating from the Medical Faculty?	Yes	23	28.4
	No	58	71.6

Abbreviation: T&CM, Traditional and Complementary Medicine

RESULTS

Eighty-one of 120 family physicians participated in the study. The mean age was 34.2±7.3. 58% of the participants (n=47) are women; 42% of them were male (n=34). The number of years worked in medical practice was 8,9±5,9. 54.3% (n=44) of the participants were family physician, and 7.4% (n=6) were family doctor spesialist. 38.3% (n=31) of the physicians specialization continues. 33.3% (n=27) were working in a university hospital, 56.8% (n=46) in a family health center, and 9.9% (n=8) in a state hospital. According to the statements of physicians,the number of registered patients was 1936.2±1493.9; the average number of patient visits per day was 43±26.9 and the percentage of patients with chronic pain 9.9±6.5. The rate of participation in congress, course, symposium, or in-service training on pain management after graduating from the

Medical Faculty was 28.4% (n=23). The rate of training on traditional and complementary medicine practices (T&CM) was 22.2% (n=18) (Table 1).

Questions and Answers

Half of the family physicians (51.9%) participating in our study reported that low back pain was the most common cause of presentation in patients with chronic pain. The other causes in decreasing order were headache (17.3%), knee pain (17.3%), rheumatic pain (4.9%), myalgia (4.9%), and neck pain (3.7%). In our country, the responses given to the question about the most common causes of chronic pain were psychiatric problems (24.7%) and low back pain (17.3%). When asked about their initial approach to a patient presenting with chronic pain, the responses of the physicians included "I treat the patient" (59.3%); "I order medical tests" (27.2%); and "I refer the patient" (13.6%). When asked whether they agreed with the idea that a multidisciplinary approach is necessary for the follow-up and treatment of patients with chronic pain, 66.7% of the physicians agreed with this view; 28.4% of them partially agreed, and 4.9% disagreed. The distribution of the physician responses to the question about which branch of a physician the participants prefer to refer a patient with chronic pain in their practice included physical medicine and rehabilitation (66.7%), algology (4.9%), neurosurgery (7.4%), psychiatry (4.9%), orthopedics (2.5%), and the reply "I do not refer my patients" (13.6%) (Table 2).

When asked whether they agreed with the statement "I think I have sufficient clinical resources required for the care of my patients with chronic pain for their current clinical condition?", 22.2% of the physicians agreed with the statement; 55.6% partially agreed, and 22.2% disagreed. The question "What could be the reasons for partially agreeing with the statement 'I think I have adequate clinical resources?" was replied as the inability to have complete access to patient records using the *e-Nabiz* system or having difficulty in entering the *e-Nabiz* system by 22.2% of the participants; the inability to order necessary laboratory tests by 60.4%; lacking adequate ancillary staff support by 3.2%; and the inability to prescribe the medically indicated treatment (14.2%). When the physicians' opioid preferences for chronic pain management were asked, 64.2% of them replied as "I do not use opioids" and 35.8% replied, "I sometimes use opioids ". The question "Have you ever had any patient who demanded steroid treatment for chronic pain management?" was replied as "Yes" by 81.5% of the participants and "No" by 18.5% of them. The question "Do patients with chronic pain ask you to prescribe their medications?" was replied as "Yes" by all physicians. The rate of meeting the demand of patients with chronic pain by prescribing medications they asked for was 76.5%.

It was found that 93.8% of patients with chronic pain asked family physicians to prescribe nonsteroidal antiinflamatory durgs (NSAIDs), 3.7% asked for steroids, and 2.5% asked for opioids The question about the most effective treatment in patients with chronic pain was replied as T&CM applications by 8.6% of the participants, physical therapy applications by 35.8%, guideline recommendations by 32.1%, and medical treatment by 23.5% (Table 3).

DISCUSSION

Chronic pain, which can cause loss of workforce and disability in the society and negatively affect the quality of life of a given individual, is a condition that a family physician encounters in daily practice. Repeated hospital admissions and chronic medication use by patients with chronic pain increase the rate of visits to family physicians. Variable results have been found in studies on the epidemiology of chronic pain. Sociocultural and economic factors may lead to large inter-societal differences in its prevalence. Jackson et al. reported the order of frequency of chronic pain types as headache, osteomuscular pain, and joint pain (11) while Ferreira et al. reported the order of frequency as headache, neuropathic pain, and osteomuscular pain (12). Domestic studies have reported that the most common causes of non-cancer chronic pain are low back pain, neuropathic pain, and myofascial pain (13); another study reported myofascial pain, neuropathic pain, low back pain, and headache as the most common non-cancer chronic pain types (14). Half of the family physicians participating in our study reported that low back pain was the most common cause of presentation in patients with chronic pain. The other causes in decreasing order were headache, knee pain, rheumatic pain, myalgia, and neck pain. The causes of chronic pain most frequently encountered by physicians show parallelism with the studies conducted in our country. In our country, the responses given to the question about the most common causes of chronic pain were psychiatric

Table 2. Family Physicians' Approaches to Chronic Pain Management

		N	%
The most common cause of presentation	Low back pain	42	51.9
	Headache	14	17.3
	Knee pain	14	17.3
	Rheumatic pain	4	4.9
	Myalgia	4	4.9
	Neck pain	3	3.7
The most common causes of chronic pain in our country	Psychiatric problems	20	24.7
	Low back pain	14	17.3
	Headache	5	6.2
	I do not know	9	11.1
	Postür bozukluğu	4	4.9
	Osteoartrit	14	17.3
	Immobilization	9	11.1
	Anemia	1	1.2
	Rheumatological disease	1	1.2
	Age	3	3.7
	Fibromiyalgia	1	1.2
Initial approach to a patient presenting with chronic pain	I treat the patient	48	59.3
	I order medical tests I order medical tests	22	27.2
	I refer the patient	11	13.6
A multidisciplinary approach is necessary for the follow-up and treatment of patients with chronic pain	I agree with this view	54	66.7
	I partially agree	23	28.4
	I disagree	4	4.9
Which branch of a physician the participants prefer to refer a patient with chronic pain?	Physical medicine and rehabilitation	54	66.7
	Algology	4	4.9
	Neurosurgery	6	7.4
	Psychiatry	4	4.9
	Orthopedics	2	2.5
	I do not refer my patients	11	13.6

Table 3. Family Physicians' Treatment Approaches for Chronic Pain

		N	%
Do you agree that "You think you have sufficient clinical resources required for the care of your patients with chronic pain for their current clinical condition?"	I agree with the statement	18	22.2
	I agree but partially	45	55.6
	I do not agree	18	22.2
What could be the reasons for partially agreeing with the statement ‘‘I think I have adequate clinical resources? ”	The inability to have complete access to patient records using the *e-Nabiz* system or having difficulty in entering the *e-Nabiz* system	14	22.2
	The inability to order necessary laboratory tests	38	60.4
	Lacking adequate ancillary staff support	2	3.2
	The inability to prescribe the medically indicated treatment	9	14.2
“Have you ever had any patient who demanded steroid treatment for chronic pain management?”	Yes	66	81.5
	No	15	18.5
Do you prescribe opioid analgesics in chronic pain management	I do not use opioid analgesics	52	64.2
	Sometimes I use opioid analgesics	29	35.8
Do patients with chronic pain ask you to prescribe their medications?	Yes	81	100.0
The rate of meeting the demand of patients with chronic pain by prescribing medications	Yes	62	76.5
	No	19	23.5
The most commonly demanded medication group by their patients	NSAIDs	76	93.8
	Steroids	3	3.7
	Opioids	2	2.5
The most effective treatment option for chronic pain	Traditional and complementary medicine	7	8.6
	Physical therapy applications	29	35.8
	Guideline recommendations	26	32.1
	Medical treatment	19	23.5

Abbreviation: NSAIDs, nonsteroidal anti-inflammatory drugs

problems (24.7%) and low back pain (17.3%). It has been reported that individuals with chronic pain have a greater rate of psychiatric diseases than those without. Depression and/or anxiety disorders are the most common accompanying disorders (8,15). Patients with chronic pain frequently change their physicians; they may think that they are not taken seriously enough by physicians, that they are

perceived as a difficult and boring patient group, and that physicians fail to manage their conditions properly. They may express their symptoms in an exaggerated way (4). The fact that the physicians participating in our study opined that psychiatric problems are the most common cause of chronic pain in our country can be explained by depression and anxiety disorders that can accompany chronic pain and are often overlooked at the time of diagnosis. In our study, in which we questioned the initial approach to a patient with chronic pain, half of the physicians replied the question as “Yes, I do treat chronic pain”. The question of whether inter-disciplinary cooperation is needed in chronic pain management was replied as “Yes, I agree” by more than half, or most of the physicians. Only a minority of them stated that there is no need for a multidisciplinary approach in chronic pain management. Our study revealed that a majority of physicians do not attend any post-graduate congress, course, symposium, or in-service training on pain management after graduating from the Medical Faculty. We are of the opinion that chronic pain management must be incorporated into in-service trainings of family physicians and awareness of pain management be increased in order to make inter-disciplinary cooperation more efficient. The distribution of the physician responses to the question about which branch of aphysician the participants prefer to refer a patient with chronic pain in their practice included physical medicine and rehabilitation (66.7%), algology (4.9%), neurosurgery (7.4%), psychiatry (4.9%), orthopedics (2.5%), and the reply “I do not refer my patients” (13.6%). Low back pain being the most common reason of patient presentation to a family physician for chronic pain, as well as physiotherapy and exercise being effective treatments for low back pain (16-18), may be the reason of referrals to physical medicine and rehabilitation being the most common. In addition, the absence of an algology clinic in Düzce province may be one of the reasons for the low referral rate to the algology department. Only a fifth of the family physicians thought that they had enough clinical resources they needed for the medical care of patients with chronic pain. When the reasons for not having sufficient clinical resources were asked, the replies included the failure to perform the most necessary laboratory tests and the inability to access patient records via the *e-Nabiz* system or having difficulty entering the system. Accessibility of the essential laboratory tests that allow making a differential diagnosis in chronic pain etiology may help achieve better chronic pain management in primary care. Our study found that patients with chronic pain asked all physicians to prescribe medications, and a great majority of physicians prescribed the medications the patients asked. It was found that 93.8% of patients with chronic pain asked family physicians to prescribe NSAIDs, 3.7% asked for steroids, and 2.5% asked for opioids. When the physicians were questioned about their preferences for prescribing opioid analgesics in chronic pain management, 64.2% replied that they did not use these agents while 35.8% replied that they sometimes used them. There is insufficient evidence that opioids are effective in chronic pain. It has been reported that opioids, which may be abused due to their addictive potential, are increasingly used in the treatment of non-cancer chronic pain while opioid-related deaths are on the rise (19-21). Therefore, family physicians must determine the indications of opioid use and avoid pain suppression using this group of medications, prevent drug abuse, and have knowledge of non-pharmacological treatment methods for pain palliation and inform patients. The question about the most effective treatment in patients with chronic pain was replied as T&CM applications by 8.6% of the participants, physical therapy applications by 35.8%, guideline recommendations by 32.1%, and medical treatment by 23.5%. There is no clear consensus as to the treatment of chronic pain, and the available recommendations are complex and sometimes controversial (22). However, evaluating patients in detail, not overlooking the accompanying psychiatric diseases, and integrating patients into society are important goals in treatment success. T&CM applications have become increasingly popular both in the world and in our country. World Health Organization recommends the integration of T&CM applications into the national health system where appropriate, and the use of a safe and effective method (23,24). In our study, the rate of physicians’ training on T&CM applications was 22.2%. T&CM applications in chronic pain treatment may be beneficial in terms of greater patient satisfaction and a reduced rate of medication use. Therefore, educating family physicians and providing a suitable environment and supporting the clinical use of the enthusiastic majority may be helpful.

CONCLUSION

We think that developing algorithms for chronic pain management, structuring specialist training and planning continuous training after graduation will contribute significantly to increasing awareness of chronic pain.

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Ethics Committee Approval: The study was approved by the local institutional ethics committee (Desicion no: 2020/178; Date:17 August, 2020).
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