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Pain management practices in the emergency departments in Turkey

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Abstract:

OBJECTIVES: This study aimed to evaluate pain management practices in the emergency departments (EDs) in Turkey and to evaluate the prevalence and etiologies of oligoanalgesia to identify possible improvement strategies.

METHODS: This multicenter cross-sectional observational study was conducted in 10 tertiary care hospitals in Turkey. Patients who were admitted to the ED with pain chief complaints were included in the study. Both patients and physicians were surveyed with two separate forms by the research associates, respectively. The patient survey collected data about the pain and the interventions from the patients' perspective. The pain was evaluated using the Numerical Rating Scale. The physician survey collected data to assess the differences between study centers on pain management strategies and physician attitudes in pain management.

RESULTS: Ten emergency physicians and 740 patients (male/female: 365/375) enrolled in the study. The median pain score at admission at both triage and ED was 7 (interquartile range: 5–8). The most frequent type of pain at admission was headache (n = 184, 24.7%). The most common analgesics ordered by physicians were nonsteroidal anti-inflammatory drugs (n = 505, 67.9%), and the most frequent route of administration was intramuscular injection (n = 396, 53.2%). About half of the patients (n = 366, 49.2%) received analgesics 10–30 min from ED admission. The posttreatment median pain score decreased to 3 (P < 0.001). About 79.2% of patients did not need a second analgesic administration (n = 589), and opioid analgesics were the most frequently administered analgesic if the second application was required. Physicians prescribed an analgesic at discharge from the ED in 55.6% of the patients (n = 414) and acute pain was present in 7.5% (n = 56) of the patients.

CONCLUSION: Our study on the pain management practices in the EDs in Turkey suggested that high rate of intramuscular analgesic use and long emergency room stay durations are issues that should constitute the focus of our quality improvement efforts in pain management.

Keywords:

Emergency medicine, oligoanalgesia, pain, pain management, Turkey

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What is already known on the study topic?

- Inadequate assessment of pain in emergency department (ED) practices is a significant problem
- Pain management practices can vary in different countries.

What is the conflict on the issue? Has it importance for readers?

- Oligoanalgesia is also directly related to patient satisfaction, so assessing the causative factors and conducting improvement studies are necessary to prevent oligoanalgesia
- Tracking the door-to-analgesic time is a way to prevent oligoanalgesia and relieve the patient's pain
- We do not have enough data for the pain management practices of Turkish EDs.

How is this study structured?

- In this multicenter cross-sectional study, 750 patients participated in the study from ten different hospitals from the six regions of Turkey.

What does this study tell us?

- The behavior of patients and physicians regarding pain was studied in a patient population experiencing acute pain
- While the rate of oligoanalgesia in EDs is low, it has been determined that medication use without a doctor's recommendation and that patients with low education level use the ED more
- Nonsteroidal anti-inflammatory drugs and intramuscular routes were very common in contrast with current literature.

Introduction

Pain is the fundamental cause of emergency department (ED) referrals that comprises 75%–80% of all admission complaints. Nevertheless, oligoanalgesia, which can be defined as the lack of using appropriate doses of analgesics or, in other words, as undertreating the pain,[1] is still a significant problem despite the considerable experience at EDs.[2]

Delaying the analgesia and administration of available analgesics in inappropriate routes and doses at crowded EDs are the significant causes of oligoanalgesia.[3,4] The assessment of pain management applications in EDs revealed a discrepancy and deficiency that covers all patient subgroups. Inadequate coverage of pain management in the medical and postgrad curricula and absence of clinical quality control audits for pain management may lie under these problems. Other factors that may be responsible include lack of attempts to improve pain management in vulnerable groups like children or elderly patients and prejudice about opioid abuse even in patients who need acute and severe pain relief. Another significant factor is the communication problems between patients and physicians due to the cultural factors that may affect pain expression.[5-8] The primary aim of emergency pain management is not eliminating the pain but enabling a comfort level for the patient to return to daily activities until the underlying problem is healed. The emergency pain management should be fast, have limited adverse effects, and be tailored to the type of pain. Optimization of analgesics should be patient-centered and specific to the pain syndrome. Emergency care providers should be familiar with various kinds of pharmacological agents by keeping the patient's sociocultural background and expectations in mind, as well as the severity of pain and the efficiency and security of medications.[9,10]

The unjustifiable resistance to overcome oligoanalgesia suggests a deep-rooted problem that originates from the population's cultural background, which is also evident in health-professional attitudes. Based on this background, this study aimed to evaluate pain management practices in emergency medicine in Turkey and the prevalence and etiologies of oligoanalgesia to identify possible improvement strategies.

Methods

This multicenter cross-sectional study was conducted under the auspices of the Turkish Emergency Medicine Association with the participation of the ten EDs including Derince Training and Research Hospital, Umraniye Training and Research Hospital, Marmara University Pendik Training and Research Hospital, Fatih Sultan Mehmet Training and Research Hospital, Ankara City Hospital, Ege University, Tepecik Training and Research Hospital, Akdeniz University, Dicle University, and Trabzon Regional Training and Research Hospital. The Kocaeli University Noninterventional Studies Ethical Committee approved the study protocol (Approval Date: August 7, 2019; Approval No: KU GOKAEK 2019/1312).

Study design

This cross-sectional multicenter study utilized two surveys that evaluated the characteristics of the pain of the patients admitted to the EDs, the practice patterns of emergency medicine specialists and residents for pain management, and the possible problems that emerge during pain management. The first survey collected information from the patients about their pain and the ED staff's interventions [Appendix 1]. The second survey collected data from the ED staff about the departmental procedures to evaluate the administrational differences between centers [Appendix 2]. A responsible emergency medicine resident supervised the completion of both surveys at each center. The senior authors of the study assessed the face validity of the surveys.

The pain was evaluated using the Numerical Rating Scale (NRS), which assessed the pain on a numerical grade between 0 and 10, ranging from no pain to the worst pain possible, respectively. The NRS was shown to be significantly correlated with the actual pain of the patients, and its feasibility in the clinical studies was proven.[11] Duration of the pain at admission was classified as <1 h, 1 h–1 day, 1 day–1 week, 1 week–1 month, and 1 month–1 year. The door-to-analgesic time was categorized as <10 min, 10–30 min, 30–60 min, and >60 min. The timing of the second application of analgesics was classified as 10 min, 10–30 min, 30–60 min, and >60 min.

The sample size was estimated using the Raosoft sample size calculator.[12] Approximately more than 150,000 patients were admitted annually to 10 EDs that participated in our study, which corresponds to 500 admissions daily to each center. For the first survey, we assumed that about half of the patients admitted to EDs had a paint complaint. With a 5% type-I error level and a 99% confidence interval, the calculated minimum sample size was 650 patients. For the second survey, the sample size estimations revealed a minimum of 320 patients needed in 10 EDs with at least 20 residents at each center.

Patient recruitment

The patients admitted to the ED with a primary complaint of pain were consecutively invited to the study. Patients with a triage category of 1 according to the classification system of the Ministry of Health of Turkey (patients with a life-threatening injury or health condition that requires immediate assessment and appropriate treatment), respiratory and hemodynamic instability, and trauma patients with an Abbreviated Injury Severity Index >20 were excluded from the study. But, remaining trauma patients were included in the study.

Data management

The study had three phases for data management. During Phase 1 of the study, the departmental heads of the EDs at universities and training and research hospitals with a specialty training program and a daily number of patient admission of over 500 were contacted and requested to assign an emergency medicine resident as the primary investigators (PIs) and a secondary investigator if available. The authors then informed PIs about the study and data collection procedures, including recording the collected data into the REDcap system.[13]

In Phase 2, the PIs collected data about pain management applications for all patients admitted with pain complaints. Also, the PIs asked other physicians (residents and/or attendings) in departmental meetings to complete the institutional data collection forms. The data collection was conducted between September 1 and October 15, 2019. The PIs recorded the collected data into the REDcap database established in the Turkish Emergency Medicine Association servers.

Phase 3 of the study included data analyses and reporting.

Statistical analyses

All statistical analyses were completed using SPSS 21 software (IBM Inc., Armonk, NY, USA). For the descriptive statistical presentation of the study parameters, the number of the patients (frequency) and the distribution proportions (percent) were used to depict the distributions for categorical variables. On the other hand, the descriptives for continuous variables, namely the pain scores measured by NRS, were presented with median values and interquartile ranges (the 25th and 75th percentiles). A comparison of NRS values between dependent groups (which were the measurement of NRS at two time-points in this study) was made using the Wilcoxon test. The statistical significance was considered as *P* value lower than 0.05 (Type-I error level of 5%) in statistical comparisons.

Results

Ten emergency medicine residents in the 3rd or 4th year of specialty training from 10 different training and research hospitals in 6 regions of Turkey completed the data collection and recording. A total of 740 patients (male/female: 365/375) participated in the study between September 1 and October 15, 2019. The majority of the patients were primary school graduates (42.1%) [Table 1].

The median pain score at admission at both triage and ED was 7 (interquartile range: 5–8). The most frequent type of pain at admission was headache present in 24.7% of the patients (*n* = 184), followed by lower back pain (*n* = 140, 18.8%) and abdominal pain (*n* = 124, 16.7%). Acute pain (present for <1 h) was present in 7.5% of the patients (*n* = 56), and the majority of patients (*n* = 311, 41.8%) had subacute (1 h–1 day) pain. The patients' pain history revealed that 35.9% had a headache (*n* = 267), and 25.5%

Table 1: Demographics of patients

	n (%)
Sex	
Female	375 (50.4)
Male	365 (49.1)
Education	
Illiterate	57 (7.7)
Primary school	292 (39.2)
High school	187 (25.1)
University	146 (19.6)
Postgraduate	12 (1.6)

had lower back pain (n = 190) in the last month. Patients' chronic pain history showed that the most frequent pain types were headache and lower back pain lasting more than 3 months in the previous year, present in 19.4% (n = 144) and 14.2% (n = 106) of patients, respectively [Table 2].

The majority of the patients (n = 454, 61%) took analgesics, and 6.7% preferred resting for pain relief (n = 50) before admission to the ED. About one-third of the patients (n = 240, 32.3%) did not go to a doctor for their pain, and 14.1% visited their family physician (n = 105), followed by physical medicine and rehabilitation specialist (n = 55, 7.4%). Primary groups of medications were nonsteroidal anti-inflammatory drugs (NSAIDs) and paracetamol pills through the oral intake (n = 420, 64.4%), which was mainly recommended by a doctor (n = 431, 57.9%). Patients mostly relied on information on the websites, including other patients with similar diseases, to choose an analgesic. Only 21.5% of them (n = 160) recommend their analgesics to the people around them [Table 3].

The physicians mainly ordered NSAIDs (n = 505, 67.9%), and the most frequent route of administration was intramuscular injection (n = 396, 53.2%). About half of the patients (n = 366, 49.2%) received analgesics in 10–30 min from admission to ED, and only one-fifth of them in <10 min. The posttreatment median pain score decreased to 3 ($P < 0.001$). The pain score reassessment was 10–30 min from analgesic administration in 31.9% of patients (n = 237), 79.2% did not need a second analgesic administration (n = 589), and opioid analgesics were the most frequently administered analgesic if the second application was required. Physicians prescribed an analgesic at discharge from the ED in 55.6% of the patients (n = 414). Patients who preferred to use the drugs they already have reported that their drugs were adequately relieved of their pain (n = 276, 37.1%). The most frequently prescribed analgesics were NSAIDs in 44% of cases (n = 327) [Table 4].

Table 2: Pain characteristics and history

	n (%)
Triage pain score - NRS, median (IQR)	7 (5-8)
Emergency department pain score - NRS, median (IQR)	7 (5-8)
Complaint at admission	
Headache	184 (24.7)
Lower back pain	140 (18.8)
Abdominal pain	124 (16.7)
Myalgia	53 (7.1)
Neck pain	32 (4.3)
Back pain	32 (4.3)
Knee pain	26 (3.5)
Menstruation pain	22 (3.0)
Hip pain	15 (2.0)
Toothache	13 (1.7)
Other	99 (13.3)
Duration of pain	
1 h-1 day	311 (41.8)
1 day-1 week	248 (33.3)
1 week-1 month	67 (9.0)
Last 1 h	56 (7.5)
1 month-1 year	40 (5.4)
Other	19 (2.6)
If present, the type of pain in the last month	
Headache	267 (35.9)
Lower back pain	190 (25.5)
Abdominal pain	113 (15.2)
Neck pain	109 (14.7)
Myalgia	97 (13.0)
Back pain	83 (11.2)
Knee pain	53 (7.1)
Menstruation pain	37 (5.0)
Hip pain	36 (4.8)
Toothache	29 (3.9)
Other	97 (13.0)
If present, the type of pain that lasted more than 3 months in the last year	
Headache	144 (19.4)
Lower back pain	106 (14.2)
Abdominal pain	48 (6.5)
Myalgia	41 (5.5)
Back pain	28 (3.8)
Knee pain	27 (3.6)
Neck pain	25 (3.4)
Toothache	13 (1.7)
Menstruation pain	12 (1.6)
Hip pain	7 (0.9)
Other	150 (20.2)

NRS=Numeric Rating Scale, IQR=Interquartile range

Discussion

This study evaluated the general characteristics of patients with acute pain and physician attitudes in the ED. Mainly, the low levels of oligoanalgesia and low levels of using analgesics without doctor recommendation were the outcomes representing the efficiency of the treatment in EDs and the patients' awareness regarding analgesic use. On the other hand, higher administration frequency among patients at lower educational levels and high intramuscular drug administration frequency were possible targets for improving pain management quality.

Physicians face pain in approximately 70% of their practice at EDs.[14] In a previous study titled the high prevalence of pain from 2002, the rate of patients with a primary complaint of pain in one site was 80.4%, and in more than one location was 19.6%.[15] The most common problem in pain management in emergency health services is oligoanalgesia.[2] The issue of oligoanalgesia is still a hot topic for the researcher since the landmark

Table 3: Characteristics of pain treatment

	n (%)
Method for pain management	
Medication	454 (61.0)
Resting	50 (6.7)
Physical therapy	12 (1.6)
Traditional methods (hirudotherapy, cupping, acupuncture, etc.)	7 (0.9)
Exercise	5 (0.7)
Herbal treatment	1 (0.1)
Which doctor have you been to until today about your pain?	
No doctor visit	240 (32.3)
Family physician	105 (14.1)
Physical medicine and rehabilitation	55 (7.4)
Neurology	51 (6.9)
Internal medicine	49 (6.6)
Neurosurgery	41 (5.5)
Orthopedics	32 (4.3)
Gynecologist	15 (2.0)
Dentist	10 (1.3)
Ear, nose, throat	7 (0.9)
Other	121 (16.3)
If you used medication for your pain, which drug group did you use?	
Nonsteroid anti-inflammatory drugs	262 (35.2)
Paracetamol	158 (21.2)
Do not know	90 (12.1)
Drugs for neuropathic pain	8 (1.1)
Opioid analgesics	6 (0.8)
Antidepressants	3 (0.4)
If you took medicine, from which route of administration?	
Oral	479 (64.4)
Topical	24 (3.2)
Intramuscular injection	23 (3.1)
Intravenous injection	4 (0.5)
How did you choose your analgesic?	
Doctor recommendation	431 (57.9)
Previous experience	116 (15.6)
Pharmacist recommendation	25 (3.4)
Neighbor recommendation	15 (2.0)
Internet	4 (0.5)
How do you decide on your medicine on the Internet?	
Websites including other patients with similar disease	273 (36.7)
Websites of Ministry of Health recommendations	77 (10.3)
Personal websites of physicians	47 (6.3)
Drug ads (banners)	22 (3.0)
Websites of pharmaceutical companies	19 (2.6)
Video ads	11 (1.5)
Websites of private hospitals	6 (0.8)
Do you have an analgesic that you regularly use and recommend to people around you?	
No	570 (76.6)
Yes	160 (21.5)

article by Marks and Schar in 1973, who reported that most of their patients referred for psychiatric assessment due to drug-seeking behavior were just had undertreated pain.[16] And, initial reports about oligoanalgesia in emergency medicine are from around the 1990s.[17]

Oligoanalgesia is briefly the inadequate administration of analgesia. The underlying factors of oligoanalgesia include administering underdoses of analgesics, the inappropriate administration route, and administering agents with a low analgesia profile.[8] Physicians' right knowledge about pain management has an essential role in choosing the right analgesic agent.[5] Moreover, variables such as age, gender, and ethnic origin of the patient also affect oligoanalgesia.[6,7] Oligoanalgesia is also directly related to patient satisfaction, so assessing the causative factors and conducting improvement studies are necessary to prevent oligoanalgesia.[4] Inadequate assessment of pain in ED practices is a significant problem. Pain is a very subjective complaint and correlating the patient's real pain, and the expressed pain is difficult.[18] The short duration of analgesia application in our study (mean 27 min) and analgesic application in the first 30 min in 71.5% of all patients suggest increasing awareness of oligoanalgesia.

Ineffective assessment of the pain causes the prolonged initiation of the treatment and oligoanalgesia, which eventually deteriorates the pain management. Health-care professionals often tended to rate the patient's pain less than the patient felt. A standard pain scale application is recommended to prevent inappropriate pain assessment.[19] Our results showed that pain score assessments by both triage staff and the physicians at the ED were similar, and the administration of an NRS regularly may increase the quality of pain management. Using standard pain scales at admission, after analgesia, and during discharge increased the number of patients receiving analgesia, shortened the time to reach analgesia, provided a significant decrease in pain scores, and increased satisfaction with pain management.[6,20] An NRS was used in 80.3% of patients for the second time in our study. This high rate may be explained by that the clinics participating in the survey are tertiary training clinics throughout the country.

The concept of door-to-analgesic time refers to the time the patient receives analgesia from the time of admission. Tracking the door-to-analgesic time is a way to prevent oligoanalgesia and relieve the patient's pain. Continued pain may cause adverse physiological and psychosomatic effects such as tachycardia, hypertension, inflammatory response, and anxiety. Previous studies showed that the door-pain relief time varies between 60 and 120 min between different settings. But, our results

Table 4: Physician assessment on pain

	n (%)
Posttreatment pain score - NRS, median (IQR)	3 (1-4)
Treatment at the emergency department	
Nonsteroidal anti-inflammatory drugs	505 (67.9)
Paracetamol	78 (10.5)
Opioid analgesics	37 (5.0)
Other	105 (14.1)
Route of analgesic administration	
Intramuscular	396 (53.2)
Intravenous	274 (36.8)
Oral	27 (3.6)
Other	25 (3.4)
Door-to-analgesic time in the emergency department (min)	
10-30	366 (49.2)
30-60	154 (20.7)
<10	149 (20.0)
>60	34 (4.6)
Timing of second application of pain scale after analgesic (min)	
10-30	237 (31.9)
30-60	224 (30.1)
>60	88 (11.8)
10	39 (5.2)
Pain scale not administered for the 2nd time	144 (19.4)
Analgesic choice if a second application is needed	
No need for 2nd analgesic application	589 (79.2)
Opioid analgesics	34 (4.6)
Nonsteroidal anti-inflammatory drugs	24 (3.2)
Paracetamol	15 (2.0)
Ketamine	1 (0.1)
Other	32 (4.3)
Prescribing analgesic at discharge	
Yes	414 (55.6)
No, the patient will refer to an outpatient clinic for further assessment	171 (23.0)
No, the patient already has analgesics for further use	55 (7.4)
No, the patient may refer to a family physician for a prescription	49 (6.6)
No, the patient will not need further analgesia	28 (3.8)
Other	16 (2.2)
Why the patient prefers to use the analgesic he/she already has?	
It is adequate for relieving pain	276 (37.1)
It does not cause an adverse effect	45 (6.0)
Economic reasons (cannot afford new medication)	22 (3.0)
Other	215 (28.9)
Analgesic choice if prescribed at discharge	
Nonsteroidal anti-inflammatory drugs	327 (44.0)
Not prescribed	242 (32.5)
Paracetamol	102 (13.7)
Opioid analgesics	5 (0.7)
Other	47 (6.3)

NRS=Numeric Rating Scale, IQR=Interquartile range

suggested an increased sensitivity to pain and avoidance of oligoanalgesia in EDs in Turkey.

The intramuscular route for analgesic administration was 54.8%, while the intravenous route was 38% in our study. The referral textbooks state that intramuscular analgesia is an undesirable method in the ED, but the frequency in our study was relatively high.[14] Intramuscular analgesia is frequently administered in our country due to the overcrowding at EDs, short duration of administration, being minimally invasive, and shortening the course of the patient's stay in the ED. Moreover, the frequency of oral analgesia was relatively low (3.7%). Although there is no problem with drug supply, oral analgesia is not preferred in the EDs in our country. Additionally, the frequency of nebulized drug use was zero.

The most common complaint at admission to the ED was headache. Although this was accordant with the literature, many factors, including population density and crowding, atmospheric elements such as humidity and air pollution should be considered when interpreting these results. Another point that needs attention and sociological explanation was the relationship between admission to ED and the level of education. Patients with low education levels had a high frequency of admissions to EDs.

Prescribing opioids was low among physicians, but this is similar to the world's practice patterns.[5] Many factors, primarily the patient's age, the risk of addiction and abuse, and drug interactions in patients with multiple drug use, affect physician decision for opioid prescribing.

Physicians in ED are frequently facing chronic pain in the ED. The chronic pain and exacerbations of chronic diseases are frequent cases in the ED, which increase the burden. A low rate of outpatient management and inadequate treatment of chronic conditions increase the load on ED.[21] The majority of the participants presented with chronic pain in our study. Some of our other findings such as 86% of the patients having similar problems in the last month, 75% of the patients having pain for 3 months in the previous year, and 50% of patients having an NRS <5 showed that EDs are facing chronic pain frequently. To be evident from

the figure that a significant portion of patients received a physician's advice before admission to the ED, had examinations performed by experts from different medical branches, and had complaints lasting more than 1 week. Educating health-care professionals and patients, expanding the use of primary health-care services, and making emergency patients' profiles clearer should only overcome this problem.

To summarize, there are many problematic areas of pain management in the ED. Further training and quality control programs are needed to identify these problems and find solutions.

Limitations

This study also has several limitations, which should be considered during the interpretation of our outcomes. First, this is a cross-sectional survey study that may not reflect the actual status all over the country. Second, although the sample size was quite large, substratifications according to different factors such as the type of the facility, region, and sociodemographic background characteristics may alleviate the power of our outcomes. Third, this study is descriptive, indicating the need for further analytical studies to link our descriptive inferences with causative factors associated with oligoanalgesia in the ED. Fourth, some patients may use analgesics for different purposes, such as their antipyretic effects, which might be a confounding factor in such analyses. Finally, there is no standardized definition of oligoanalgesia, but it should be defined with evident criteria in further studies to evaluate the actual status.

Conclusion

Our study showed that pain management practices in the ED in Turkey have many differences with current literature. The most prominent findings were the common use of nonsteroid anti-inflammatory drugs and the intramuscular route of administration. The low rate of oligoanalgesia and low rate of analgesic use without doctor recommendation was the significant results obtained in the study. Application to the ED with relatively high nonsevere NRS scores, high rate of IM drug use, and long emergency room stay durations are issues that should constitute the focus of our quality improvement efforts in pain management.

Author contribution statement

MC, BK, OC, and SY conceived the study, designed the trial, and was also responsible for the study's scientific validity. BK, TYK, NDH, SG, SEE, SNA, OGC, DP, and EU undertook recruitment of participating centers and patients. MC, OC, and SY provided statistical advice on study design and analyzed the data; SY and OC chaired the data oversight committee. MC drafted the manuscript, and all the authors contributed substantially to its revision. MC takes responsibility for the study as a whole.

Ethical approval

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Conflicts of interest

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Appendixes

Appendix 1: Patient management questions

1.What is the patient's gender?

2.What is the Education level of your patient?

3.What is your complaint of applying to the emergency department?

4.What is the visual pain analog score in triage?

5.What is the visual pain analog score in the emergency department?

6.How long is your pain?

7.Which of these pains have you felt in the last month?

8.In the last year, which of these pains have been felt for more than three months?

9.How did you treat your pain?

10.Which doctor did you go to about your pain so far?

11.If you used medication for your pain, which drug group did you use?

12.If you used medication, in which way did you use it?

13.How did you choose the medicine you use?

14.The treatment applied to the patient in the emergency department?

15.The way of administration of analgesia to the patient?

16.How long is the door-pain relief period for the patient in the emergency department?

17.After how many minutes did you apply the pain scale for the second time to the patient you applied analgesia to?

18.What was the visual pain analog score performed as a control in the emergency department?

19.The treatment applied to the patient in the emergency department in case of a second analgesia need?

20.Will you prescribe an analgesic when your patient is discharged with pain complaints?

21.If an analgesic will be prescribed during discharge, which type of analgesic would you prefer?

Appendix 2: Institutional evaluation questions

1.What is your role in the emergency department?

2.How many patients, on average, apply to the emergency department you work in a month?

3.In your opinion, what percentage of the patients who admit to the emergency department you work in a year apply with the complaint of pain?

4.Do you have standard pain management algorithms created for certain clinical situations in the emergency department?

5.How often is the pain scale used by the triage officer during the triage in the emergency department where you work?

6.How often is the pain scale used by the nurse/paramedic in the observation department of the emergency department you work?

7.How often is the pain scale used by you in the emergency department you work?

8.How often is the pain scale used routinely before discharge in the emergency department you work?

9.How often do you delay giving painkillers to a patient presenting with pain because of concerns about delaying the diagnosis or masking the current clinical picture?

10.How often do you perform oral analgesia in a patient who is admitted to the emergency department with pain?

11.What is the frequency of applying analgesia with intramuscular injection in the emergency service practice?

12.How often are patients admitted to your emergency department with chronic pain complaints?

13.How often do you prescribe opioids during discharge in emergency department practice?

14.Do we have any reservations about prescribing opioids to a patient discharged from the emergency room?

15.How often do you encounter opioid addicts in the emergency department?

16.Do you organize training on pain management for emergency room personnel?

17.Please mark the analgesia prescriptions that you will choose at the discharge of patients who apply to the emergency department with different pain scenarios?