Brief Communication

Practices and perceived barriers regarding pain management among Emergency Department physicians: a nationwide multicenter survey in Moroccan hospitals

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Aim: To describe pain management practices in Moroccan emergency departments, and to identify perceived barriers among emergency department physicians regarding pain management.

Methods: Eleven Moroccan emergency departments participated in the study. A nationwide survey was administered to physicians. The questionnaire covered physicians' characteristics, practices regarding pain management, and the perceived barriers to pain control.

Results: A total of 86 questionnaires were analyzed. The participants' mean age was 41±7 years and 59.3% had more than 10 years working experience in emergency departments. The majority of participants were general physicians (87.2%) with no pain education (73.3%). Pain assessment in emergency departments was carried out by 59.3% of the physicians. Simple interrogatory assessment was the main tool (88.3%) with poor use of algometric scales (11.7%). Pain assessment results were not recorded in clinical charts in 93% of cases. Pain reassessment after treatment was carried out by 23.2% of respondents. Physicians had opiophobia in 80.2% of cases. None of the Moroccan emergency departments participating in the study have a written protocol for pain management. Barriers relating to medical staff and the health care system were the most commonly encountered hindrances that preclude emergency department physicians from proper pain management.

Conclusions: Despite the availability of international guidelines, pain management practices are still sub-optimal in Moroccan emergency departments.

Key words: Barriers, emergency care, pain management, practices

INTRODUCTION

THE EMERGENCY DEPARTMENT (ED) is a primary setting for medical care for many patients with traumatic and non-traumatic painful conditions. Recently there has been a substantial increase in ED research focusing on pain management. However, the under-treatment of pain continues to be a serious problem in the ED.^{1–3}

Morocco is a North African country with 32 million inhabitants. The health budget corresponds to 1.1 percent of

gross domestic product and 5.5 percent of the central government budget.⁴ Morocco has inadequate numbers of physicians (0.5 per 1000 people) and hospital beds (1.0 per 1000 people) and poor access to water (82% of the population) and sanitation (75% of the population). The health care system includes 122 hospitals, 2,400 health centers, and 4 university clinics, but they are poorly maintained with inadequate capacity to meet the demand for medical care.⁶ Only 24,000 beds are available for 6 million patients seeking care each year, including 3 million emergency cases. Morocco has two major health sectors, public and private, said to be complementary rather than competitive.⁴ The majority of Moroccans in employment pay for health insurance, which covers most, but not all, health expenses within the public and private sectors.

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A previous study on pain management in a Moroccan ED reported high levels of intense to severe pain at ED arrival (91.1%); however, only 46.9% had a decrease in pain intensity at discharge.³ These results prompted us to wonder about the attitudes of physicians to pain management. To our knowledge, there is no study reporting attitudes and practices of physicians in Moroccan EDs. In this study, we aimed to describe practices of pain management in a national sample of Moroccan EDs, and identify perceived barriers among ED physicians regarding inadequate pain management.

METHODS

THIS WAS AN observational, multicenter survey, carried out between June 2012 and January 2013 at 11 hospitals (3 academic and 8 non-academic hospitals). Doctors involved in the ED were eligible to participate in this study. The term “ED” is used to include emergency room and short-stay observation. Triage is not used in our practices. The research coordinator contacted the eligible participants at participating hospitals and subsequently delivered the questionnaires. The study protocol and consent procedure was approved by the Rabat Ethics Committee for Biomedical Research.

The questionnaire was developed by the researchers for the purposes of the study.^{5–7} The participants filled out a questionnaire, and completed information concerning physicians’ characteristics, practices regarding pain management, and perceived barriers in pain management.

Questions related to physicians’ characteristics included: gender; age; ED working experience (<10 years, ≥10 years); specialty (general practice, emergency and intensive care medicine, others); do you think that the pain assessment is useful? (yes or no); and have you attended a pain management education? (yes or no).

Questions related to practices regarding pain management by ED physicians included: pain assessment (yes or no); the use of algometric scales or simple interrogatory assessment; documentation of pain assessment (never/sometimes/always); pain reassessment after treatment (never/sometimes/always); and availability of written protocols for pain treatment in EDs (yes or no).

Questions related to perceived barriers included three categories of factors.

(i) Factors related to patients included: reluctance to report pain, reluctance to take analgesic, and insufficient communication with medical staff. (ii) Factors related to medical staff included: inadequate pain assessment, inadequate experience in pain control, insufficient knowledge of pain control, time constraints, reluctance to prescribe opioids (opiophobia), and insufficient communication with patients.

(iii) Factors related to the health care system included: strict regulation of opioids, inadequate staffing, limited stock of different types of analgesics, and perceived importance of pain management.

Qualitative variables were presented as numbers and percentages. Quantitative variables were presented as mean $\pm$ standard deviation for variables with normal distribution, and as median and interquartile range for variables with skewed distribution. The normality of the distribution was tested using the Kolmogorov–Smirnov test. Statistical analysis was carried out with SPSS 17.0 for Windows (SPSS, Chicago, IL, USA).

RESULTS

ONE HUNDRED AND ten questionnaires were distributed; of these, 86 were completed (response rate 78.2%). Table 1 shows the summary of ED physicians’ characteristics and their practices regarding pain management. Table 2 shows ED physicians’ perceived barriers in pain management.

DISCUSSION

THIS IS THE first nationwide study to evaluate practices related to pain management among ED physicians in Morocco. A questionnaire study for ED nurses’ pain management has been carried out.⁸

In this study, pain assessment in EDs was performed by 59.3% of our physicians. Simple interrogatory assessment was the main tool (88.3%), with limited use of algometric scales (11.7%). Thus, the assessment of pain in ED remains insufficient. This can be explained by the absence of objective measures; the clinician must depend on the patient to supply key information on the localization, quality, and severity of the pain. Even when pain assessment was carried out, it was rarely recorded on clinical charts, as reported in other studies.⁹ Recent guidelines and policies on pain management require the assessment of pain for all patients attending the ED, and require that pain assessment be recorded in the medical record by using a pain scale.¹⁰

Only one-quarter of physicians had received pain management education. However, previous studies showed that an educational program for residents improved pain assessment.¹¹ The gap in emergency physicians’ clinical knowledge of pain management reflects the lack of formal teaching, and training of pain management in Moroccan medical schools.

The barriers related to medical staff and the health care system were the most commonly encountered difficulties that preclude ED physicians from proper pain management;

Table 1. Characteristics of physicians and their practices related to pain management in emergency departments (ED) in Morocco

Characteristics	n (%) (n = 86)
Gender	
Male	66 (76.7)
Female	20 (23.3)
Age, years, mean (SD)	41 ± 7
ED experience in years, mean (SD)	
<10	35 (40.7)
≥10	51 (59.3)
Specialty	
General practice	75 (87.2)
Emergency and intensive care medicine	5 (5.8)
Others	6 (7)
Evaluation of pain is useful	
No	6 (7)
Yes	80 (93)
Pain management education	
No	63 (73.3)
Yes	23 (26.7)
Practices	
Pain assessment	
No	63 (26.7)
Yes	23 (26.7)
Use of simple interrogatory assessment	76 (88.3)
Use of algometric scales	10 (11.7)
Documentation of pain assessment	
Never	80
Sometimes	0 (0)
Always	6 (7)
Pain reassessment after treatment	
Never	61 (71)
Sometimes	5 (5.8)
Always	20 (23.2)
No availability of written protocol for pain treatment	86 (100)

n, frequency; SD, standard deviation.

Table 2. Perceived barriers to pain management among emergency department physicians in Morocco

Barriers	n (%)
Related to medical staff	
Inadequate pain assessment	80 (93.1)
Inadequate experience on pain control	78 (90.7)
Insufficient knowledge of pain control	80 (93.1)
Time constraints	70 (81.4)
Reluctance to use opioid	69 (80.2)
Insufficient communication with patient	41 (47.7)
Related to patient	
Reluctance to report pain	30 (34.8)
Reluctance to take analgesic	24 (28)
Insufficient communication with medical staff	54 (62.8)
Related to health care system	
Strict regulation of opioids	71 (82.5)
Inadequate staffing	67 (77.9)
Limited stock of different types of analgesics	68 (79.1)
Pain management is not important	62 (72)

n, frequency.

mentation practices, such as auditing charts, are needed. Finally, in this study, we simply asked whether participants had attended pain education so as to determine exposure to the educational experience, without considering the level of such exposure.

In conclusion, it is imperative that ED physicians make an effort to alleviate human suffering by treating patients' acute pain. Despite the availability of international guidelines, pain management practices are still sub-optimal in Moroccan ED. Multifaceted strategies including development of local policies and staff educational programs should be implemented.

CONFLICT OF INTEREST

NONE.

REFERENCES

- 1 Rupp T, Delaney KA. Inadequate analgesia in emergency medicine. *Ann. Emerg. Med.* 2004; 43: 494–503.
- 2 Johnston CC, Gagnon AJ, Pepler CJ, Bourgault P. Pain in the emergency department with 1-week follow-up of pain resolution. *Pain. Res. Manag.* 2005; 10: 67–70.
- 3 Louriz M, Belayachi J, Arnel B *et al.* Factors associated to unrelieved pain in a Moroccan Emergency Department. *Int. Arch. Med.* 2014; 7: 48.

when combined, they create powerful obstacles against successful treatment of pain in the ED. In addition, we showed that more than three-quarters of ED physicians have an opioid phobia. Possible causes include lack of proper knowledge about opioid analgesics, fear of side-effects, fear of masking symptoms of acute illness, and strict regulation policy.

This study has some limitations. First, although we undertook a multicenter study, the results may not represent practices and knowledge of all EDs in Morocco. Second, in order to accurately measure actual pain assessment, docu-

- 4 World Health Organization. Country Cooperation Strategy for WHO and Morocco 2004–2007. 2013.
- 5 Jho HJ, Kim Y, Ae Kong K *et al.* Knowledge, practices, and perceived barriers regarding cancer pain management among physicians and nurses in Korea: a nationwide multicenter survey. *PLoS ONE* 2014;9:e105900.
- 6 Ferrante P, Cuttini M, Zangardi T *et al.* Pain management policies and practices in pediatric emergency care: a nationwide survey of Italian hospitals. *BMC Pediatr.* 2013; 13: 139.
- 7 Langlade A, Bellanger F, Cornet C, Monrigal MC, Ballandyne S, Bonnet F. Démarche assurance-qualité pour la prise en charge des douleurs postopératoires : proposition d'un outil de réalisation d'enquêtes. *Ann. Fr. Anesth. Réanim.* 2002; 21: 276–94.
- 8 Pretorius A, Searle J, Marshall B. Barriers and enablers to emergency department nurses' management of patients' pain. *Pain Manag. Nurs.* 2015; 16: 372–9.
- 9 Eder SC, Sloan EP, Todd K. Documentation of ED patient pain by nurses and physicians. *Am. J. Emerg. Med.* 2003; 21: 253–7.
- 10 Revised Pain Management Standards. 2000. Available from: <http://www.jcaho.org/standard/pmhap.html>.
- 11 Motov SM, Marshall JP. Acute pain management curriculum for emergency medicine residency programs. *Acad. Emerg. Med.* 2011;2:S87–91.