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Defining the need for analgesia in the emergency department: an international consensus statement

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Background and importance **The high prevalence of acute pain in the emergency department (ED) underscores the need for accurate pain assessment to guide effective interventions. A pain assessment tool for ED patients with acute pain should enable clinicians to distinguish those who require analgesia from those who do not. However, a universally accepted definition of the 'need for analgesia' is lacking.**

Objective **To identify predictors of the need for analgesia in ED patients through a consensus-based interdisciplinary approach.**

Design/setting and participants **A three-stage modified Delphi was conducted. In stage 1, 63 international panel members, including clinicians, researchers, patients, and patient representatives from 15 countries, answered three open-ended questions to generate candidate predictor variables. In stage 2, the same participants rated these variables using a five-point Likert scale. In stage 3, randomly selected clinicians and patients were recruited internationally to complete a survey rating the consensus-derived variables.**

Outcome measures and analysis **The primary outcome was the identification of variables defining the need for analgesia in ED patients without communication or cognitive impairments. Consensus was defined a priori as more than or equal to 80% of participants selecting 'agree' or 'strongly agree' after stage 2. Variables meeting this threshold were considered in the final consensus-derived items. Stage 3 aimed to evaluate agreement with these variables among a broader panel of frontline clinicians and patients, to assess alignment with the expert panel, primarily composed of researchers, while also addressing potential geographic and professional biases.**

Results **Stage 1 generated 20 potential clinical predictor variables to define the need for analgesia. In stage 2, the six consensus-derived variables were: (a) patient's perception of pain, (b) patient's desire for analgesia, (c) pain tolerance, (d) patient observation, (e) caregiver/relative's perception of the patient's pain, and (f) provider's perception of the patient's pain. In stage 3, the rating of these variables reached combined agreement ('agree' or 'strongly agree') ranging from 72% to 91%.**

Conclusion **The six consensus-derived variables provide a foundation for a multidimensional, patient-centered pain assessment framework, which will serve as the basis for developing and validating a new tool to improve analgesia for ED patients with acute pain.**
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Introduction

Pain is among the most frequent reasons why patients present to the emergency department (ED) [1]. Treating acute pain in the ED remains challenging, as clinicians must balance the risk of oligoanalgesia [2–4] with that of over-treatment [5–8]. In fact, the association between pain intensity and desire for analgesia is only moderate [9]. Up to half of ED patients in pain do not desire pain medications, and even among those with severe pain, up to one-third still decline analgesia [10]. Unidimensional pain scales are commonly used in the ED but do not reliably distinguish patients who need analgesia from those who do not [11]. Although some studies suggest that a

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pain score less than 4/10 on the numerical rating scale or 40/100 on the visual analog scale indicates adequate pain relief [12,13], nearly one-fifth of patients within this pain range still desire pain medication [10]. Multidimensional pain scales may improve pain management [14], yet evidence for their utility in the ED is limited [11]. Moreover, pain intensity alone appears to have little prognostic value [15], while inadequate acute pain treatment can lead to chronic pain, reduced quality of life, and increased morbidity [16–18].

To mitigate the adverse outcomes associated with insufficient pain treatment, pain assessment in the ED should guide treatment rather than measure pain in isolation. Achieving this requires defining which patients need analgesia and what constitutes adequate analgesia, both of which currently lack a universal consensus. Therefore, this study aimed to establish a consensus-based definition of the need for and adequacy of analgesia in adult ED patients with acute pain, providing a foundation for a new pain assessment tool focused on analgesic requirements. To account for the heterogeneity of ED populations and the challenge of developing a generalizable framework, the research question was limited to adults without communication or cognitive impairments.

Methods

Design

We employed a modified Delphi method to facilitate anonymous input, minimize the influence of dominant voices, and enable broad participation across geographical areas [19]. This method involves iterative rounds of feedback to converge toward consensus. The consensus process consisted of three stages (Fig. 1). The study protocol was published [20]. Data are reported according to the Accurate Consensus Reporting Document [21].

Selection of participants

Steering committee

The Delphi process was conducted by an international core study group (steering committee) consisting of 12 researchers chosen for their expertise and interest in ED pain research. Members included specialists from emergency medicine, nursing science, psychology, health services research, and pain medicine. They represented 10 institutions across four countries. Two patient representatives trained through the European Patients' Academy on Therapeutic Innovation in Switzerland [22] were involved in the steering committee.

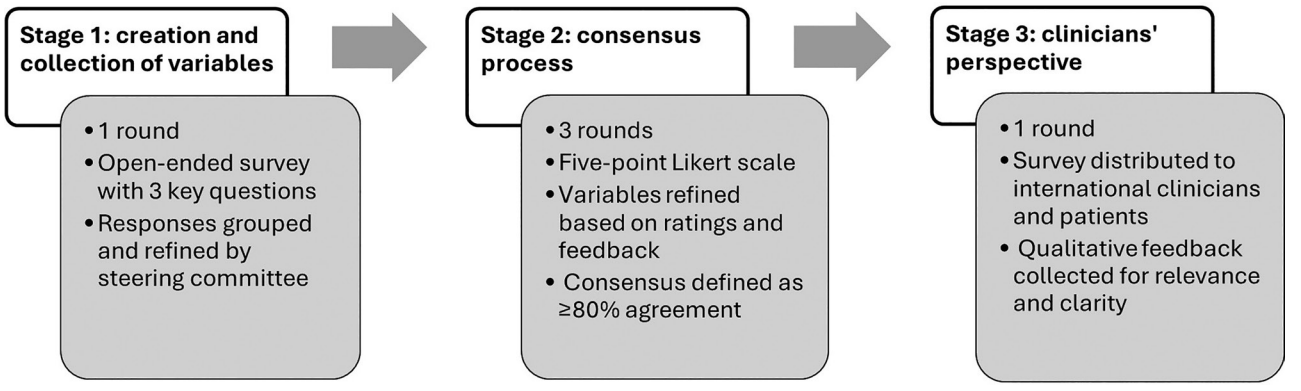
Expert panel (researchers and patients)

Participants in the expert panel (panelists) were identified through a systematic search of the Scopus and CINAHL (Nursing and Allied Health Literature) databases on 27 December 2023. The search focused on authors of publications identified by the keywords 'pain', 'emergency', 'assessment', and 'scale' in titles and abstracts. Authors with fewer than three publications, without retrievable contact information, or focused on unrelated pain conditions (e.g. chest, postoperative, or chronic pain) were excluded. The full search strategy is detailed in the published protocol [20], which identified 553 researchers as potential panelists.

To ensure patient representation (Patients and public involvement), adult patients with at least one experience of acute pain in the ED within the past 2 years were invited to join the expert panel. They were recruited through patients' organizations and a snowball sampling approach [23]. The role of patients in the steering committee, as well as in the panel, was the same as that of any other participant.

Although a panel of 30–50 experts has been considered appropriate for Delphi studies [24], we aimed to

Fig. 1



Stages of the Delphi consensus process.

recruit 50–100 panelists to achieve a higher level of replicability [25].

Feedback panel

The feedback panel (stage 3) primarily included emergency clinicians (physicians and nurses) and patients identified through snowball sampling. There was no predefined limit on the number of participants. Members of the expert panel did not participate in stage 3 but were encouraged to share the survey within their networks.

Recruitment process

Invitation and informed consent to participate in the study were emailed alongside the survey links at the start of each stage. To ensure clarity on the research question, we provided a summary explanation of the study's purpose in the invitation email [20]. For stage 3, a shareable, non-traceable survey link was provided to facilitate snowball sampling through professional and patient networks of previous participants. All responses were fully anonymized throughout all stages of the process.

Preparatory research

We conducted a systematic review comparing unidimensional and multidimensional pain scales to assess the need for analgesia in adult ED patients but found very limited evidence [11]. In response, we pursued a consensus process without providing predefined items to avoid introducing bias or pre-influencing participants. To ensure clarity on the research question, the invitation email included a brief explanation of the study's purpose, as detailed in the protocol [20].

Assessing consensus

Stage 1: Generation of potential predictor variables

Participants were asked to answer three questions: (a) 'Based on your experience, which clinical variables should define the need for analgesia?'; (b) 'Which parameters should define adequacy of analgesia?'; and (c) 'What are the challenges encountered when assessing patient's pain?'. Only the email addresses of participants completing the full survey were used for stage 2, with no link to individual responses. The steering committee reviewed the answers: nonmeasurable variables were excluded, duplicated variables were removed, and conceptually similar variables were merged. Variables were removed only by unanimous steering committee agreement. Challenges identified in question (c) were reviewed to eventually generate additional variables. The steering committee then generated a finalized list of selected variables for stage 2.

Stage 2: Consensus process

Stage 1 participants rated the selected variables on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) and provided free-text comments as needed. The steering committee participated in the first two stages to provide expertise, with their votes counted equally with those of other participants. Consensus was defined a priori as more than or equal to 80% of combined agreement (agree or strongly agree). Three iterative rounds were conducted. After each round, the steering committee reviewed results, accepted variables reaching consensus, and refined or added variables that did not reach consensus based on participant feedback. All modifications were justified with discussion summaries and supporting evidence when available. Accepted and removed variables were communicated back to participants.

Stage 3: Perspectives of emergency department clinicians and international patients

After recruitment of the expert panel according to the systematic method described in the protocol, it was noted that emergency nurses were underrepresented, and their perspectives were considered essential. A predominance of experts from developed countries was also observed. Additionally, because expert selection was based on publication track records, the expert panel included mainly researchers, with limited representation of frontline clinicians. To address these gaps, this posthoc stage 3 was introduced to evaluate agreement with the consensus variables among a broader panel of frontline clinicians and patients recruited internationally, to assess alignment with the expert panel while also addressing potential geographic and professional biases. This stage was not intended as a validation, which would have required additional Delphi rounds and strict selection criteria, but rather to assess whether the consensus-derived variables were generally supported.

Variables reaching consensus in stage 2 were distributed via snowball sampling to this cohort (the feedback panel). Respondents rated variables on a five-point Likert scale and provided free-text comments.

Participation

To encourage engagement and participation, three reminder emails were sent at 1-week intervals before stage 1 and all rounds in stage 2. Regular study updates were also provided after each steering committee meeting. Panelists did not receive financial compensation.

Data collection and statistical analysis

The survey was developed and distributed using Research Electronic Data Capture Version 14.0.16, (REDCap, Vanderbilt University, Nashville, Tennessee, USA) hosted by the University of Basel, Switzerland [26,27]. Responses were extracted anonymously from REDCap and analyzed using Microsoft Excel. Statistical analyses were performed using R software version 3.4.1 (R Foundation for Statistical Computing, Vienna, Austria). Data were stored on a server at the University of Basel system, accessible only to the

study team. Participants received an online survey link, with monitoring for access. Descriptive statistics were used to summarize the characteristics of the panelists, with categorical data reported as numbers and percentages and continuous data as medians with minimum and maximum values. Differences in agreement between clinicians and patients (stage 3) were assessed using Fisher's exact test. Statistical significance was defined as a two-sided $P < 0.05$, without adjustment for multiple comparisons given the exploratory nature of the analysis.

Results

Participants

Expert panel

The first invitation with the initial survey was emailed on 11 June 2024 to 553 identified experts and, via snowball sampling, to patients for recruitment. The final round of invitation emails was sent on 19 August 2024. Of the 553 previously identified eligible experts from 40 countries, 329 were physicians (60%), with 150 specialized in emergency medicine (46%), 29 in anesthesiology (9%), 26 in psychiatry (8%), 24 in pediatrics (7%), 23 in public health (7%), 17 in pain medicine (5%), and 60 in other specialties (18%). In addition, 136 were nurses (25%), 45 psychologists (8%), 36 physiotherapists (7%), 4 dentists (1%), 2 paramedics (0.3%), and 1 nutrition scientist (0.2%). Demographic data, including gender and age, were not available. The steering committee included five additional experts recommended by potential panelists who had declined participation.

Of 553 identified experts, 40 completed the survey (7.2% response rate); finally, 11 patients joined the panel. Including the 12 steering committee members, the panel ultimately comprised 63 participants. The median age was 48 years (range: 30–70); 32 (51%) identified as female, 30 (48%) as male, and 1 (1%) preferred not to disclose their gender. Panelists represented 15 different countries, 31 from North America (49%), 26 from Europe (41%), and 8 from Oceania (13%) (see Table 1 for all countries). Professional backgrounds included 12 emergency physicians (19%), 10 emergency medicine (16%), 10 nurses (16%), 5 pediatricians (8%), 3 physical therapists (5%), 2 psychologists (3%), and other specialists (see Table 1 for all professionals). Patients were 11 (18%), with a median age of 46 years (range: 31–59), and were from Switzerland (5), Italy (3), the UK (1), Australia (1), and Spain (1), along with the two patient representatives from the steering committee (Table 1).

Consensus process

Stage 1

Stage 1 (June–August 2024) collected responses using the predefined open-ended questions. Individual answers were separated into distinct inputs, and similar concepts were merged. Question (a) generated 221 inputs, condensed into 20 potential variables; question (b) generated 163 inputs, reduced to 12 variables; and question (c) yielded 224 inputs, resulting in 25 identified challenges (Table 2). Variables intended to define the adequacy of analgesia were initially planned as a study outcome. Following a unanimous decision by the steering committee, these variables were removed from further analysis because they represented only the inverse of the need for analgesia. None of these variables represented a distinct construct. None of the identified challenges was used to generate additional variables. Following steering committee review via videoconference, 13 of the 20 variables proposed to define the need for analgesia were advanced to stage 2. The 25 identified challenges informed their refinement and wording. The excluded variables were

Table 1 Participant characteristics across Delphi stages

	Stages 1 and 2	Stage 3
Characteristic		
Participants, N	63	301
Gender, N (%)		
Male	30 (48)	149 (49)
Female	32 (51)	148 (49)
Prefer not to say	1 (2)	4 (1)
Age, years (range)		
Median	48 (30–72)	42 (22–67)
Years of experience, years (range)		
Median	24 (4–50)	
Professional background, N (%)		
Emergency Physician	12 (19)	140 (47)
Patient	11 (18)	27 (9)
Emergency Medicine	10 (16)	
Nurse	10 (16)	
Emergency Nurse		90 (30)
Pediatric	5 (8)	
Physiotherapy	3 (5)	
Physician	2 (3)	
Psychology	2 (3)	
Anesthesiologist	1 (2)	14 (5)
Emergency Health Services Research	1 (2)	
Pain medicine nurse	1 (2)	
Pain medicine physician	1 (2)	
Palliative care	1 (2)	
Physician-scientist	1 (2)	
Podiatrist	1 (2)	
Researcher	1 (2)	
Other		11 (4)
Paramedic		19 (6)
Nationality, N (%)		
USA	19 (30)	64 (21)
Switzerland	12 (19)	170 (60)
Australia	7 (11)	
UK	6 (10)	1 (0.3)
Italy	4 (6)	30 (10)
Germany	4 (6)	6 (2)
Canada	2 (3)	14 (5)
The Netherlands	2 (3)	
Austria	1 (2)	
France	1 (2)	
Hong Kong No. (%)	1 (2)	
Ireland	1 (2)	
Nigeria	1 (2)	
Spain	1 (2)	
Turkey	1 (2)	
Trinidad and Tobago		4 (1)
Uganda		4 (1)
México		3 (1)
Portugal		1 (0.3)
Belgium		1 (0.3)
The Netherlands		1 (0.3)
Not stated		2 (1)

Table 2 Proposed variables after stage 1, including identified challenges

Based on your experience, which clinical variables should define the need for analgesia?	Which parameters should define adequacy of analgesia?	What are the challenges encountered when assessing patient's pain?
Ability to ambulate (yes/no)	Caregiver perception	Access to treatment
Ability to discuss (yes/no)	Decrease patient behavior symptoms	Adverse effect expectations, experience
Ability to lie supine	Functional improvement	Analgesic dosing
Additional painful procedure planned	Improved anxiety	Caregiver interpretations
Anticipated duration/cause of pain	Improved neurovegetative response	Chronic pain issues
Caregiver perception	improved patient compliance	Cognitive impairment
Desire for analgesia (yes/no)	Improved thinking skills	Communication
Gender	No more desire for analgesia	Comorbidities limiting options.
Impact of pain on mobility	Pain score decrease 50%	Contraindications
Injury type/disease	Pain tolerance/bearable pain	Cultural factors
Neurovegetative response (e.g. sweating)	Patient reported relief/improvement	Degree of injury
Pain (yes/no)	Vital signs	Different expectations
Pain tolerance/bearable pain/pain comfort		Emotional status
Parent/relative opinion		Frequency
Patient expression/agitation/stress level		Medication dosage, application
Vomiting		Mixed pain pictures
Need for anti-inflammatory therapy		Neuropathic pain
Substance misuse		Over-reliance on numerical scales
Type of pain		Over-reliance on vital signs
Vital signs		Pain is subjective
		Past history
		Patient preferences
		Prior exposures to analgesics
		Re-assessment
		Timing

reviewed through discussion, focusing on usability. For example, despite recognizing 'gender' as a potential factor influencing pain perception, it was not considered usable for defining the need for analgesia. This, because being male, female, or other, should not guide analgesic decisions, that is, the need for analgesia.

Stage 2

Stage 2 (August–November 2024) consisted of three rounds, inviting the 63 participants from stage 1.

Round 1

Forty-seven of the 63 participants (75%) responded. Consensus was reached on three variables: patient's perception of pain, patient's desire for analgesia, and caregiver/relative's perception of the patient's pain. Four variables (agitation/stress, sweating, nausea/vomiting, and altered vital signs) were removed by unanimous decision. These items showed low agreement and were considered nonspecific physiological or behavioral responses that may accompany, but do not define, the need for analgesia. Their exclusion was additionally informed by the available literature, which shows no consistent association between pain intensity and physiological responses [28]. Six variables were reformulated based on panel free-text comments and steering committee discussion, with additional rationales and explanations provided (Supplemental 1, Supplemental digital content 1, *https://links.lww.com/EJEM/A535*).

Round 2

Fifty participants (79%) responded. One additional variable, pain tolerance, reached consensus. Three variables (altered mental status, ability to understand a conversation, and ability to ambulate) were unanimously removed. Altered mental status was removed because it was not applicable to the target population of cognitively intact adult ED patients. The two 'ability to' variables were excluded due to limited specificity, as baseline function is often unknown in the ED. All variables requiring patient evaluation through observation were consolidated into a single variable, 'patient observation'. The final variable, 'provider's perception', was retained but further clarified as complementary to, rather than a replacement for, patient self-assessment (Supplemental 2, Supplemental digital content 2, *https://links.lww.com/EJEM/A536*).

Round 3

Fifty-one participants (81%) responded. Consensus was reached on the last two variables: patient observation and provider's perception of patient's pain.

By the end of stage 2, six consensus-derived variables were defined: patient's perception of pain, patient's desire for analgesia, pain tolerance, patient observation, caregiver/relative's perception of the patient's pain, and provider's perception of the patient's pain (Table 3). Variables that did not reach consensus are summarized in Table 4.

Stage 3

The six variables that achieved consensus in stage 2 were evaluated via an open-link survey by 301 international participants, including 140 emergency physicians (47%), 90 emergency nurses (30%), and 27 patients (9%), representing 12 countries (see Table 1 for full details). Combined agreement (agree or strongly agree) ranged

Table 3 Stage 2 variables reaching consensus, with round of consensus and agreement proportion

Variable	Participants of 63 panelists, *N* (%)	Round reached consensus	Agreement proportion (%)
Patient's perception of pain	47 (75)	Round 1	87
Patient's desire for analgesia	46 (73)	Round 1	80
Pain tolerance	50 (79)	Round 2	84
Patient observation	51 (81)	Round 3	90
Caregiver/relative's perception of the patient's pain	46 (73)	Round 1	85
Provider's perception of the patient's pain	51 (81)	Round 3	80

Table 4 Variables not reaching consensus, with last round rating

Variable	Participants of 63 panelists, *N* (%)	Last round rated	Agreement proportion (%)
Ability to ambulate (e.g. walk)	50 (79)	Round 2	48
Altered mental status (e.g. RASS, AVPU)	50 (79)	Round 2	54
Ability to understand a conversation (e.g. medical information)	50 (79)	Round 2	54
Sweating	46 (73)	Round 1	56
Agitation/stress	44 (70)	Round 1	64
Nausea/vomiting	46 (73)	Round 1	39
Altered vital signs	46 (73)	Round 1	50

from 72% (pain tolerance) to 91% (desire for analgesia). Subgroup analysis revealed that patients had a slightly tendency to lower agreement than clinicians, with significant differences in patient's perception of pain ($P = 0.01$), patient's desire for analgesia ($P = 0.01$), and patient observation ($P = 0.03$; Table 5).

Discussion

This modified multi-stakeholder Delphi study generated (stage 1) and validated (stage 2) six variables aimed at defining the need for analgesia in adult ED patients with acute pain. In stage 3, not all variables reached the 80% agreement threshold overall, although agreement was generally high, particularly among emergency nurses. Unlike the expert panel, stage 3 participants received limited explanations of the variables and had no opportunity to revote following further clarification. Overall, stage 3 achieved its intended aim of assessing alignment between frontline clinicians and researchers, demonstrating generally good concordance. However, further subgroup analyses in larger cohorts may eventually be warranted.

Adequacy of analgesia was defined indirectly, as the proposed variables represented the inverse of those used to define the need for analgesia. Accordingly, we did not pursue a separate definition, implicitly accepting that adequacy would be reflected by the absence of the need for analgesia.

These findings highlight an alternative perspective on pain assessment that complements, rather than replaces, patient self-report. While self-assessment remains the gold standard [29], incorporating patient observation and the perceptions of caregivers and healthcare providers may facilitate multidisciplinary evaluation in specific clinical contexts. Notably, in 2018, the American Nurses Association stated that nurses have an ethical responsibility to manage pain by considering both patient self-report and their clinical assessment, knowledge, and judgment to ensure effective pain management [30]. Similarly, physicians seem to frequently rely on patient observation and clinical judgment when determining whether and how to administer analgesia [31]. A meta-analysis found that nurses and physicians generally underestimated patient pain, whereas caregivers tended to overestimate it; however, caregivers demonstrated the highest accuracy [32]. Accordingly, these findings support a multimethod approach incorporating patients, caregivers, and healthcare providers.

Nevertheless, pain remains a deeply personal experience and must be respected as such. For example, although certain conditions or injuries are typically associated with higher pain levels, such as renal colic or a dislocated shoulder [33], conditions generally considered less painful may be experienced as intensely painful by individual patients. Ignoring or minimizing such pain may have serious consequences [33–35].

Timely identification and management of pain in ED patients is critical, as early analgesia is associated with improved outcomes [36–38]. Given the limitations of unidimensional pain scales, a new assessment tool is warranted. The present definition of 'need for analgesia' provides a conceptual foundation for such a tool. Although consensus was reached on the variables, questions remain regarding weighting and how to address discrepancies, for example, when providers recommend analgesia but patients decline. The variables currently represent a conceptual framework and are not yet intended for direct, word-for-word application. Wording was extensively discussed during the consensus meetings and often refined across rounds (see Supplemental 1, Supplemental digital content 1, *https://links.lww.com/EJEM/A535* and Supplemental 2, Supplemental digital content 2, *https://links.lww.com/EJEM/A536*). Future implementation will begin with the operationalization of the variables, converting conceptual definitions into specific, measurable data (atomization and de-abstraction) [39]. This will be followed by weighting analyses to determine the relative contribution of each variable to the overall assessment. The operationalized variables will then be integrated into a structured algorithm or decision-support tool for use by ED clinicians. Subsequent steps will include pilot testing for usability and feasibility, iterative refinement based on clinicians' and patients' feedback, and formal evaluation of reliability and validity.

Table 5 Combined agreement (vote agree or strongly agree) stratified by professional background and differences in agreement between clinicians and patients (Fisher's exact test)

Variables Professional Background	Patient's perception of pain	Patient's desire for analgesia	Pain tolerance	Patient observation	Caregiver/relative's perception of the patient's pain	Provider's perception of the patient's pain
Anesthesiologist (N = 14)	12 (85.7)	13 (92.9)	11 (78.6)	10 (71.4)	8 (57.1)	11 (78.6)
Emergency nurse (N = 90)	78 (86.7)	85 (94.4)	69 (76.7)	84 (93.3)	71 (78.9)	78 (86.7)
Emergency physician (N = 140)	130 (92.9)	127 (90.7)	100 (71.4)	124 (88.6)	110 (78.6)	122 (87.1)
Patient (N = 27)	19 (70.4)	20 (74.1)	17 (63.0)	20 (74.1)	16 (59.3)	20 (74.1)
Paramedic (N = 19)	17 (89.5)	18 (94.7)	13 (68.4)	18 (94.7)	8 (42.1)	16 (84.2)
Other (N = 11)	11 (100)	10 (90.9)	8 (72.7)	9 (81.8)	8 (72.7)	7 (63.6)
Total (N = 301)	267 (88.7)	273 (90.7)	218 (72.4)	265 (88.0)	221 (73.4)	254 (84.4)
Clinicians vs. Patients (p)	0.01	0.01	0.26	0.03	0.11	0.16

Limitations

Several limitations should be acknowledged. First, response rates were lower than expected, potentially introducing selection bias. The expert panel was identified through a systematic, literature-based process targeting authors who had published on the topic, rather than based on anticipated availability. Consequently, some invitees were retired or no longer clinically active, and many may have had limited time for a demanding Delphi process. Invitations were sent electronically, and nonresponse may also have been influenced by email overload or institutional filtering. However, participation increased across rounds in stage 2, possibly reflecting growing interest in the topic and enhanced engagement through regular updates. Second, the involvement of the steering committee in the consensus process may have influenced variable prioritization, despite anonymized responses. Third, emergency nurses were underrepresented in the first two stages, limiting input from this essential group, as were authors from low-income countries. This likely reflects the literature-based identification of experts, where authors are predominantly physicians from developed countries. However, of the 553 experts invited, 136 (25%) were nurses, suggesting that underrepresentation was due to lower response rates rather than a lack of invitations. In stage 3, added post hoc, these limitations were partially addressed by inviting a larger number of clinicians from around the world, particularly emergency nurses. Fourth, initial attempts to engage patient representatives through organizations were unsuccessful, and some patient groups may have been underrepresented. Additionally, because patients represented only 17% of the panel in stage 1, the steering committee decided to retain the same individuals for stage 2. Although the original protocol planned to recruit additional patient representatives to ensure broader representation without exceeding an arbitrarily defined 10% of the panel to maintain balance, the steering committee determined that the existing patient group was adequately balanced and sufficiently sensitized to the topic. Fifth, the variables were developed specifically for cognitively intact adult ED patients with acute pain; their applicability to other populations, including those with cognitive impairment, has not yet been established. Finally, although the variable selection process was transparent and evidence-informed, the steering committee's review necessarily involved expert judgment. Some degree of subjectivity was unavoidable and may have influenced decisions to retain, modify, or exclude some variables.

Conclusion

This study provides a consensus-based definition of the 'need for analgesia' in adult ED patients with acute pain. The identified variables form the foundation for a multidimensional, multidisciplinary pain assessment framework focused on individual analgesic requirements, guiding the development of a new pain scale.

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Conflicts of interest

There are no conflicts of interest.

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