REME • Rev Min Enferm. 2020; 24:e-1320
DOI: 10.5935/1415-2762.20200057

RESEARCH

BRAZILIAN VERSION OF THE TORONTO PAIN MANAGEMENT INVENTORY - ACUTE CORONARY SYNDROME

VERSÃO BRASILEIRA DO *TORONTO PAIN MANAGEMENT INVENTORY – ACUTE CORONARY SYNDROME*

VERSIÓN BRASILEÑA DEL TORONTO PAIN MANAGEMENT INVENTORY – ACUTE CORONARY SYNDROME

Andressa Cristina de Souza Felício[1]
Renata Eloah de Lucena Ferretii-Rebustini[2]
Beatriz Murata Murakami[1]
Filipe Utuari de Andrade Coelho[1]
Camila Takao Lopes[3]
Sheila O'Keefe-McCarthy[4]
Eduarda Ribeiro dos Santos[1]

[1] Faculdade Israelita de Ciências da Saúde Albert Einstein, Instituto de Ensino e Pesquisa. São Paulo, SP - Brazil.
[2] Universidade de São Paulo - USP, Escola de Enfermagem – EE. São Paulo, SP – Brazil.
[3] Universidade Federal de São Paulo - Unifesp, Escola Paulista de Enfermagem - EPE. São Paulo, SP – Brazil.
[4] Brock University, Faculty of Applied Health Sciences - St. Catharines - Ontario, Canadá.

Corresponding author: Eduarda Ribeiro dos Santos
E-mail: eduarda.santos@einstein.br

Authors´ Contributions:
Conceptualization: Andressa C. S. Felicio, Renata E. L. Ferretii-Rebustini, Camila T. Lopes, Sheila O'Keefe-McCarthy; ***Data Collection:*** Andressa C. S. Felicio; ***Methodology:*** Renata E. L. Ferretii-Rebustini, Eduarda R. Santos; ***Project Management:*** Eduarda R. Santos; ***Supervision:*** Eduarda R.Santos; Validation: Renata E. L. Ferretii-Rebustini, Sheila O'Keefe-McCarthy, Eduarda R.Santos; ***Writing – Original Draft Preparation:*** Andressa C. S. Felicio, Beatriz M. Murakami, Filipe U. A. Coelho, Camila T. Lopes; ***Writing – Review and Editing:*** Renata E. L. Ferretii-Rebustini, Beatriz M. Murakami, Filipe U. A. Coelho, Camila T. Lopes, Sheila O'Keefe-McCarthy, Eduarda R.Santos; ***Visualization:*** Andressa C. S. Felicio.

Funding: No funding.

Submitted on: 2019/11/13
Approved on: 2020/05/13

ABSTRACT

Objective: to perform the cross-cultural adaptation of the Toronto Pain Management Inventory - Acute Coronary Syndrome instrument into Brazilian Portuguese and test face validity evidence of the adapted instrument. **Methods:** we followed the procedures proposed by the Guideline for Establishing Cultural Equivalency of Instruments (RDC/TMD) Consortium Network (phase 1) for cross-cultural adaptation. To measure agreement between the judges in the equivalences analysis, we used the content validity index (CVI). Face validity was performed with nurses during the pre-test and consisted of assessing the ease of understanding when answering the items. **Results:** the adapted instrument achieved linguistic equivalence. The semantic, idiomatic, experimental and conceptual equivalences had a mean CVI of 98.5 (95% CI 97.1-100.0), 97.8 (95% CI 96.0-99.5), 94.1 (95 % 91.6-96.6) and 99.6 (95% CI 98.9-100.0). In the pre-test, 92.5% of nurses considered the instrument easy to understand and 85% found no difficulty. **Conclusion:** the adapted instrument is culturally equivalent to the original instrument and shows evidence of face validity. The psychometric properties of the instrument are yet to be investigated.

Keywords: Knowledge; Chest Pain; Nursing; Validation Study; Acute Coronary Syndrome.

RESUMO

Objetivo: *realizar a adaptação transcultural do instrumento Toronto Pain Management Inventory – Acute Coronary Syndrome para o Português brasileiro e analisar evidências de validade de face do instrumento adaptado.* ***Métodos:*** *para a adaptação transcultural foram seguidos os procedimentos propostos pelo Guideline for Establishing Cultural Equivalency of Instruments (RDC/TMD) Consortium Network (fase 1). Para verificar a concordância entre os juízes na análise das equivalências foi utilizado o índice de validade de conteúdo (IVC). A validade de face foi feita com enfermeiros durante o pré-teste e consistiu na avaliação da facilidade da compreensão para responder aos itens.* ***Resultados:*** *o instrumento adaptado alcançou equivalência linguística. As equivalências semântica, idiomática, experimental e conceitual tiveram IVC médios de 98,5 (IC 95% 97,1-100,0), 97,8 (IC 95% 96,0-99,5), 94,1 (IC95% 91,6-96,6) e 99,6 (IC 95% 98,9-100,0). No pré-teste, 92,5% dos enfermeiros consideraram o instrumento de fácil compreensão e 85% não encontraram dificuldade.* ***Conclusão:*** *o instrumento adaptado é culturalmente equivalente ao instrumento original e reúne evidências de validade de face. As propriedades psicométricas do instrumento ainda serão investigadas.*

Palavras-chave: *Conhecimento; Dor no Peito; Enfermagem; Estudos de Validação; Síndrome Coronariana Aguda.*

How to cite this article:
Felício ACS, Ferretii-Rebustini REL, Murakami BM, Coelho FUA, Lopes CT, O'Keefe-McCarthy S, Santos ER. Brazilian version of the Toronto Pain Management Inventory – Acute Coronary Syndrome. REME - Rev Min Enferm. 2020[cited _____ ___];24:e-1320. Available from: _____ DOI: 10.5935/1415-2762.20200057

RESUMEN

Objetivo: *realizar la adaptación transcultural del instrumento Toronto Pain Management Inventory - Acute Coronary Syndrome al idioma portugués de Brasil y analizar la evidencia de la validez aparente del instrumento adaptado.* ***Métodos:*** *para la adaptación transcultural se siguieron los procedimientos propuestos por la Guideline for Establishing Cultural Equivalency of Instruments (RDC/TMD) Consortium Network (fase 1). Para verificar el acuerdo entre los jueces en el análisis de equivalencias se utilizó el índice de validez de contenido (IVC). La validez aparente se realizó con los enfermeros durante la prueba previa y consistió en evaluar la facilidad de comprensión para responder a los ítems.* ***Resultados:*** *el instrumento adaptado logró equivalencia lingüística. Las equivalencias semánticas, idiomáticas, experimentales y conceptuales tuvieron un IVC promedio de 98.5 (IC 95% 97.1-100.0), 97.8 (IC 95% 96.0-99.5), 94.1 (IC 95 % 91.6-96.6) y 99.6 (IC 95% 98.9-100.0). En la prueba previa, el 92.5% de los enfermeros consideraba que el instrumento era fácil de entender y el 85% no encontró dificultades.* ***Conclusión:*** *el instrumento adaptado es culturalmente equivalente al instrumento original y reúne evidencia de validez aparente. Las propiedades psicométricas del instrumento aún no se han investigado.*

Palabras clave: *Conocimiento; Dolor en el Pecho; Enfermería; Estudio de Validación; Síndrome Coronario Agudo.*

INTRODUCTION

From 2015 to February 2020, Acute Myocardial Infarction (AMI) was accountable for 581,878 hospitalizations in the Brazilian Unified Health System (*Sistema Único de Saúde* - SUS), with a progressive increase from 97,328 hospitalizations in 2015 to 129,814 in 2019. In the same period, the disease caused 62,187 deaths, corresponding to the mean mortality rate of 10.56.[1]

Acute Myocardial Infarction and other types of acute coronary syndrome (ACS) are diagnosed through clinical history, electrocardiogram assessment, and markers of myocardial ischemia. The clinical history is an indispensable instrument, including detailed reports on the peculiarities of pain, risk factors, previous AMI and atherosclerotic disease.[2-4] Chest pain related to ischemic cardiac events is usually reported as tightness, pressure or a burning discomfort in an inaccurate location of the chest, with frequent irradiation to the neck, jaw, shoulders, and arms, which progressively worsens.[4]

Pain management in ACS decreases oxygen consumption by the myocardium. Preferably, management should be initiated with 2-8 mg intravenous morphine sulfate to alleviate pain and decrease anxiety. According to the patient's blood pressure levels, analgesia can be repeated every five to 15 minutes.[5] Nurses are the professionals who often have the first contact with the patient in the chest pain unit. However, many of them are not aware of the systematic assessment of pain and undervalue its occurrence and impact. They deliver care based on their own opinion, thereby providing inadequate pain assessment and management.[6,7] Issues related to culture and structured practice in previous experiences have negative influences on pain assessment and treatment. Thus, knowledge is considered essential for modifying mistaken beliefs regarding pain.[7,8]

Permanent in-service education should include interventions that adapt the nurses' knowledge and therefore their beliefs regarding chest pain management. Thus, validated tools should be used to assess nurses' knowledge and beliefs about ACS pain, providing a standardized measure of the participants' baseline status and the effectiveness of the educational intervention.

The Toronto Pain Management Inventory (TPMI) was developed in 2001 in Canada to measure nurses' evidence-based knowledge about pain, beliefs, and pain management and professional issues surrounding post-operative pain management for patients undergoing coronary artery bypass grafting.[9] In 2014, it was adapted to measure nurses' knowledge and beliefs about ACS pain, anxiety, pharmacological management strategies, including antianginal drugs and opioids. It was named the Toronto Pain Management Inventory-ACS Version (TPMI-ACS)[10] and adapted by a nurse with expertise in critical cardiovascular care and researcher in the cardiovascular and pain areas.

The TPMI-ACS is a 24-item instrument scored on 11-point scales ranging from zero to 100. The scale extremities refer to No pain and Worst pain ever; Never and Always; None and All; Not proportional and Proportional; Not associated and Associated; Disagree and Agree; Not competent and Competent; Not adequate and Adequate; Not gold standard and Gold standard.[10] Aiming to reduce acquiescence bias and avoid use of negative items, half of the scale items were formulated so that higher scores indicate greater knowledge. However, to generate the final score, the remaining items are reversed: e.g., if the answer was scored 80 points, its reverse score will be 20, and so on.[10]

The overall score ranges from zero to 2,400; a score from zero to 800 indicates low knowledge; a score from 801 to 1,600 indicates moderate knowledge; and a score from 1,601 to 2,400 indicates most knowledge. The total score is reached through the formula: X/2400x100, where X represents the percentage of knowledge. The instrument was tested in Canada for content validity by eight clinical and academic experts. The content validity indexes (CVI) for each item ranged from 0.5 to 1.0 and the mean total CVI of the instrument was 0.90.[10] To the best of the authors' knowledge, no adaptations have been performed to other countries.

In Brazil, there are no instruments validated to assess nurses' knowledge and beliefs about ACS pain. Thus, this study aimed to perform the cross-cultural adaptation of the TPMI-ACS instrument into Brazilian Portuguese and test face validity evidence of the adapted instrument.

METHOD

This is a methodological study of cross-cultural adaptation of health measurement instruments. The author of the instrument provided authorization to adapt the TPMI-ACS via electronic mail. The adaptation process was carried out according to the Guideline for Establishing Cultural Equivalency of Instruments - RDC/TMD Consortium Network,[11] concerning phase 1, including the following steps:

a) Translation: two independent translations (T1 and T2) were carried out, one by a nurse and the other by a biochemical engineer, both Brazilians, who lived in Canada and knew local expressions and culture;

b) synthes is and resolution of the discrepancies between the two translations: a nurse with a specialist degree in Cardiology and a Ph.D. in Health Sciences performed the synthesis of the two independent translations (T12);

c) back-translation: the translation synthesis (T12) had two independent back-translations (BT1 and BT2) performed by a North American and an English translator. The North American translator the synthesized the two-independent back-translations (BT12);

d) independent assessment of the back-translation versus original document: BT12 was compared to the original document by the author of the original instrument to reconcile discrepancies between the back-translation and the source of origin;

e) review and iterative development of the discrepancies: in this phase, the problematic translation items identified during the previous phase would be evaluated by the main researcher and could be returned to the translator or back-translator for review. However, there were no problematic items found. The translated material had a Portuguese review assessing for standard norms of the language;

f) consolidation of the translation units: five nurses with clinical and academic expertise in Cardiology and fluency in English, two with a master's degrees and three with doctoral degrees discussed all translations face-to-face, item by item, until reaching a consolidated version;

g) review by a judge committee regarding cultural equivalence: the material approved in the previous phase, consisting of 54 items, including the instrument title, instructions, questions, answers, and scoring, was e-mailed to four nurses (two with master's degrees and two with doctoral degrees) and a psychometrist (with a doctoral degree) for equivalence analysis. This group used a scale to evaluate the items regarding semantic, idiomatic, experimental, and conceptual equivalences, with 0 = nothing equivalent, 1 = more or less equivalent, and 2 = equivalent. If the answer was zero or one, an explanation for the assessment was requested. According to the Guideline for Establishing Cultural Equivalency of Instruments (RDC/TMD) Consortium Network,[13] the committee should ideally have language, methods, and content experts. However, the authors emphasized that some constructs may not require such an extensive panel and the role of each type of member must be considered by the team leader. Thus, we considered that five experts would form an appropriate committee, based on previous validation studies, since the T12 version had already been consolidated by experts with clinical and academic experience.[12,13] Based on the judges' evaluations, the CVI was calculated using the formula: number of participants who agreed on x 100/total number of answers. Coefficients less than 0.2 were considered poor, between 0.2 and 0.4 were considered reasonable, between 0.4 and 0.6 were considered moderate, between 0.6 and 0.8 were considered good and above 0.8 were considered excellent. Values above 0.8 were considered adequate, with a 95% confidence interval. The CVI was calculated for each equivalence assessed and the instrument as a whole;[14]

h) construction of the pre-final version of the instrument: after the adjustments recommended by the experts, the pre-final instrument was elaborated. It was named "pre-final version" because it had not been tested in the area;

i) independent review of the translation and documentation process: the main researcher and a nurse with a specialist degree in Cardiology and a Ph.D. in Health Sciences reviewed the products from all the previous phases to confirm that the discrepancies had been identified, that the alternative forms of adaptation had been considered, that the final decisions had incorporated sufficient perspectives and that the pre-final instrument correctly reflected the translation process. The 10th phase of the first stage, corresponding to the publication of the translated and adapted instrument in the Consortium Network[11] as a way to allow for other researchers' collaboration, was not carried out, since it was not the authors' purpose to publish the instrument in the context of the Consortium. Thus, the next phase was carried out, providing a pre-test and review of the instrument;

j) pre-test and review of the instrument: the instrument was applied to 40 nurses to analyze the face validity evidence. They were graduate nurse students on Intensive Care and Cardiology & Hemodynamics. After reading, understanding, and filling out the Free and Informed Consent Form, the nurses answered to the instrument. Finally, they were asked if the question for each item was easy to understand (dichotomous answer, yes or no) and if the nurse had found any difficulty to answer the item (dichotomous answer, yes or no).

The Research Ethics Committee of *Hospital Israelita Albert Einstein* approved this study (Protocol no. 12453019.2.0000.0071).

RESULTS

In the translation process, there were no significant discrepancies between the T1 and T2 translations (phase 1) so few adjustments were necessary to produce the T12 synthesis (phase 2).

The T12 was back-translated and the versions BT1 and BT2 (phase 3) reflected the content of the original instrument, according to the author's opinion (phase 4). Thus, the review of problematic items was not needed and the instrument underwent a Portuguese review (phase 5). In the next phase (6), a group of nurses consolidated the translation units. Of the 24 items in the instrument, 21 underwent some type of adjustment for the preparation of the consolidated version (Appendix 1). This consolidated version was submitted to the analysis of a panel of judges for equivalences (phase 7).

Table 1 - Semantic, idiomatic, experimental, and conceptual equivalences of the Brazilian version of Toronto Pain Management Inventory – Acute Coronary Syndrome. *São Paulo* - SP, Brazil, 2016

Equivalence	Equivalent items n (%)	CVI* average	CVI* minimum-maximum	CI†95%
Semantic	50 (92.6)	98.5	80-100	97.1-100.0
Idiomatic	48 (88.9)	97.8	80-100	96.0-99.5
Experimental	38 (70.4)	94.1	80-100	91.6-96.6
Conceptual	53 (98.1)	99.6	80-100	98.9-100.0

*CVI: Content validity index; †CI: Confidence interval.

In this phase, the entire instrument, including the title, instructions, questions, answers, and scoring, was evaluated by the panel of judges, totaling 54 topics (Table 1). The CVI for the instrument as a whole ranged between 85 and 100, with an average of 97.5 (95% CI: 96.5-98.5).

After the judges evaluation in the seventh phase, the following suggestions were accepted and the pre-final version of the scale was elaborated:

- The acronym SCA was changed to "syndrome coronariana aguda";

- the expression "não padrão ouro" was replaced by "não é padrão ouro"

The pre-final instrument (phase 8) was named Toronto Pain Management Inventory - Acute Coronary Syndrome – *Versão Brasileira* (Appendix 2)

In the pre-test evaluating the face validity evidence, the nurses' scores ranged between 940 and 1,780 points, with a mean of 1,272.7±183.0 points; 29 (96.7%) professionals had moderate knowledge (801 to 1,600 points) and one (3.3%) had a most knowledge on the subject (1,601 to 2,400 points).

Table 2 shows the median score for each item obtained by the nurses. The respondents showed a high level of knowledge through items 1 (referring to the what pain rating ACS patients should experience after treatment), 18 (referring to the need to reduce the morphine dose to improve nausea), 21 (frequency of use of a numeric rating scale to assess chest pain intensity) and 24 (self-reported pain intensity as the gold standard to guide pain management).

Table 2 - Score obtained by graduate nurses when answering the Toronto Pain Management Inventory – Acute Coronary Syndrome – *Versão Brasileira* (n=40). *São Paulo* - SP, Brazil, 2016

Items	Median	Interquartile range (Q1; Q3)
1*	0	0; 10
2*	55	40; 70
3#	65	50; 90
4*	55	50; 70
5*	80	40; 90
6*	75	50; 90
7*	60	40; 80
8#	70	40; 80
9*	70	50; 90
10*	70	50; 80
11#	70	50; 80
12*	60	40; 80
13#	60	40; 80
14*	50	40; 50
15*	50	30; 70
16#	50	30; 60
17#	50	20; 70
18*	40	10; 50
19#	75	50; 100
20*	60	30; 90
21#	100	80; 100
22#	50	20; 80
23#	50	20; 70
24#	80	50; 90

* Lower scores indicate less knowledge. # Higher scores indicate more knowledge.

The nurses had a low level of knowledge through items five (referring to how often ACS patients voluntarily report chest pain), six (referring to how often ACS patients voluntarily ask for an analgesic for chest pain) and 19 (regarding consultation with the prescribing physician to obtain an order for a larger maximum dose of morphine if the patient continues to report severe pain).

Among all the nurses, 92.5% (n=37) considered the instrument to be easy to understand and 85% (n=34) found no difficulty in filling it out.

DISCUSSION

Despite existing evidence on the impact of pain, it is still underidentified and undertreated in terms of physiological and psychological changes.[5] Effective pain management requires thorough knowledge, attitudes, and clinical decision-making skills.

Knowledge deficits in this area and inadequacy of pain assessment models can generate negative attitudes that interfere with clinical decision-making skills and add complexity to the pain management issue, leading to incorrect use of relief measures.[8,15-18] Thus, improving the knowledge of health professionals is the first step towards obtaining adequate pain assessment and management in patients with cardiac pain events.

In this context, the TPMI-ACS was adapted to the Brazilian culture, generating the Toronto Pain Management Inventory - Acute Coronary Syndrome – *Versão Brasileira* (TPMI-SCA-Br). Once the instrument's validity and reliability have been shown, it can be used to assess nurses' baseline knowledge and beliefs in contexts such as urgency and emergency and critical care, and their evolution after the implementation of educational measures.

The absence of significant discrepancies between the initial translations showed that the terms used in the original instrument did not generate semantic doubts for the translators, even though one of them was not aware of the applied health area.

The independent assessment of the back-translated versions by the author of the original instrument (phase 4) is a methodological step in which the author could have identified possible unusual meanings from errors in the previous phases. In this case, the researchers would have the possibility to resume back-translations or translations, depending on the stage in which the error had been identified, preventing it from persisting until the final stages of adaptation. It is a phase that advances, in terms of methodological rigor, compared to the most commonly used method for cross-cultural adaptation, proposed by Beaton in 2000.[19]

The qualification of the nurse who synthesized versions T1 and T2 in phase 2 - specialized in Cardiology and with a Ph.D. degree – and the nurses who consolidated the translation units in phase 6 - clinical and academic expertise in Cardiology, fluency in English, with at least a master's degree - contributed for the Brazilian version to have an academic character, without detriment to the language used in clinical practice. Authors previously highlighted the relevance of selecting experts while valuing clinical practice, in addition to academic knowledge.[20]

Despite the nurses' expertise in phase 6 face-to-face meeting, undue influences of psychological factors may have occurred during the deliberations, such as the dominance of opinion (special persuasion of the most authoritative/most senior member), special persuasion of the loudest member, the inability of members to abandon publicly expressed opinions, in addition to the effect of the majority opinion's popularity.[21]

Given the possibility of the influence of these psychological factors, the anonymous participation of another judges committee in phase 7 via email was important because anonymity prevents dominant individuals from influencing the group. Thus, the evidence of satisfactory semantic, idiomatic, experimental and conceptual equivalences was not obtained through external pressures.[22]

The experts' opinion in phase 7 was reflected on the nurses' easy understanding in the pre-test (phase 11). This step is important because, at times, what is considered relevant by the target population of an instrument may not have been considered by researchers.[23] In addition to the nurses' understanding of the instrument's content, it is relevant to consider its performance regarding the scores. Considering that they were nurses at the specialization level, in courses whose practice demands skills directly related to the construct measured by TPMI-ACS, the fact that there is a score of 940 (low knowledge), the predominance of moderate knowledge and only one nurse with most knowledge must be adjusted. Thus, additional use of the instrument can take place in the educational area at the graduate level, subsidizing corrections regarding deficient knowledge and misbeliefs.

Also, the lack of knowledge regarding how often patients with ACS voluntarily report chest pain, how often they voluntarily ask for analgesics for chest pain and consultation with the prescribing physician to obtain an order an order for a larger maximum dose of morphine if they continue to have severe pain corroborates results of a previous study, which showed inadequate evaluation and reluctance to administer opioids in the treatment of chest pain in an emergency department.[24]

An incorrect evaluation of pain as less severe than it is, believing that the patient exaggerates, not having adequate knowledge about analgesia, concerns about addiction and beliefs that treatment delays the diagnosis result in inadequate pain management.[18] Furthermore, we believe some nurses erroneously support the idea that patients should be encouraged to endure pain as much as possible before resorting to a relief method. Insufficient clinical treatment, knowledge and problematic beliefs about pain are the main barriers to its management, resulting in dissatisfaction with the ineffectiveness of relief strategies.[25]

We consider that the set of methodological characteristics adopted by this study provides more security regarding the final product, which will be subjected to psychometric assessments.

CONCLUSION

TPMI-SCA-Br is culturally equivalent to the original instrument and has face validity evidence. However, content, criteria and construct validities, in addition to the reliability of the Brazilian version must still be investigated so that the instrument can be used to measure nurses' knowledge and beliefs about ACS pain, thereby supporting planning of targeted interventions that improve the quality of pain assessment and management.

REFERENCES

1. Ministério da Saúde (BR). Sistema de Informações Hospitalares do SUS (SIH/SUS). 2002[cited 2020 Feb 3]. Available from: http://tabnet.datasus.gov.br/cgi/tabcgi.exe?sih/cnv/nrbr.def

2. Makki N, Brennan TM, Girotra S. Acute coronary syndrome. J Intensive Care Med. 2015[cited 2019 Oct 10];30(4):186-200. Available from: https://doi.org/10.1177/0885066613503294
3. Chang AM, Fischman DL, Hollander JE. Evaluation of chest pain and acute coronary syndromes. Cardiol Clin. 2018[cited 2019 Oct 10];36(1):1-12. Available from: https://doi.org/10.1016/j.ccl.2017.08.001
4. Aroesty JM, Kannam JP. Patient education: chestpain (Beyond the Basics). Up to Date. 2018[cited 2019 Oct 10]. Available from: https://www.uptodate.com/contents/chest-pain-beyond-the-basics
5. Piegas LS, Timerman A, Feitosa GS, Nicolau JC, Mattos LA, Andrade MD, *et al*. V Guideline of the Brazilian Society of Cardiology on acute myocardial infarction treatment with ST Segment Elevation. Arq Bras Cardiol. 2015[cited 2019 Oct 10];105(2):1-121. Available from: http://www.scielo.br/pdf/abc/v105n2s1/0066-782X-abc-105-02-s1-0001.pdf
6. Brant JM, Mohr C, Coombs NC, Finn S, Wilmarth E. Nurses' knowledge and attitudes about pain: personal and professional characteristics and patient reported pain satisfaction. Pain Manag Nurs. 2017[cited 2019 Oct 10];18(4):214-23. Available from: https://doi.org/10.1016/j.pmn.2017.04.003
7. Alzghoul B, Abdullah NA. Pain Management practices by nurses: an application of the Knowledge, Attitude and Practices (KAP) model. Glob J Health Sci. 2015[cited 2019 Oct 10];8(6):154-60. Available from: https://doi.org/10.5539/gjhs.v8n6p154
8. Gretarsdottir E, Zoega S, Tomasson G, Sveindottir H, Gunnarsdottir S. Determinants of knowledge and attitudes regarding pain among nurses in a university hospital: a cross-sectionalstudy. Pain Manag Nurs. 2017[cited 2019 Oct 10];18(3):144-52. Available from: https://doi.org/10.1111/j.1365-2702.2007.02183.x
9. Watt-Watson J, Stevens B, Garfinkel P, Streiner D, Gallop R. Relationship between nurses' pain knowledge and pain management outcomes for their postoperative cardiac patients patients. J Adv Nurs. 2001[cited 2019 Oct 10];36(4):535-45. Available from: https://onlinelibrary.wiley.com/doi/epdf/10.1046/j.1365-2648.2001.02006.x
10. O'Keefe-McCarthy S, McGillion M, Nelson S, Clarke S, McFetridge-Durdle J, Watt-Watson J. Content validity of the Toronto pain management inventory acute coronary syndrome version. Can J Cardiovasc Nurse. 2014[cited 2019 Oct 10];24(2):11-8. Available from: https://www.onlinecjc.ca/article/S0828-282X(12)01182-8/pdf
11. Orbach R, Bjomer J, Jazewski M, John MT, Lobbezoo F. Guidelines for establishing cultural equivalency of instruments. 2013[cited 2019 Oct 10]. Available from: https://ubwp.buffalo.edu/rdc-tmdinternational/wp-content/uploads/sites/58/2017/01/Guidelines-for-Translation-and-Cultural-Equivalency-of-Instruments-2013_05_118608.pdf
12. Dias JS, Rocha LP, Carvalho DP, Tomaschewski-Barlem JG, Barlem ELD, Dalmolin GL. Construction and validation of a tool to assess nursing interpersonal relations. Rev Bras Enferm. 2019[cited 2020 May 2];72(2):408-13. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-71672019000200408&lng=en
13. Silveira MB, Saldanha RP, Leite JCC, Silva TOF, Silva T, Filippin LI. Construction and validation of content of one instrument to assess falls in the elderly. Einstein (São Paulo). 2018[cited 2020 May 2];16(2):eAO4154. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1679-45082018000200207&lng=en
14. Altman DG. Practical statistics for medical research. London: CRC Texts; 1990.
15. Santos SM, Araújo TL, Cavalcante TF, Galindo Neto NM. Acute pain in myocardial infarction: analysis of concept. Rev Gaúcha Enferm. 2015[cited 2019 Oct 109];36(3):102-8. Available from: https://www.scielo.br/pdf/rgenf/v36n3/pt_1983-1447-rgenf-36-03-00102.pdf
16. Oliveira Jr MT, Canesin MF, Marcolino MS, Ribeiro AL, Carvalho AC, Reddy S, *et al*. Sociedade Brasileira de Cardiologia. Telemedicine guideline in Patient Care with Acute Coronary Syndrome and Other heart Diseases. Arq Bras Cardiol. 2015[cited 2019 Oct 10];104(5 supl.1):1-26. Available from: http://publicacoes.cardiol.br/portal/abc/portugues/aop/2019/aop-diretriz-telemedicina-portugues.pdf
17. El-Rahman MA, Kaladeh MTA, Muhbes FJ. Knowledge and attitude towards pain management: a comparison between oncology and non-oncology nurses in Jordan. Int J Nurs Stud. 2013[cited 2019 Oct 10];2(2):95-100. Available from: https://www.researchgate.net/publication/274469179_Knowledge_and_attitude_towards_pain_management_A_comparison_between_oncology_and_non-oncology_nurses _in_Jordan
18. Weeler E, Hardi T, Klemum P, Akanji I, Schonewolf E, Scott J, *et al*. Level of pain and waiting time in the emergency department. Pain Manag Nurs. 2010[cited 2019 Oct 10];11(2):108-14. Available from: https://doi.org/10.1016/j.pmn.2009.06.005
19. Beaton DE, Bombardier C, Guillemin F, Ferraz MB. Guidelines for the process of cross-cultural adaptation of self-report measures. Spine (Phila Pa 1976). 2000[cited 2020 May 2];25(24):3186-91. Available from: https://journals.lww.com/spinejournal/Fulltext/2000/12150/Guidelines_for_the_Process_of_Cross_Cultural.14.aspx
20. Quatrini HCCPG, Pena SB, Lopes JL, Lopes CT, Barros ALBL. Experts for validation studies in nursing: new proposal and selection criteria. Int J Nurs Knowl. 2016[cited 2020 May 2];27(3):130-5. Available from: https://onlinelibrary.wiley.com/doi/epdf/10.1111/2047-3095.12089
21. Powell C. The Delphi technique: myths and realities. J Adv Nurs. 2003[cited 2020 May 2];41(4):376-82. Available from: https://onlinelibrary.wiley.com/doi/epdf/10.1046/j.1365-2648.2003.02537.x
22. Humphrey-Murto S, Varpio L, Wood TJ, Gonsalves C, Ufholz LA, Mascioli K, *et al*. The use of the Delphi and other consensus group methods in medical education research: a review. Acad Med. 2017[cited 2020 May 2];92(10):1491-8. Available from: https://journals.lww.com/academicmedicine/Fulltext/2017/10000/The_Use_of_the_Delphi_and_Other_Consensus_Group.38.aspx
23. Connell J, Carlton J, Grundy A, Taylor Buck E, Keetharuth AD, Ricketts T, *et al*. The importance of content and face validity in instrument development: lessons learnt from service users when developing the Recovering Quality of Life measure (ReQoL). Qual Life Res. 2018[cited 2020 May 2];27(7):1893-902. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5997715/pdf/11136_2018_Article_1847.pdf
24. Pretorius A, Searle J, Marsball B. Barriers and enablers to emergency department nurses' management of patient'spain. Pain Manag Nurs. 2015[cited 2019 Oct 10];16(3):372-9. Available from: https://doi.org/10.1016/j.pmn.2014.08.015
25. O'Keefe-Mc Carthy S, Mc Guillion M, Clarke SP, Mc Fetridge-Durdle J. Pain and anxiety in rural acute coronary syndrome patients awaiting diagnostic cardiac catheterization. J Cardiovasc Nurs. 2015[cited 2019 Oct 10];30(6):546-57. Available from: https://journals.lww.com/jcnjournal/Abstract/2015/11000/Pain_and_Anxiety_in_Rural_Acute_Coronary_Syndrome.13.aspx

Appendix 1 - Questions in the original version, final version, consolidated version, and their respective explanations. *São Paulo* - SP, Brazil, 2016

Original version	Version based on the translations	Consolidated version in the 6th phase	Explanation
The Toronto Pain Management Inventory ACS– Version (**Scoring** Template)	Inventário de Manejo da Dor de Toronto - Síndrome coronariana aguda - SCA - Versão (**Modelo** de pontuação)	Inventário de Manejo da Dor de Toronto - SCA - **Versão brasileira** (**Formulário** de pontuação)	The word **Modelo** was replaced by the term **Formulário** as being more appropriate; The "**versão brasileira**" was included after the titleindicating the target country where the scale went through the process of translation and cross-cultural adaptation.
This 24 item inventory collects information about your knowledge and **beliefs about** Acute Coronary Syndrome (ACS). For each item, please circle the number that best describes your understanding of ACS pain and its associated management.	Este inventário de 24 itens coleta informações sobre seu conhecimento e **opinião acerca da** Síndrome Coronariana Aguda (SCA). Para cada item, por favor, circule o número que melhor descreve seu entendimento sobre a dor relacionada à SCA e seu manejo.	Este inventário de 24 itens coleta informações sobre seu conhecimento e **crença sobre a** Síndrome Coronariana Aguda (SCA). Para cada item, por favor, circule o número que melhor descreve seu entendimento sobre a dor relacionada à SCA e seu manejo.	The substitution of "**opinião a cerca da**", by "**crença sobre a**" was suggested, considering the real meaning of the words within the context.
Item 1 - With effective pain management, what pain **rating** should ACS patients **experience** after treatment?	Com o manejo efetivo da dor, qual é a **intensidade** da dor que os pacientes com SCA devem **suportar / experenciar** após o tratamento?	Com o manejo efetivo da dor, qual é o **nível** de dor que os pacientes com SCA devem **sentir** após o tratamento?	"Pain level" was considered the most commonly used term in Brazilian nursing practice instead of **intensidade**. The terms "**suportar**" and "**experenciar**" were suggested as not adequate, replaced by "**sentir**".
No pain – Worst pain ever	Sem dor – Dor máxima	**Nenhuma dor –** Dor máxima	The term "**nenhuma**" was considered more adequate to report the pain level.
Item 2 - How often do ACS patients overstate their chest pain (**i.e., what % of the time**)?	Com qual frequência os pacientes com SCA superestimam sua dor no peito? (**por ex: qual a porcentagem do tempo**)?	Com qual frequência os pacientes com SCA superestimam sua dor no peito? (**i.e: qual % de vezes**)?	"**i.e**" was considered as "**isto é**" and not, "for example"; It was opted to use "**% de vezes**" instead of "**porcentagem do tempo**", believing that the percentage of time was hours measurement, which makes it difficult to answer and to understand the question.*
Item 3 - To what degree is an opioid analgesic appropriate for severe ACS-related pain?	**Em que medida** um analgésico opioide é apropriado para dor **severa** relacionada à SCA?	**Quando** um analgésico opioide é apropriado para dor **intensa** relacionada à SCA?	The expression "**Em que medida**" was replaced by "**Quando**", since "medida" refers to an action and the effect of measuring: comparing a quantity with its unit or something non-material with something else. The term "**severa**" was replaced by "**intensa**", considering the type of answer requested in the question.
Item 4 - What percentage of patients that require opioids for pain become addicted?	Qual é o percentual de pacientes que necessitam de opioide para dor e se tornam **adictos?**	Qual é o percentual de pacientes que necessitam de opioide para dor **que** se tornam **dependentes?**	The word "e" was replaced by the word "**que**", showing continuity of just one question. The term mostcommonly usedis "**dependentes**" instead of "***adictos***".
Item 9 - Disagree – Agree	**Não concordo** - Concordo	**Discordo** – Concordo	The expression "**não concordo**" was replaced by "**discordo**", considering the type of answer requested in the question.
Item 10 - What pain **rating** should ACS patients **have** before the next opioid analgesic dose is given?	Qual **a classificação** de dor que os pacientes com SCA devem **reportar** antes de ser administrada a próxima dose de analgésico opioide?	Qual o **nível** de dor que os pacientes com SCA devem ter antes de ser administrada a próxima dose de analgésico opioide?	The word "**classificação**" was replaced by "**nível**", considering the real meaning of the question and the usual form used in clinical nursing practice. The word "**reportar**" was replaced by "**ter**", approximating to the terms used in Brazilian nursing practice.**
Item 11 - What percentage of the time would you administer an opioid analgesic for ACS pain?	**Qual a percentagem do tempo em que** você administraria um analgésico opioide para dor de SCA?	**Com qual frequência** você administraria um analgésico opioide para dor de SCA?	The expression "**Com qual frequência**" was used instead of "**Qual a porcentagem do tempo em que**", believing that the percentage of time referred to measurement in hours and not in times, which makes it difficult to answer and understand the question. ***

Continua...

Continuação...

Item 12 - What pain **rating** should ACS patients **have** before **increasing** the dose of intravenous nitroglycerine?	Qual **a classificação** de dor que os pacientes com SCA devem **reportar** antes do **aumento gradual** da dose de Nitroglicerina intravenosa?	Qual **o nível** de dor que os pacientes com SCA devem **ter** antes de **aumentar** a dose de Nitroglicerina intravenosa?	The expression "**aumento gradual**" was replaced by "**aumentar**", as a term more adequatewithin the question context.
Item 15 - How often would you give **ACS patients an analgesic for chest pain if their BP and HR** were within normal limits?	Com qual frequência você administraria **analgésicos para dor no peito em pacientes com SCA estando** a PA e a FC dentro dos limites normais?	Com qual frequência você administraria **aos pacientes com SCA analgésicos para dor no peito, se a PA e a FC estiverem** dentro dos limites normais?	The question was partially reformulated for its cohesion and textual progression to facilitate its understanding and the answer.
Item 16 - When beginning thrombolytic therapy, **what percentage of the time** would you **hold opioid analgesics to determine if effective reperfusion ST changes have occurred?**	Quando iniciada a terapia trombolítica, **qual a porcentagem do tempo** você **manteria o analgésico opioide para determinar se as mudanças que ocorreram foram efetivas para a reperfusão de ST?**	Ao iniciar a terapia trombolítica, **em quantos por cento das vezes você esperaria para administrar analgésicos opioides para determinar se alterações efetivas de reperfusão no segmento ST ocorreram?**	It was necessary to reformulate the question because it disagreed with the original version. The word "segmento" was included to facilitate the understanding of the respondents at the moment of choosing the answer.
Item 17 - A 45 year old male patient had an anterior wall MI one month ago. Today he presents to the ED with a report of moderate chest pain, scoring 5/10 on the pain intensity scale. While you are **attaching the bedside monitor, you notice that his two lead ECG has no ST- and T segment changes.** Would you give him the Morphine, as ordered: 2.5- 5mg IV q 5 minutes to a maximum of 10 mg/hour **PRN**?	**Um paciente do sexo masculino, 45 anos de idade**, teve IAM da parede anterior há um mês. Hoje, ele chega ao **DE** com um relato de dor no peito moderada, nota 5/10 na escala de intensidade de dor. Enquanto você, **à beira-leito, monitora- o, você** observa que duas d**erivações do ECG não têm mudanças nos segmentos ST e T.** Você administraria Morfina conforme pedido: 2.5-5 mg IV a cada 5 minutos **para** um máximo de 10 mg/hora **PRN**?	**Um homem** de 45 anos teve IAM da parede anterior há um mês. Hoje ele chega ao **pronto atendimento** com um relato de dor no peito moderada, nota 5/10 na escala de intensidade de dor. Enquanto você **instala a monitorização, à beira-leito,** observa que **não há mudanças de segmento ST e T no ECG de duas derivações.** Você administraria Morfina, conforme pedido: 2.5-5 mg IV a cada 5 minutos **até** o máximo de 10 mg/hora **se necessário?**	The expression "Um paciente do sexo masculino" was replacedby "Um homem". The acronym "DE"means "Department of Emergency" and it was replaced by "pronto-atendimento". Then, the final version was compared with the original instrument and it was considered necessary to partially reformulate the question for a better understanding. The word "para" was replaced by the term "até", indicating a limit of themedication dosage. The acronym "PRN" (Pro re nata) is not used in Brazil and it was replaced by the expression "se necessário".
Item 18 - Mrs. A, is a 67 year old patient admitted with an inferior wall MI. She has received an antiemetic for nausea but has considerable pain. Your colleagues recommend **reducing her IV Morphine dose.** Would you follow this advice?	**Senhora A.,** paciente de 67 anos de idade, foi admitida com IAM da parede inferior. Ela recebeu um antiemético para náuseas, mas está com dor considerável. Seus colegas recomendam **reduzi-la com dose de Morfina IV**. Você seguiria este conselho?	**Sra. A.,** é uma paciente de 67 anos de idade, admitida com IAM da parede inferior. Ela recebeu um antiemético para náuseas, mas está com dor considerável. Seus colegas recomendam **reduzir sua dose de Morfina IV.** Você seguiria este conselho?	Since, in the original version, the question begins with an abbreviation for "Mrs. A", it was decided to keep the original text, replacing the term "Senhora A"by "Sra. A". The text was adapted for its cohesion, coherence, and textual progression.
Item 19 - Mr. S. continues to have **severe** pain despite receiving the **maximum morphine dose** ordered. Would you consult **with the ordering physician about obtaining an order for a larger maximum dose?**	**Senhor S.** continua apresentando dor **severa**, mesmo recebendo a dose **máxima de Morfina** prescrita. Você consultaria o médico **que prescreveu no sentido de obter uma prescrição para uma dose máxima maior?**	**Sr S.** continua apresentando dor **intensa,** mesmo recebendo a **máxima dose de Morfina** prescrita. Você consultaria o médico **prescritor para obter autorização para aumentar a dose máxima?**	The expression "Sr. S." was kept instead of "Senhor S.", consideringthe text in the original version. The word "severa" was replaced by the word "intensa", as the usual form used in the nursing clinical practice. The expression "máxima dose de Morfina" was opted instead of "dose máxima de Morfina" for better understanding.
Item 20 - What percentage of the time do younger patients with ACS experience more pain as compared to older ACS patients?	**Qual a percentagem de tempo** os pacientes jovens com SCA apresentam mais dor quando comparados aos pacientes mais velhos com SCA?	**Com qual frequência** os pacientes mais jovens com SCA apresentam **mais** dor quando comparados aos pacientes mais velhos com SCA?	The word "mais" was included in the expression "mais jovens", highlighting the correct form of the translation of "younger" from the original version.
Item 22 - How competent do you **feel in effectively managing** ACS **patients having ongoing pain**?	**Quanto** competente você **acredita ser no manejo efetivo da dor persistente em pacientes com** SCA?	**Quão** competente você se sente **em manejar efetivamente o paciente com dor vigente na** SCA?	It was necessary to replace the expression "Quanto" by the term "Quão", emphasizing intensity and increasing the quality of the question. However, "Quanto" and "Quão" are synonyms. The word "acreditar" was replaced by "se sente" as a more adequate term, facilitating the answer.**** The word "persistente" was replaced by "vigente", indicating something happening at that moment.

Continua...

Continuação...

Item 24 - To what degree **are patients' self-reports of pain intensity the gold standard guiding** pain management?	Até que ponto **os relatos dos pacientes sobre a intensidade da dor é padrão ouro, conduzindo** o manejo da dor?	Até que ponto **o autorrelato de intensidade da dor dos pacientes é considerado padrão ouro para nortear** o manejo da dor?	A discrepancy was observed when comparing the original and final versions. The importance of preserving the original version was considered, and the question was reformulated. The term "conduzindo" was replaced by "nortear" for determining a direction, a guide to be followed in managing pain.
Scoring **Template**: Toronto Pain Management Inventory-Acute Coronary Syndrome Version (TPMI-ACS). The TPMI-ACS is a 24 item scale that measures nurses' knowledge of ACS pain and cardiac pain assessment, anxiety, pharmacologic management strategies, including anti-anginal medications and opioids. In order to decrease acquiescence bias and avoid use of negative items, half of the **scale** items are phrased so that higher scores indicate "greater knowledge (Streiner; Norman, 2008). To the final score, the remaining items (i.e.,1, 2, 4, 7, 9, 10, 12, 14, 16, 18, 20) were reversed (i.e., subtracted from 100) and all items were summed. The overall summary range is 0 to 2400; higher scores indicate knowledge. "	**Modelo** de Pontuação: Inventário de Manejo da Dor de Toronto – Versão Síndrome Coronariana Aguda (IMDT - SCA). O TPMI-**ACS** é um **questionário** de 24 itens que mede o conhecimento de enfermeiros sobre a dor na SCA, além da avaliação da dor cardíaca, ansiedade, estratégias no manejo farmacológico, incluindo medicamentos antianginosos e opioides. A fim de diminuir o viés **consentido** e evitar o uso de itens negativos, metade dos itens da escala são formulados de tal forma que as "pontuações mais elevadas indicam maior conhecimento (STREINER; NORMAN, 2008). Para gerar a pontuação final, os itens restantes (ex.: 1, 2, 4, 7, 9, 10, 12, 14, 16, 18, 20) foram revertidos (ex.: subtraídos de 100) e todos os itens foram somados. O intervalo da pontuação total é de 0 a 2.400; pontuações mais altas indicam um conhecimento superior."	**Formulário** de Pontuação: Inventário de Manejo da Dor de Toronto – Versão Síndrome Coronariana Aguda (IMDT - SCA - **BR**). O TPMI-**SCA** é um inventário de 24 itens que mede o conhecimento de enfermeiros sobre a dor na SCA, além da avaliação da dor cardíaca, ansiedade, estratégias no manejo farmacológico, incluindo medicamentos antianginosos e opioides. A fim de diminuir o viés de **aquiescência** e evitar o uso de itens negativos, metade dos itens da escala são formulados "de tal forma que as pontuações mais elevadas indicam maior conhecimento (STRINER; NORMAN, 2008). Para obter a pontuação final, os itens restantes (i.e.: 1, 2, 4, 7, 9, 10, 12, 14, 16, 18, 20) foram revertidos (ex.: subtraídos de 100) e, **posteriormente,** todos os itens foram somados. **A pontuação total varia de** 0 a 2.400; **em que** pontuações mais altas indicam um conhecimento superior. "	It was necessary to replace the word "Modelo" by the term "Formulário", for allowing the formalization of information. The acronym "BR" was included to indicate to theBrazilian version. The word "questionário" was replaced by "inventário", making a judgment/evaluation about something. The "consentido" was replaced by "aquiescência", in the sense of agreement. The word "gerar" was replaced by "obter", to indicate possession, to achieve some result. It was considered necessary to reformulate the expression "A pontuação total varia de" instead of "O intervalo da pontuação total é de" for showing discrepancy when compared to the original version.
"NAME / **LABEL** / VALUE / MEASURE / COMMENTS "	NOME / **RÓTULO** / VALOR / MEDIDA / COMENTÁRIOS	NOME / **DESCRIÇÃO** VALOR / MEDIDA COMENTÁRIOS	The word RÓTULO was replaced by DESCRIÇÃO, as a term more commonly used to explainthe content to be assessed.
Reverse Scoring: (e.g. If scored 80 then actual reverse **score** would be 20.) The correct answer is zero pain = 100.	Pontuação Reversa (p. ex. Se pontuado 80, então, a **nota** reversa será 20.) A resposta correta é dor zero = 100	Pontuação Reversa (p. ex. Se pontuado 80, então, a **pontuação** reversa será 20.) A resposta correta é dor zero = 100	Theword "nota" meaning toobserve something, was replaced by "pontuação" meaning a scoring effect, related to the interpretation of results.
Knowledge Level / TPMI-Total Score KNOWLEDGE CATEGORY 0= **low** knowledge 0-800 1= moderate knowledge 801- 1.600 2= most knowledge 1.601- 2.400	Nível de Conhecimento / IMDT-Pontuação Total Categoria de Conhecimento 0= **baixo** conhecimento 0-800 1= conhecimento moderado 801-1.600 2= muito conhecimento 1.601- 2.400	Nível de Conhecimento / IMDT-Pontuação Total / Categoria de Conhecimento 0= **pouco** conhecimento 0-800 1= moderado conhecimento 801-1.600 2= muito conhecimento 1.601- 2.400	Theword "nota" meaning toobserve something, was replaced by "pontuação" meaning a scoring effect, related to the interpretation of results.

Theword "nota" meaning toobserve something, was replaced by "pontuação" meaning a scoring effect, related to the interpretation of results.

Appendix 2 - Inventário de Manejo da Dor de Toronto - SCA - Versão brasileira (Formulário de pontuação)

Este inventário de 24 itens coleta informações sobre o seu conhecimento e crença sobre a Síndrome Coronariana Aguda (SCA). Para cada item, por favor, circule o número que melhor descreve seu entendimento sobre a dor relacionada à Síndrome Coronariana Aguda e seu manejo.

1. Com o manejo efetivo da dor, qual é o nível de dor que os pacientes com Síndrome Coronariana Aguda devem sentir após o tratamento?

0 10 20 30 40 50 60 70 80 90 100
Nenhuma Dor — Dor máxima

2. Com qual frequência os pacientes com Síndrome Coronariana Aguda superestimam sua dor no peito? (isto é: qual % de vezes?)

0 10 20 30 40 50 60 70 80 90 100
Nunca — Sempre

3. Quando um analgésico opióide é apropriado para dor intensa relacionada à Síndrome Coronariana Aguda?

0 10 20 30 40 50 60 70 80 90 100
Nunca — Sempre

4. Qual é o percentual de pacientes que necessitam de opióide para dor que se tornam dependentes?

0 10 20 30 40 50 60 70 80 90 100
Nenhum — Todos

5. Após a sua avaliação inicial, com qual frequência os pacientes com Síndrome Coronariana Aguda relatam, voluntariamente, quando eles estão tendo dor no peito? (isto é: qual % de vezes?)

0 10 20 30 40 50 60 70 80 90 100
Nunca — Sempre

6. Com qual frequência os pacientes com SCA solicitam, voluntariamente, analgésicos para dor no peito? (isto é: qual % de vezes?)

0 10 20 30 40 50 60 70 80 90 100
Nunca — Sempre

7. Em que medida a dor no peito é proporcional ao tamanho e profundidade da região isquêmica miocárdica?

0 10 20 30 40 50 60 70 80 90 100
Não proporcional — Proporcional

8. Em que medida a dor no peito está associada à ansiedade em pacientes com Síndrome Coronariana Aguda?

0 10 20 30 40 50 60 70 80 90 100
Não associada — Associada

9. Até que ponto você concorda que a Morfina IV tem uma dose máxima acima da qual não é obtido maior alívio de dor?

0 10 20 30 40 50 60 70 80 90 100
Discordo — Concordo

10. Qual o nível de dor que os pacientes com Síndrome Coronariana Aguda devem ter antes de ser administrada a próxima dose de analgésico opióide?

0 10 20 30 40 50 60 70 80 90 100
Nenhuma Dor — Dor máxima

11. Com qual frequência você administraria um analgésico opióide para dor de Síndrome Coronariana Aguda?

0 10 20 30 40 50 60 70 80 90 100
Nunca Sempre

12. Qual o nível de dor que os pacientes com Síndrome Coronariana Aguda devem ter antes de aumentar a dose de Nitroglicerina intravenosa?

0 10 20 30 40 50 60 70 80 90 100
Nenhuma Dor Dor máxima

13. Com qual frequência você administraria Nitroglicerina IV para tratar a dor no peito na Síndrome Coronariana Aguda?

0 10 20 30 40 50 60 70 80 90 100
Nunca Sempre

14. Com qual frequência você diz aos pacientes que eles precisam esperar antes da próxima dose de analgésico para dor no peito (isto é: qual % de vezes)?

0 10 20 30 40 50 60 70 80 90 100
Nunca Sempre

15. Com qual frequência você administraria aos pacientes com Síndrome Coronariana Aguda analgésicos para dor no peito, se a PA e a FC estiverem dentro dos limites normais?

0 10 20 30 40 50 60 70 80 90 100
Nunca Sempre

16. Ao iniciar a terapia trombolítica, em quantos por cento das vezes você esperaria para administrar analgésicos opioides para determinar se alterações efetivas de reperfusão no segmento ST ocorreram?

0 10 20 30 40 50 60 70 80 90 100
Nunca Sempre

17. Um homem de 45 anos teve IAM da parede anterior há um mês. Hoje ele chega ao pronto atendimento com um relato de dor no peito moderada, nota 5/10 na escala de intensidade de dor. Enquanto você instala a monitorização, à beira-leito, observa que não há mudanças de segmento ST e T no ECG de duas derivações. Você administraria Morfina conforme pedido: 2.5-5 mg IV a cada 5 minutos até o máximo de 10 mg/hora se necessário?

0 10 20 30 40 50 60 70 80 90 100
Nunca Sempre

18. Sra. A., é uma paciente de 67 anos de idade, admitida com IAM da parede inferior. Ela recebeu um antiemético para náuseas, mas está com dor considerável. Seus colegas recomendam reduzir sua dose de Morfina IV. Você seguiria este conselho?

0 10 20 30 40 50 60 70 80 90 100
Nunca Sempre

19. Sr S. continua apresentando dor intensa, mesmo recebendo a máxima dose de Morfina prescrita. Você consultaria o médico prescritor para obter autorização para aumentar a dose máxima?

0 10 20 30 40 50 60 70 80 90 100
Nunca Sempre

20. Com qual frequência os pacientes mais jovens com Síndrome Coronariana Aguda apresentam mais dor quando comparados aos pacientes mais velhos com Síndrome Coronariana?

0 10 20 30 40 50 60 70 80 90 100
Nunca Sempre

21. Com qual frequência você utiliza uma escala de classificação numérica para avaliar a intensidade da dor no peito (por exemplo: 0-10)?

0 10 20 30 40 50 60 70 80 90 100
Nunca Sempre

22. Quão competente você se sente em manejar efetivamente o paciente com dor vigente na Síndrome Coronariana Aguda?

0 10 20 30 40 50 60 70 80 90 100
Não competente Competente

23. Quão adequado você sente que é o seu conhecimento atual sobre a avaliação e manejo da dor na Síndrome Coronariana Aguda?

0 10 20 30 40 50 60 70 80 90 100
Não Adequado Adequado

24. Até que ponto o auto relato de intensidade da dor dos pacientes é considerado padrão ouro para nortear o manejo da dor?

0 10 20 30 40 50 60 70 80 90 100
Não é padrão ouro Padrão ouro