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DEVELOPMENT AND VALIDATION OF SPANISH KASRP

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10 Spanish Version of the Knowledge and Attitudes Survey Regarding Pain
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2 SPANISH VERSION OF THE KNOWLEDGE AND ATTITUDES
3 SURVEY REGARDING PAIN

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Abstract

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10 There are a variety of valid tools to assess staff knowledge and attitudes regarding pain,
11 among which is the Knowledge and Attitudes Survey Regarding Pain. Although this
12 instrument has been widely and successfully used, a valid and adapted Spanish version
13 is yet to be developed. The purpose of this study was to validate the Spanish version of
14 the Knowledge and Attitudes Survey Regarding Pain. After translating and back-
15 translating this tool, we conducted a cross-cultural adaptation and construct validation
16 with 102 participants, including nursing professionals (in palliative care, oncology, and
17 intensive care) from five health centers and final-year nursing students. All participants
18 were recruited in the Principality of Asturias, Spain. We also evaluated the internal
19 consistency and test-retest correlations. Cronbach's alpha was .781, and Pearson's r and
20 the intraclass correlation coefficient between the test and retest scores were .881
21 and .883, respectively. The mean questionnaire scores in the test and retest phases were
22 65.8% and 67.6%, respectively. Palliative care nurses had the highest score, 70.8%,
23 which differed significantly from the rest of the groups. The Spanish version of the
24 Knowledge and Attitudes Survey Regarding Pain can effectively differentiate nursing
25 staff in terms of their pain expertise. The results indicate that Spanish nurses have a gap
26 in pharmacological knowledge that is comparable to that found in other countries, but
27 their foundation in general pain concepts was solid.

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Keywords: Pain, Pain Management, Knowledge, Nursing.
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Key Practice Points:

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54 KASRP has not been validated in Spain, but a validated and adapted version will
55 help nursing professionals to evaluate their knowledge and attitudes regarding pain.
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63 Palliative care nurses had the highest score, and this differed significantly from the
64 other groups.
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66 Spanish nurses show a gap in pharmacological knowledge that is comparable to that
67 found in other countries, but they have a solid foundation in general pain concepts.
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121 **INTRODUCTION**
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123 Inappropriate pain management is known to lead to increases in healthcare costs,
124 and can have a negative impact on individuals' quality of life and even increase the risk
125 of mortality (Dale et al., 2013; Robinson et al., 2008; Yamashita, Yamasaki,
126 Matsuyama, & Amaya, 2017). Nowadays, pain management and relief are often
127 considered the responsibilities of healthcare professionals who are in contact with
128 suffering individuals (Dunwoody, Krenzischek, Pasero, Rathmell, & Polomano, 2008;
129 Loeser, Butler, Chapman, Turk, & Bonica, 2003; Mosteiro Díaz & Graván Fernández,
130 2010). Nurses play a particularly crucial role in this regard, since they normally spend
131 much of their time with patients and establish a more intimate contact.
132

133 However, multiple studies in different countries and hospital settings have
134 shown that nurses tend to have relatively little knowledge of general pain concepts, pain
135 evaluation, and correct treatment approaches (Al Qadire & Al Khalaileh, 2014; Eid,
136 Manias, Bucknall, & Almazrooa, 2014; Erkes, Parker, Carr, & Mayo, 2001; Kubecka,
137 Simon, & Boettcher, 1996; Latina et al., 2015; Martín et al., 2012; Salvadó-Hernández
138 et al., 2009; Yildirim, Cicek, & Uyar, 2008). Other studies have shown the benefits of
139 educational efforts in this field, particularly in the improvement of assessment and
140 management of general pain (de Rond et al., 2000; Erkes et al., 2001; Keen et al., 2017;
141 Machira, Kariuki, & Martindale, 2013; Schreiber et al., 2014; Zhang et al., 2008).

142 Ferrell and McCaffery developed the "Knowledge and Attitudes Survey Regarding
143 Pain" (KASRP) in 1987 (Ferrell & McCaffery, 2014) to identify weaknesses in
144 professionals' education regarding pain in order to improve their knowledge. In Europe,
145 the Greek version of the KASRP was validated in 2002 (Tafas, Patiraki, McDonald, &
146 Lemonidou, 2002), the Italian version in 2006 (Catania et al., 2006), and the Icelandic
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181 version in 2011 (Gretarsdottir, Zoëga, Tomasson, & Gunnarsdottir, 2011). However, the
182 KASRP has not been validated in Spain to date.
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184 The KASRP comprises 39 items, 22 of which are “true-or-false” questions, 15
185 are multiple-choice questions, and 2 are clinical case studies comprising 2 questions
186 each. This instrument has been used successfully and repeatedly over the years in
187 various studies throughout the world, as it is freely available for use and is based on the
188 recommendations on analgesia by the World Health Organization, American Pain
189 Society, and National Comprehensive Cancer Network Pain Guidelines (American Pain
190 Society, 2016; Swarm, Gafford, & Rabow, 2018; World Health Organization, 2012).
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193 In its original version, the construct validity was established by comparing the
194 scores of nurses with various levels of expertise (i.e., students, newly graduated
195 students, oncology nurses, and senior pain experts). Internal consistency (Cronbach’s
196 alpha > .70) and test-retest reliability ($r > .80$) were also established for both the
197 knowledge and attitude domains. However, the original authors recommended an
198 analysis of the full scale (where the percentage of correct answers is calculated) without
199 consideration of these separate domains, as some questions mix both aspects (Ferrell &
200 McCaffery, 2014). When the KASRP was originally developed, no pass mark was
201 determined; however, in later studies, a passing score of 80% was set: if a nurse scored
202 less than 80%, their ability to care for a patient experiencing pain was considered to be
203 significantly compromised (McCaffery & Robinson, 2002). Moreover, the authors also
204 allowed for modification of the questionnaire to better suit the needs of the particular
205 service or institution.
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208 The purpose of the study was to validate the Spanish version of the Knowledge
209 and Attitudes survey Regarding Pain in order to faithfully illustrate its psychometric
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239 properties. We did not modify the questionnaire, in order to get a comprehensive
240 support tool to measure Spanish nursing pain Knowledge.
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243 **METHOD**
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245 **Design**
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247 It was a validation and transcultural adaptation of the KASRP.
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249 **Procedure**
250

251 We conducted a 2-step procedure for the development. The first step was a
252 content and linguistic validation from English to Spanish. The second step was a
253 construct and reliability validation using a test-retest procedure.
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256 **Content and Linguistic Validation**
257

258 A translation and back-translation of the original version of the questionnaire
259 according to an adaption of Brislin's model (Jones, Lee, Phillips, Zhang, & Jaceldo,
260 2001) was performed by six bilingual translators who had knowledge of healthcare to
261 ensure a correct interpretation of terms; no modifications to the items were made. In the
262 first step, the original document was sent to two translators. These translators each
263 produced Spanish versions, which were subsequently sent to two different translators
264 for back-translation (thus resulting in two new English-language questionnaires). All
265 four translators then met to consolidate both versions by clarifying terms and giving
266 meaning to items that might be unclear in Spanish. Once a common document was
267 obtained through consensus, two new bilingual translators conducted another round of
268 translation and back-translation. Finally, all six translators met to fine-tune the meaning
269 of the final items. Using this version, we conducted a pretest with 10 healthcare
270 professionals (5 doctors and 5 nurses) to evaluate and obtain semantic and cultural
271 equivalence.
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298 To ensure that the target population fully understood the KASRP, we slightly
299 modified item 16 because the medication it cited was not available in Spain (Vicodin®,
300 the brand name for the combination of hydrocodone 5 mg and acetaminophen 300 mg).
301 We contacted the Pharmacy Department of Hospital Universitario Central de Asturias to
302 find an equivalent therapy in the Spanish market from a pharmacist's perspective.
303 Following this consultation, we chose a combination of tramadol 37.5 mg and
304 acetaminophen 325 mg, which in Spain is known by the trade name Zaldiar®, among
305 others.
306

307 **Construct Validity and Reliability**
308

309 We evaluated the test-retest reliability by distributing 140 copies of the final
310 Spanish version of the KASRP (**Appendix A**) to three nursing professional groups
311 (oncology, palliative care, and intensive care) from five institutions belonging to the
312 healthcare network of the Principality of Asturias, as well as to final-year nursing
313 students at the University of Oviedo. Construct validity was evaluated by discriminating
314 validity, which shows differences between extreme groups. The survey was conducted
315 between April and June 2017. The retest phase was conducted after an interval of 10–14
316 days to avoid memory bias. In addition to the KASRP, we collected data on age, gender,
317 academic degree, years of nursing experience, and work shift type.
318

319 **Permissions and ethics**
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321 Regional Ethical Committee permission (No. 115/17) and written consents of all the
322 institutions involved in the study were taken. The research team contacted all
323 participating nurses, and informed consent was obtained from each participant after a
324 full explanation of the study's purpose and nature was provided in a sealed envelope
325 along with the questionnaire. To preserve their anonymity, they placed the survey back
326 in the sealed envelope after completing it.
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357 **Statistical Analysis**
358

359 We calculated the KASRP score by assigning a score of 1 to correctly answered
360 questions and a score of 0 to incorrectly answered or unanswered questions. We then
361 calculated the total percentage of correct answers in the questionnaire, without
362 consideration of these separate domains. After the normal distribution of each variable
363 had been assessed by the Kolmogorov-Smirnov test, the Kruskal-Wallis H test was used
364 to compare KASRP scores according to demographic data and participant groups due to
365 violation of normality assumption. We conducted post-hoc analyses using the Tukey
366 test. Statistically significant differences were indicated by $p < .05$.
367

368 The internal consistency and test-retest correlations were also assessed to
369 evaluate the psychometric properties of the KASRP and facilitate comparison of our
370 findings with those of the original and European versions of the tool. The data analysis
371 was conducted using SPSS Statistics 22.
372

373 **RESULTS**
374

375 A total of 102 questionnaires (72.8%) were completed at both the test and retest
376 phases of the study. The sociodemographic characteristics of the respondents are shown
377 in Table 1.
378

379 **Internal Consistency**
380

381 Cronbach's alpha of the Spanish version of the KASRP was .781.
382

383 **Test-retest Correlation**
384

385 We calculated Pearson's correlation between the test and retest phase scores,
386 which yielded a value of $r = .884$ ($p < 0.001$). We also calculated the intraclass
387 correlation coefficient to ensure greater accuracy of the reliability, which yielded a
388 value of .883 (95% confidence interval = 0.812–0.928).
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390 **Descriptive statistics and construct validity**
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431 The overall mean percentage of correct answers was 65.8% ($SD = 9.7$) for the
432 test phase and 67.6% ($SD = 10.1$) for the retest phase. The comparison of the different
433 participant groups revealed that the palliative care group scored higher (70.8%, $SD =$
434 9.2) than did the oncology (67.3%, $SD = 7$), intensive care (64.7%, $SD = 9.2$), and
435 student (62.4%, $SD = 10.8$) groups. The Kruskal-Wallis H-test revealed significant
436 group differences ($p < .034$) and post hoc testing revealed that the palliative care group
437 and students group differed significantly ($p < .031$), as shown in **Figure 1 and Table 2**.
438 We did not find significant differences in KASRP scores by gender, academic degree,
439 age, or work shift as shown in **Table 3**. When examining the responses to each item, we
440 observed that 13 items had scores below 50% and 15 items had scores above 80%, as
441 shown in **Table 4**.

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444 DISCUSSION
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447
448 The results of the Spanish KASRP version were similar to those of the original
449 version. In fact, the internal consistency was greater than that of the original English
450 survey (Cronbach's alpha $> .70$) (Ferrell & McCaffery, 2014), positioning it among the
451 Greek, Italian, and Icelandic versions (.88, .69, and .75, respectively) (Catania et al.,
452 2006; Gretarsdottir et al., 2011; Tafas et al., 2002). The test-retest correlation was also
453 greater than that of the original version ($r > .80$), which again positions the Spanish
454 version among the Greek and Italian versions (.69 and .97, respectively). Although we
455 have no data available with regard to the intraclass correlation coefficient, the values
456 obtained in this study reflect excellent reliability.

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460 We also observed that group differences were similar to the validated Italian
461 version of the survey (Catania et al., 2006), and allow for clear discrimination between
462 levels of pain-related expertise (Catania et al., 2006; Gretarsdottir et al., 2011). This
463 supports the overall purpose of the KASRP. Unfortunately, we could not compare the
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475 intensive care group with these previous studies as the previous authors used other
476 professional groups. The higher score of the palliative care group compared to the other
477 groups (particularly the student group, with which the difference was significant) seems
478 logical, given their greater proximity to end-of-life situations and focus on providing
479 relief in difficult situations. The other groups might also lack education and experience
480 at a professional technical level, and in the case of students, in emotional management.
481

482 We found higher KASRP scores than those of previous surveys conducted in
483 other countries, such as Italy, Greece, Taiwan, Saudi Arabia, or China (Eid et al., 2014;
484 Kiekas et al., 2015; Lai et al., 2003; Latina et al., 2015; Samarkandi, 2018; Zhang
485 et al., 2008), and the scores in our study were essentially the same as those found in
486 samples from the United States and Iceland (Gretarsdottir, Zoëga, Tomasson,
487 Sveinsdottir, & Gunnarsdottir, 2017; Kubecka et al., 1996). However, our scores were
488 lower than those found in more recent studies conducted in the United States (Al-Shaer,
489 Hill, & Anderson, 2011; Keen et al., 2017). Furthermore, none of the participants
490 reached the minimum standard of correct answers of 80%, which indicated a general
491 lack of education in pain.

492 The oncology group in this study showed a higher KASRP score than that of the
493 same group in studies conducted in other countries such as Turkey, Saudi Arabia, or
494 Italy (Alqahtani & Jones, 2015; Bernardi, Catania, & Tridello, 2007; Yildirim et al.,
495 2008), which is the same as found in Iran (Shahriary et al., 2015) and lower than in
496 Norway (Utne, Småstuen, & Nyblin, 2018). The student group in comparison to
497 students from Jordan obtained a higher score (Al-Khawaldeh, Al-Hussami, & Darawad,
498 2013), although our group had a similar score to that of students in the United States
499 (Plaisance & Logan, 2006). As for the intensive care group, our results were lower than
500 those obtained in other studies conducted in the United States, where a similar
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534 population of such nursing professionals had a mean score of 72.9% (Erkes et al.,
535 2001), although a modified version of the survey was used.
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538 As for the relationship between the KASRP and the assessed sociodemographic
539 variables, the results of this study were consistent with those conducted in Italy, Greece,
540 and the United States, where there was no relationship found between KASRP scores
541 and age, academic degree, or professional experience (Erkes et al., 2001; Kiekas et al.,
542 2015; Latina et al., 2015). However, studies carried out in Turkey, Holland, Taiwan,
543 and Iceland, and other studies conducted in the United States, showed a statistically
544 significant correlation between professional experience/academic degree and KASRP
545 scores (Al-Shaer et al., 2011; Brunier, Carson, & Harrison, 1995; de Rond et al., 2000;
546 Gretarsdottir et al., 2017; Lai et al., 2003; Yildirim et al., 2008). These discrepancies
547 render the results inconclusive; thus, further studies are necessary to objectively address
548 this question.
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551 Items for which the correct answer rate did not reach 50% mainly related to
552 pharmacological concepts, which is consistent with a previous finding (Bernardi et al.,
553 2007). In Spain, medications are prescribed by doctors, which is probably why nurses
554 obtained lower scores. Furthermore, this indicates a need for further education about
555 these concepts for nurses. The item that related to assessing a smiling patient's pain also
556 had a lower score, both in terms of pain interpretation and therapeutic choice, which
557 was in agreement with other studies showing how nursing staff tend to underestimate it
558 (Bernardi et al., 2007; Lai et al., 2003; Salvadó-Hernández et al., 2009; Yildirim et al.,
559 2008). This could be related to a phenomenon of desensitization (Holl & Carmack,
560 2015; Manias, Bucknall, & Botti, 2005) or to a traditional view of pain as having only
561 diagnostic value. Accordingly, a more specific study on this subject might be necessary.
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593 Moreover, participants demonstrated adequate knowledge of general concepts, with
594 many of these items having a correct answer rate above 80%.
595

596 **Limitations**
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598 The results of this study must be interpreted within the context of the sample.
599 That is, the findings cannot be extrapolated to other populations due to the specificity of
600 the sample. Nevertheless, the Spanish version of the KASRP is a valid tool for focusing
601 educational efforts on specific areas, and will contribute to improving pain
602 management.
603

604 **CONCLUSION**
605

606 The Spanish version of the KASRP is a valid and reliable tool for
607 comprehensively measuring nursing staff's knowledge and attitudes regarding pain.
608 This instrument can effectively discriminate between levels of expertise. This tool will
609 help in providing a clear picture of where the educational gaps are and might
610 simultaneously facilitate the channeling of activities to where they are most needed. Our
611 findings highlight the need for providing more education on pain management during
612 basic and continuing education for nurses.
613

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621

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Conflict of interest

The authors declare no conflicts of interest.

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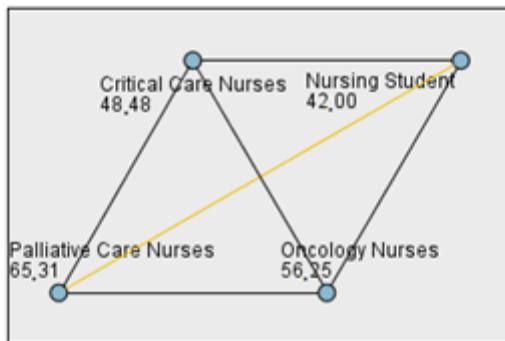
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Pairwise Comparisons of Nursing Group



Each node shows the sample average rank of Nursing Group.

Figure 1. Post hoc analyses of differences of the Knowledge and Attitudes Survey
Regarding Pain scores between nursing groups.

Table 1**Sociodemographic Characteristics**

	<i>Students</i>	<i>Intensive Care</i>	<i>Oncology</i>	<i>Palliative Care</i>
	(<i>n</i> = 31) 30.4%	(<i>n</i> = 30) 29.4%	(<i>n</i> = 20) 19.6%	(<i>n</i> = 21) 20.6%
Age, <i>M</i>	25.8 (6.4)	40.4 (6.6)	38.1 (8.0)	46.2 (11.4)
(<i>SD</i>)				
Gender	3 males 28 females	4 males 26 females	3 males 17 females	1 male 20 females
Academic degree	--	25 Bachelor 5 Master	15 Bachelor 5 Master	15 Bachelor 6 Master
Years of professional experience, <i>M</i> (<i>SD</i>)	--	17.2 (6.5)	12.8 (7.4)	22.1 (10.9)
Work shifts	--	30 rotating	11 rotating 9 fixed shift	12 rotating 9 fixed shift

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Table 210
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Post Hoc Analyses of differences of the Knowledge and Attitudes Survey12
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Regarding Pain scores (n=102)

14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59	Sample 1–Sample 2	Test statistic	Std. error	Test statistic	Test sig.	Adj. sig.
Nursing Student–Critical Care Nurses	-6.483	7.551	-0.859	.391	1.000	
Nursing Student–Oncology Nurses	-14.250	8.456	-1.685	.092	.0552	
Nursing Student–Palliative Care Nurses	-23.310	8.333	-2.797	.005	.031	
Critical Care Nurses–Oncology Nurses	-7.767	8.511	-0.912	.362	1.000	
Critical Care Nurses–Palliative Care Nurses	-16.826	8.389	-2.006	.045	.269	
Oncology Nurses–Palliative Care Nurses	-9.060	9.212	-0.983	.325	1.000	

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Note. Each row tests the null hypothesis that the sample 1 and sample 2 distributions are the same. Asymptotic significance (2-sided tests) is displayed. The significance level is .05

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5 **Table 3. Relationships between KASRP and the demographic variables**

Variable	Options	Mean	p
Gender	Men	27.73	.693
	Female	26.88	
Age Group	18-30 years old	26.03	.054
	31-50 years old	27.00	
	>51 years old	30.50	
Academic Degree	Bachelor	27.36	.278
	Master	28.00	
Work Shifts	Fixed Shift	28.66	.123
	Rotating	27.04	
Years of Professional Experience	1-5 years	27.80	.742
	6-10 years	27.58	
	11-15 years	27.37	
	16-20 years	27.20	
	21-25 years	25.17	
	26-30 years	28.43	
	>30 years	30.00	
Professional Group	Student	25.58	.034
	Intensive Care	26.53	
	Oncology	27.60	
	Palliative Care	29.05	

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Table 413
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Frequency distribution

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 Item	Question (Correct answer)	Correct	
		No.	n
True or false questions			
1	Vital signs are always reliable indicators of the intensity of a patient's pain. (False)	82	80.4
2	Because their nervous system is underdeveloped, children under two years of age have decreased pain sensitivity and limited memory of painful experiences. (False)	65	63.7
3	Patients who can be distracted from pain usually do not have severe pain. (False)	59	57.8
4	Patients may sleep in spite of severe pain. (True)	26	25.5
5	Aspirin and other nonsteroidal anti-inflammatory agents are NOT effective analgesics for painful bone metastases. (False)	47	46.1
6	Respiratory depression rarely occurs in patients who have been receiving stable doses of opioids over a period of months. (True)	50	49
7	Combining analgesics that work by different mechanisms (e.g., combining an NSAID with an opioid) may result in better pain control with fewer side effects than using a single analgesic agent. (True)	90	88.2
8	The usual duration of analgesia of 1–2 mg morphine IV is 4–5 hours. (False)	21	20.6

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62 DEVELOPMENT AND VALIDATION OF SPANISH KASRP
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- 65
66 9 Opioids should not be used in patients with a history of substance 70 68.6
67 abuse. (False)
68
69 10 Elderly patients cannot tolerate opioids for pain relief. (False) 97 95.1
70
71 11 Patients should be encouraged to endure as much pain as possible 101 99
72 before using an opioid. (False)
73
74 12 Children less than 11 years old cannot reliably report pain so 102 100
75 clinicians should rely solely on the assessment of the parent's
76
77 child's pain intensity. (False)
78
79 13 Patients' spiritual beliefs may lead them to think pain and 100 98
80 suffering are necessary. (True)
81
82 14 After an initial dose of opioid analgesic is given, subsequent doses 99 97.1
83
84 should be adjusted in accordance with the individual patient's
85
86 response. (True)
87
88 15 Giving patients sterile water by injection (placebo) is a useful test 68 66.7
89
90 to determine if the pain is real. (False)
91
92 16 Zaldiar® (Tramadol 37.5 mg + acetaminophen 325 mg) PO is 38 37.3
93
94 approximately equal to 5–10 mg of morphine PO. (True)
95
96 17 If the source of the patient's pain is unknown, opioids should not 41 40.2
97
98 be used during the pain evaluation period, as this could mask the
99
100 ability to correctly diagnose the cause of pain. (False)
101
102 18 Anticonvulsant drugs such as gabapentin (Neurontin) produce 72 70.6
103
104 optimal pain relief after a single dose. (False)
105
106 19 Benzodiazepines are not effective pain relievers and are rarely 56 54.9
107
108 recommended as part of an analgesic regimen. (True)
109
110 20 Narcotic/opioid addiction is defined as a chronic neurobiologic 87 85.3
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- 121 disease, characterized by behaviors that include one or more of
122 the following: impaired control over drug use, compulsive use,
123 continued use despite harm, and craving. (True)
124
125 21 The term “equianalgesia” means approximately equal analgesia 98 96.1
126 and is used when referring to the doses of various analgesics that
127 provide approximately the same amount of pain relief. (True)
128
129 22 Sedation assessment is recommended during opioid pain 92 90.2
130 management because excessive sedation precedes opioid-induced
131 respiratory depression. (True)
132
133

140 **Multiple choice questions**
141

- 142 23 The recommended route of administration of opioid analgesics for 58 56.9
143 patients with persistent cancer-related pain is. (Oral)
144
145 24 The recommended route administration of opioid analgesics for 77 75.5
146 patients with brief, severe pain of sudden onset such as trauma or
147 postoperative pain is. (Intravenous)
148
149 25 Which of the following analgesic medications is considered the 54 52.9
150 drug of choice for the treatment of prolonged moderate to severe
151 pain for cancer patients? (Morphine)
152
153 26 A 30 mg dose of oral morphine is approximately equivalent to. 67 65.7
154 (Morphine 10mg IV)
155
156 27 Analgesics for post-operative pain should initially be given. 98 96.1
157 (Around the clock on a fixed schedule)
158
159 28 A patient with persistent cancer pain has been receiving daily 34 33.3
160 opioid analgesics for 2 months. Yesterday the patient was
161 receiving morphine 200 mg/hour intravenously. Today he has
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- 180 been receiving 250 mg/hour intravenously. The likelihood of the
181 patient developing clinically significant respiratory depression in
182 the absence of new comorbidity is. (Less than 1%)
183
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186 29 The most likely reason a patient with pain would request 98 96.1
187 increased doses of pain medication is. (The patient is increased
188 pain)
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192
193 30 Which of the following is useful for treatment of cancer pain? (All 76 74.5
194 of the above)
195
196
197 31 The most accurate judge of the intensity of the patient's pain is. 101 99
198 (The patient)
199
200
201 32 Which of the following describes the best approach for cultural 94 92.2
202 considerations in caring for patients in pain. (Patients should be
203 individually assessed)
204
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206
207
208 33 How likely is it that patients who develop pain already have an 39 38.2
209 alcohol and/or drug abuse problem? (5-15%)
210
211
212 34 The time to peak effect for morphine given IV is. (15 min.) 82 80.4
213
214 35 The time to peak effect for morphine given orally is. (1-2 hours) 64 62.7
215
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217 36 Following abrupt discontinuation of an opioid, physical 32 31
218 dependence is manifested by the following. (Sweating, yawning,
219 diarrhea and agitation...)
220
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223 37 Which statement is true regarding opioid induced respiratory 50 49
224 depression. (Obstructive sleep apnea is an important risk factor)
225
226

227 **Case studies**
228

- 229 38A Case study: Andrew is 25 years old and this is his first day 30 29.4
230 following abdominal surgery. As you enter his room, he smiles at
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237 DEVELOPMENT AND VALIDATION OF SPANISH KASRP
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239 you and continues talking and joking with his visitor. Your
240 assessment reveals the following information: BP = 120/80; HR =
241 80; R = 18; on a scale of 0 to 10 (0 = no pain/discomfort, 10 =
242 worst pain/discomfort) he rates his pain as 8.
243

244 On the patient's record, you must mark his pain on the scale
245 below. Circle the number that represents your assessment of
246 Andrew's pain. (8)
247

- 248 38B Your assessment, above, is made 2 hours after he received 19 18.6
249 morphine 2 mg IV. Half-hourly pain ratings following the
250 injection ranged from 6 to 8 and he had no clinically significant
251 respiratory depression, sedation, or other untoward side effects.
252 He has identified 2/10 as an acceptable level of pain relief. His
253 physician's order for analgesia is "morphine IV 1-3 mg q1h PRN
254 pain relief." Check the action you will take at this time.
255
256 (Morphine 3 mg IV now)

- 257 39A Robert is 25 years old and this is his first day following 70 68.6
258 abdominal surgery. As you enter his room, he is lying quietly in
259 bed and grimaces as he turns in bed. Your assessment reveals the
260 following information: BP = 120/80; HR = 80; R = 18; on a scale
261 of 0 to 10 (0 = no pain/discomfort, 10 = worst pain/discomfort) he
262 rates his pain as 8.
263

264 On the patient's record you must mark his pain on the scale
265 below. Circle the number that represents your assessment of
266 Robert's pain: (8)
267

- 268 39B Your assessment, above, is made two hours after he received 47 46.1
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298 morphine 2 mg IV. Half hourly pain ratings following the
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300 injection ranged from 6 to 8 and he had no clinically significant
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302 respiratory depression, sedation, or other untoward side effects.
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304 He has identified 2/10 as an acceptable level of pain relief. His
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306 physician's order for analgesia is "morphine IV 1-3 mg q1h PRN
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308 pain relief." Check the action you will take at this time.
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Appendix A. Spanish version of the Knowledge and Attitudes Survey Regarding Pain

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Verdadero/Falso – Marque la respuesta correcta.

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11 V F 1. Los signos vitales son siempre indicadores fiables de la intensidad del dolor del paciente.
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13 V F 2. Debido a que su sistema nervioso está poco desarrollado, los niños menores de 2 años
14 tienen reducida la sensibilidad al dolor y una memoria limitada de experiencias dolorosas.
15 V F 3. Los pacientes que pueden ser distraídos del dolor, normalmente no tienen dolor intenso.
16 V F 4. Los pacientes pueden dormir a pesar de tener dolor intenso.
17 V F 5. El Ácido Acetil Salicílico (AAS) y otros Antiinflamatorios No Esteroideos (AINEs) **NO**
18 son analgésicos efectivos en las metástasis óseas dolorosas.
19 V F 6. La depresión respiratoria raramente se da en pacientes que han estado recibiendo dosis
20 fijas de opiáceos durante meses.
21 V F 7. Combinar analgésicos que funcionan por diferentes mecanismos (ej. combinar un AINE
22 con un opiáceo) puede dar como resultado un mejor control del dolor con menos efectos
23 secundarios que usando un único agente analgésico.
24 V F 8. La duración habitual de la analgesia con Morfina 1-2mg IV es de 4-5horas.
25 V F 9. Los opiáceos no deberían ser administrados en pacientes con un historial de abuso de
26 drogas.
27 V F 10. Los pacientes en edad avanzada no toleran los opiáceos como tratamiento para el dolor.
28 V F 11. Se debe animar a los pacientes a soportar el máximo dolor posible antes de usar
29 opiáceos.
30 V F 12. Los niños menores de 11 años no pueden referir su dolor de forma fiable, así que los
31 médicos deberían apoyarse únicamente en la valoración de los padres acerca del dolor del
32 niño.
33 V F 13. Las creencias religiosas de los pacientes pueden llevarles a pensar que el dolor y el
34 sufrimiento son necesarios.
35 V F 14. Después de administrar una dosis inicial de analgésico opiáceo, las dosis siguientes
36 deberían ajustarse de acuerdo con la respuesta individual del paciente.
37 V F 15. Administrar a los pacientes placebos es una prueba útil para determinar si el dolor es
38 real.
39 V F 16. El ZALDIAR® (Tramadol 37.5mg + Paracetamol 325mg) VO es aproximadamente
40 igual a 5-10mg de Morfina VO.
41 V F 17. Si la causa del dolor del paciente es desconocida, no se deberían usar opiáceos durante
42 el periodo de evaluación del dolor, ya que podrían enmascarar el correcto diagnóstico de la
43 causa del mismo.
44 V F 18. Drogas anticonvulsivantes como la Gabapentina (Neurontin®) producen un alivio
45 óptimo del dolor tras una única dosis.
46 V F 19. Las benzodiazepinas no son efectivas en el tratamiento del dolor y raramente se
47 recomiendan como parte de un régimen analgésico.
48 V F 20. La adicción a narcóticos/opiáceos se define como una enfermedad neurobiológica
49 crónica, caracterizada por comportamientos que incluyen uno o más de los siguientes:
50 reducción de la capacidad de control sobre el consumo de drogas, consumo compulsivo,
51 consumo continuado a pesar de que produzca daños y “mono”.
52 V F 21. El término Equianalgesia significa aproximadamente “igual analgesia” y se usa al hablar
53 de las dosis de diferentes analgésicos que tienen aproximadamente la cantidad equivalente
54 de efecto analgésico.
55 V F 22. Se recomienda evaluar el estado de sedación del paciente mientras el dolor se controle
56 con opiáceos, ya que una sedación excesiva precede a la depresión respiratoria inducida por
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opiáceos.

Test de respuesta múltiple - Marque la opción correcta.

23. La vía recomendada para la administración de analgésicos opiáceos en pacientes con dolor de tipo oncológico crónico, es:

- a). Intravenosa.
 - b). Intramuscular.
 - c). Subcutánea.
 - d). Oral.
 - e). Rectal.

24. La vía recomendada para la administración de analgésicos opiáceos en pacientes con dolor breve e intenso, de aparición súbita, como en el caso de un traumatismo o de dolor post quirúrgico, es:

- a). Intravenosa.
 - b). Intramuscular.
 - c). Subcutánea.
 - d). Oral.
 - e). Rectal.

25. ¿Cuál de los siguientes analgésicos se considera de primera elección en el tratamiento del dolor crónico de tipo moderado a intenso en pacientes oncológicos?:

- a). Codeina.
 - b). Morfina.
 - c). Meperidina.
 - d). Tramadol.

26. Una dosis de 30mg de Morfina vía oral es aproximadamente equivalente a:

- a). 5mg de Morfina IV.
 - b). 10mg de Morfina IV.
 - c). 30mg de Morfina IV.
 - d). 60mg de Morfina IV.

27. La analgesia para el dolor postoperatorio debería administrarse inicialmente:

- a). Siguiendo una pauta horaria fija/prescrita.
 - b). Sólo cuando el paciente la pida.
 - c). Sólo cuando la enfermera considere que el paciente tiene un desconfort moderado o mayor.

28. Un paciente con dolor de tipo oncológico crónico ha estado tomando analgésicos opiáceos a diario durante 2 meses. Ayer el paciente estaba recibiendo Morfina 200mg/h IV. Hoy ha estado recibiendo 250mg/h. La probabilidad de que el paciente desarrolle una depresión respiratoria significativa en ausencia de una nueva comorbilidad es:

- a). < 1%
 - b). del 1 al 10%
 - c). del 11 al 20%
 - d). del 21 al 40%
 - e). > 41%

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120 **29.** La razón más probable por la cual un paciente con dolor pediría aumentar la dosis de
121 analgesia es:

- 122
123 a). El paciente está sintiendo un dolor mayor.
124 b). El paciente está sintiendo mayor ansiedad o depresión.
125 c). El paciente está pidiendo más atención por parte de los trabajadores.
126 d). Las demandas del paciente están relacionadas con una adicción.

127 **30.** ¿Cuál de los siguientes fármacos es útil para el tratamiento del dolor oncológico?:

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129 a). Ibuprofeno
130 b). Hidromorfona
131 c). Gabapentina
132 d). Todos los anteriores.

133 **31.** La persona que mejor puede juzgar la intensidad del dolor del paciente, es:

- 134 a). El médico que le trata.
135 b). La enfermera de atención primaria del paciente.
136 c). El paciente.
137 d). El farmacéutico.
138 e). El cónyuge o la familia del paciente.

139 **32.** ¿Cuál de los siguientes describe el mejor abordaje de las consideraciones culturales en el
140 cuidado de pacientes con dolor?:

- 141 a). Ya no existen las influencias culturales en España debido a la diversidad de la población.
142 b). Las influencias culturales se pueden determinar por el origen étnico del individuo (pe: los
143 asiáticos son estoicos, los italianos son expresivos, etc).
144 c). Los pacientes deberían ser valorados individualmente para determinar sus influencias
145 culturales.
146 d). Las influencias culturales de un individuo pueden determinarse por su estatus socioeconómico
147 (ej. los obreros declaran más dolor que los trabajadores cualificados).

148 **33.** ¿Cuál es la probabilidad de que los pacientes que desarrollan dolor tengan algún problema
149 previo de abuso de alcohol y/o drogas?:

- 150 a). < 1%
151 b). 5 – 15%
152 c). 25 – 50%
153 d). 75 – 100%

154 **34.** El efecto pico de la Morfina administrada IV se produce tras

- 155 a). 15min.
156 b). 45min.
157 c). 1hora.
158 d). 2horas.

159 **35.** El efecto pico de la Morfina administrada VO se produce tras:

- 160 a). 5min.
161 b). 30min.
162 c). 1-2horas.
163 d). 3horas.

164 **36.** Tras la interrupción súbita de un opiáceo, la dependencia física se manifiesta con los
165 siguientes:

- 166 a). Sudoración, bostezos, diarrea y agitación.
167 b). Afectación sobre el control del consumo de drogas, consumo compulsivo, y ansiedad.
168 c). La necesidad de dosis mayores para conseguir el mismo efecto.
169 d). a y b.

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179 37. Qué afirmación es correcta con respecto a la depresión respiratoria inducida por opiáceos:
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- 182 a). Es más común después de varias noches post-cirugía debido a la acumulación de opiáceos.
183 b). La apnea obstructiva del sueño es un factor de riesgo importante.
184 c). Se da más frecuentemente en aquellos que estaban con dosis altas de opiáceos antes de la
185 cirugía.
186 d). Puede valorarse fácilmente usando una pulsioximetría de forma intermitente.

187 **Casos Prácticos-Marque la opción correcta.**

188 Se presentan dos casos prácticos con pacientes. Se te pide que tomes decisiones sobre dolor y
189 medicación para cada paciente.

190 **Paciente A:** Andrés tiene 25 años y éste es el primer día tras una cirugía abdominal. Cuando entras
191 en su habitación, te sonríe y continúa hablando y bromeando con su visitante. Tu valoración revela
192 la siguiente información: PA = 120/80; FC = 80; FR = 18; en una escala de 0 a 10 puntúa **SU** dolor
193 en un 8 (0 = ningún dolor/discomfort, 10 = el peor dolor/discomfort).

- 194 A. En la historia del paciente debes marcar su dolor en la escala de abajo.
195 Marca el número que representa **TU** valoración del dolor de Andrés.

200 0 1 2 3 4 5 6 7 8 9 10
201 Ningún Peor
202 dolor/discomfort dolor/discomfort

- 203
204 B. Tu valoración, arriba, se hizo dos horas después de que recibiera 2mg de Morfina
205 IV. Tras la inyección, las puntuaciones del dolor hechas cada media hora oscilaban
206 entre 6 y 8, y él no tenía ningún signo clínico significativo de depresión
207 respiratoria,
208 sedación, u otro efecto secundario adverso. Él ha identificado 2/10 como un nivel
209 aceptable de efecto analgésico. Su prescripción médica de analgesia es: Morfina IV
210 de 1 a 3 mg cada hora, como analgesia “si precisa” (a demanda del paciente).

211 Compruebe qué medidas tomará esta vez.

- 212
213 1. No administrar Morfina esta vez.
214 2. Administrar Morfina 1mg IV
215 ahora.
216 3. Administrar Morfina 2mg IV
217 ahora.
218 4. Administrar Morfina 3mg IV
219 ahora.

220 **Paciente B:** Roberto tiene 25 años y éste es el primer día tras una cirugía abdominal. Cuando entras
221 en su habitación, él está tumbado en la cama en silencio y hace muecas de dolor cuando se gira en
222 la cama. Tu valoración revela la siguiente información: PA = 120/80; FC = 80; FR = 18; en una
223 escala de 0 a 10 puntúa **SU** dolor en un 8 (0 = ningún dolor/discomfort, 10 = el peor
224 dolor/discomfort).

- 225 A. En la historia del paciente debes marcar su dolor en la escala de abajo.
226 Marca el número que representa **TU** valoración del dolor de Roberto.

0 1 2 3 4 5 6 7 8 9 10

Ningún dolor/discomfort dolor/discomfort

Peor dolor/discomfort dolor/discomfort

B. Tu valoración, arriba, se hizo dos horas después de que recibiera 2mg de Morfina IV. Tras la inyección, las puntuaciones del dolor hechas cada media hora oscilaban entre 6 y 8, y él no tenía ningún signo clínico significativo de depresión respiratoria, sedación, u otro efecto secundario adverso. Él ha identificado 2/10 como un nivel aceptable de efecto analgésico. Su prescripción médica de analgesia es: Morfina IV de 1 a 3 mg cada hora, como analgesia “si precisa” (a demanda del paciente).

Compruebe qué medidas tomará esta vez.

1. No administrar Morfina esta vez.
 2. Administrar Morfina 1mg IV ahora.
 3. Administrar Morfina 2mg IV ahora.
 4. Administrar Morfina 3mg IV ahora.