

BACKGROUND AND AIMS

Pain is one of the most common reasons for health consultations and one of the most important causes of disability worldwide. One of EFIC's key priorities is to raise the standard of pain care provided in Europe, and education of healthcare professionals is critical. The IASP and EFIC have developed a pain curriculum that should help and guide the improvement of pain education among healthcare professionals in Europe, and knowing what the current situation is would be a first step towards this important objective. The aim of this study was to describe the content of pain curricula in undergraduate health science programs in public and private universities in Catalonia.

METHODS

Undergraduate programs in medicine, nursing, physiotherapy, nutrition, psychology, dentistry, podiatry, occupational therapy, pharmacy and veterinary, from all eleven public and private Catalan universities have been evaluated. Course leaders for all subjects in each program were identified and asked to participate by responding to an online-based survey. This survey contained questions seeking professional demographic information, and information about the nature of the pain-related content that is being taught. The questions about pain content included the following: the name and the area according to the program (basic training, compulsory, optional, compulsory placements and compulsory final project), the level and the hours given to each pain subject. Participants were also presented a list of topics extracted from the Interprofessional Pain Curriculum Outline in order to collect information about the nature of the pain-related content that is taught. Finally, all respondents, regardless of whether they included any pain content in their subjects or not, were asked to rate three questions related to pain education in the undergraduate programs on a 5-point rating scale (1 = Totally disagree to 5 = Totally agree).

RESULTS

Three hundred and fifty-nine university teachers participated and completed the online survey. Of them, 153 reported that the subject/s that he/she coordinated included pain information (see Table 1). Most courses (62%) including pain content were compulsory (see Figure 1), with Nursing providing the greatest number of hours of all (see Figure 2). Table 2 shows the percentage of participants who reported they included some of the pain topics from in the Interprofessional Pain Curriculum. Participants agreed that a complete and comprehensive pain education is of special interest to students in health care training programs, and that current training should be improved, investing more resources and training time.

Table 1. Participants who included pain content in the subjects they lead.

Participants (N)	153
Sex N (%)	
Male	91 (60)
Female	62 (40)
Undergraduate program N (%)	
Medicine	44 (23)
Nursing	54 (28)
Physiotherapy	35 (18)
Nutrition and Dietetics	8 (4)
Psychology	13 (7)
Dentistry	16 (8)
Podiatry	8 (4)
Occupational therapy	3 (2)
Pharmacy	2 (1)
Veterinary	7 (4)

Figure 1. Classes including pain content (%).

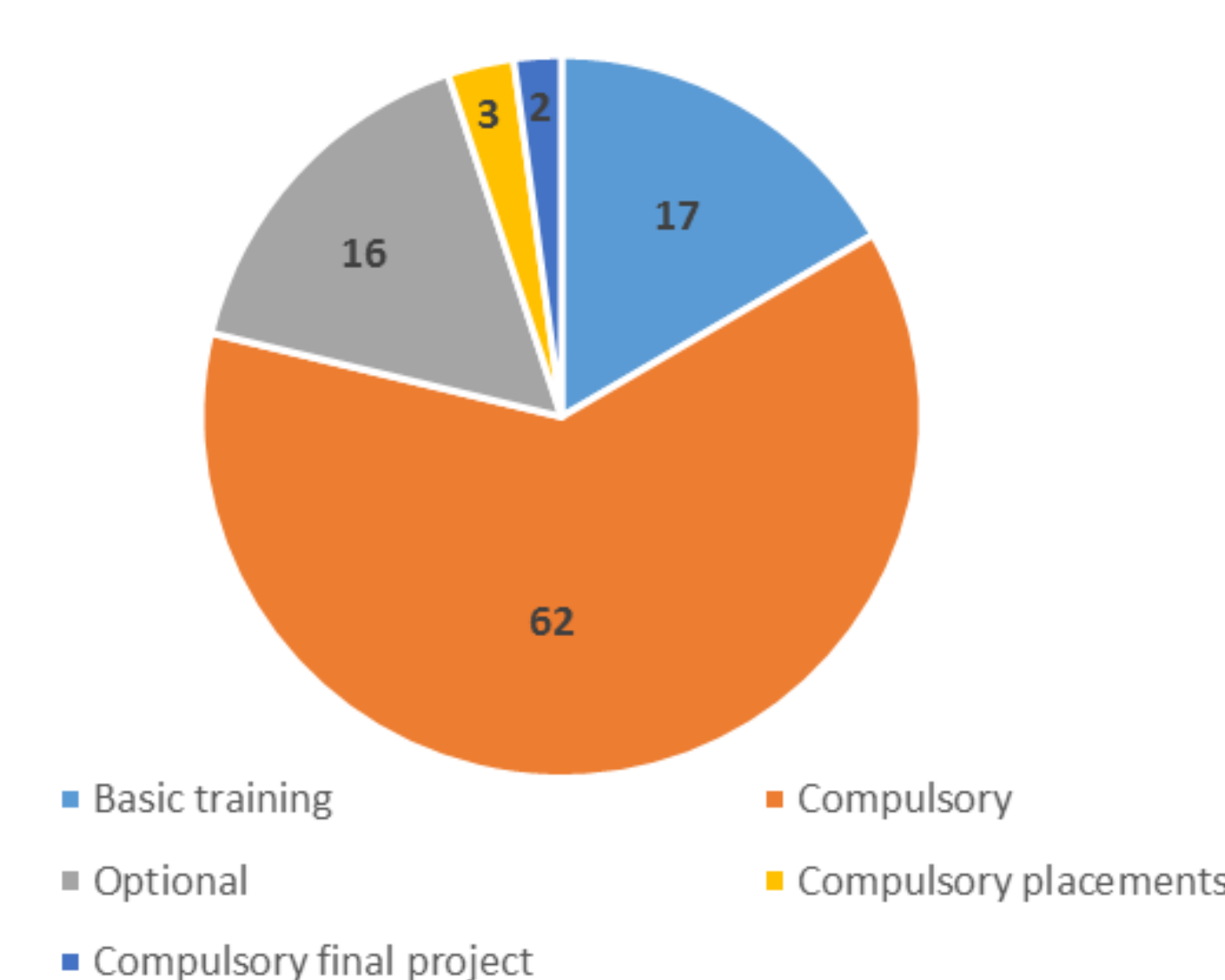


Figure 2. Number of hours devoted to pain information/training in the programs evaluated

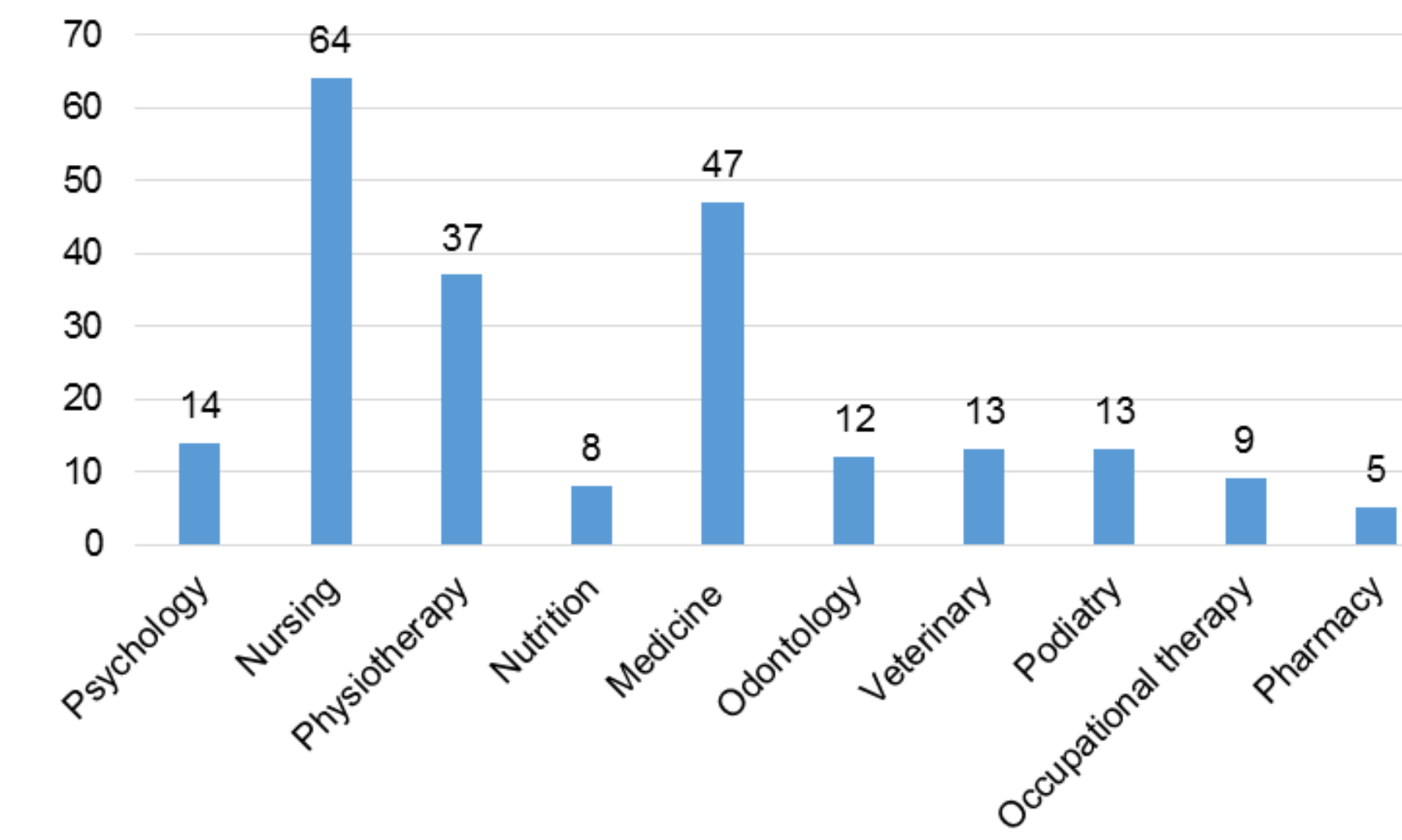
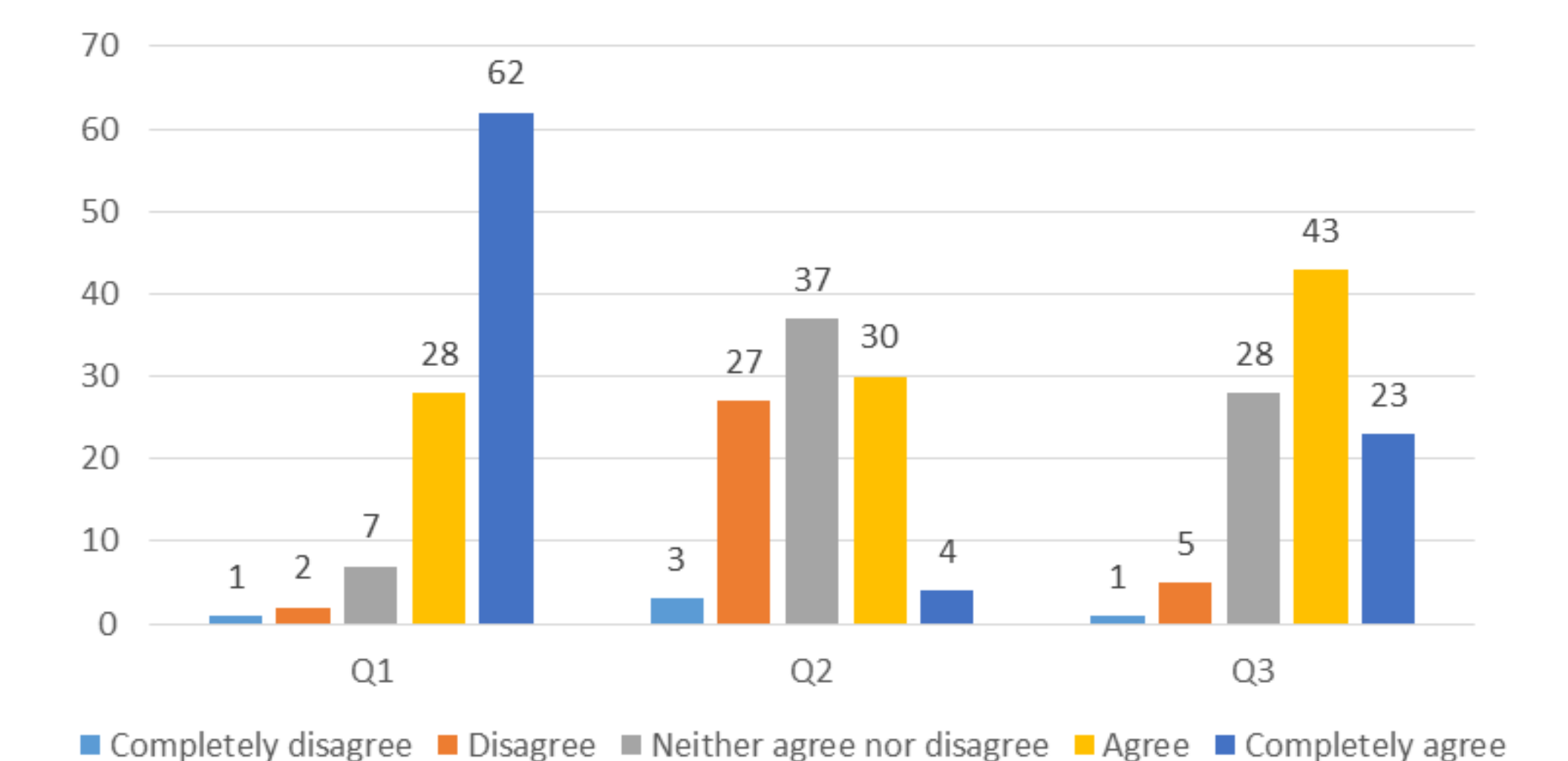


Table 2. Specific pain content that participants teach in the subjects they coordinate

Content	N (%)
Type(s) of pain (neuropathic pain, nociceptive pain)	102 (67)
Distinction between acute, recurrent, incident, and or persistent (chronic) pain.	102 (67)
Definition of pain and pain terms	98 (64)
Pain assessment	78 (51)
Biological, psychological and social factors influencing the perception of pain	74 (48)
Pharmacological methods	71 (46)
Biological mechanisms of pain	67 (44)
Non-pharmacological approaches	63 (41)
Pain impact on quality of life	57 (37)
Interprofessional and multiprofessional collaboration	47 (31)
Psychological approaches	47 (31)
Distinction between commonly used pain terms in clinical practice (e.g. allodynia, analgesia, dysesthesia, hyperalgesia)	42 (28)
Specific pain problems (e.g., back pain, headache)	43 (28)
Ethical standards and guidelines related to management of pain	31 (20)
Evaluation of outcomes	30 (20)
Other non-pharmacological	31 (20)
Rehabilitation approaches	26 (17)
Surgical approaches	24 (16)
Pain in older adults	24 (16)
Pain theories	23 (15)
Epidemiology of pain	22 (14)
Pain in special population (e.g., pain in people with psychiatric disorder or in individuals with substance abuse)	20 (13)
Pain in infants, children and adolescents	16 (11)

Figure 3. Participants' responses (%) to the questions related to pain training in the undergraduate programs (N=359)



Question 1 (Q1): Formal training on pain in the undergraduate studies in health sciences is key for a practitioner.

Question 2 (Q2): In general, the training on pain that our students receive is adequate for their professional future.

Question 3 (Q3): More resources and time should be invested in pain training in the undergraduate training.

CONCLUSIONS

The results of this survey may be useful for education authorities, and other interested bodies (e.g., professional and scientific societies) to improve undergraduate pain-related education.

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