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Article

Complementary and Alternative Therapies (CAT) in Nursing Education in Spanish Universities

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Abstract: Background: The use of complementary therapies in the population is increasing, so it is necessary to understand the training that health professionals receive in this type of therapy in their training plans, as they are often the primary source of information for patients. Our objective was to investigate Spanish universities that offer subjects on complementary therapies in their Nursing degree programs. Methods: Observational descriptive cross-sectional study. For this purpose, we used the document published on the website of the Ministry of Universities as a working document. Additionally, a literature search was conducted up to September 2023 in the PubMed database, along with reverse searches. Results: Out of a total of 62 universities, only 16 (29%) offer a subject related to this type of therapy, with most of them being elective courses. Conclusions: The training content on complementary care in Nursing degree programs in Spanish universities is scarce, highlighting the potential benefit of expanding and promoting it, in line with the recommendations of the World Health Organization.

Keywords: complementary therapies; alternative therapies; nursing education; university students

1. Introduction

Complementary and Alternative Therapies (CAT) can be defined as the use of practices and products of non-mainstream origin, including natural products, mind and body practices, and other approaches apart from traditional Western medicine [1]. However, in practice, there is no consensus regarding the terminology and concepts used to refer to these therapies, resulting in various ways of naming and defining them [2]. In this regard, it is necessary to consider the meanings of the following terms [3]: a) complementary: when a non-mainstream approach is used alongside conventional approaches, b) alternative: when a non-mainstream approach is used in place of conventional approaches.

In recent decades, there has been a significant surge in the demand for and consumption of CAT, creating a landscape where professionals and patients alike are increasingly interested in these therapies [2].

Several studies have highlighted the widespread use of CAT among patients with various health conditions. For instance, usage rates stand at 89.7% among hemodialysis patients [4], 71.1% among rheumatology patients [5], 67.3% among patients with multiple sclerosis [6], 55.4% among individuals over 65 years during the COVID-19 pandemic [7], 53.6% among oncohematology patients (Sánchez 2014), 35% among adult patients with joint pain [8] and 23% among patients with inflammatory bowel disease [9]. However, there exists a gap both in the training of professionals in CAT [10] and in the available evidence regarding the efficacy and safety of many CATs due to limited research in this area [11].

An increasing number of studies are substantiating the efficacy of various CATs. For instance, a comprehensive study on music therapy in patients experiencing anxiety, stress, and depression, encompassing findings from 10 systematic reviews conducted across the United States, Denmark, the

Netherlands, Norway, Taiwan, and South Korea, analyzed 186 studies involving 11,326 participants across palliative care, dementia, and cancer contexts. The study revealed that three of the reviews indicated potential beneficial effects of music therapy for depression and anxiety [12]. A systematic review with meta-analysis investigating the impact of Tai Chi on fall prevention in frail elderly individuals concluded that Tai Chi yielded beneficial outcomes in preventing falls [13]. A report by the Agency for Health Technology Assessment of Andalusia on acupuncture treatment for chronic non-oncological pain revealed evidence of short-term pain reduction in low back pain, neck pain, and shoulder pain compared to sham acupuncture or usual care [14]. In a systematic review with meta-analysis by Hou, Wang [15], examining the impact of yoga on breast cancer-related fatigue, findings indicated that yoga led to improvements in sleep quality, anxiety, depression, and overall quality of life.

In Spain, the Ministry of Health published a report on Natural Therapies, highlighting the absence of research and regulation in the field. The report compiled a total of 139 therapies, aiming to establish a potential foundation for future regulatory measures [16]. As a follow-up to this report, in 2018, the Plan for the Protection of Health against Pseudo-therapies was launched, with the objective of evaluating knowledge and scientific evidence, promoting the dissemination and transparency of information, and ensuring regulatory compliance [17].

In response to the growing demand and application of these therapies, several governments and official bodies are taking steps to improve the information and safety surrounding them. For instance, in the United States of America, the National Center for Complementary and Integrative Health (NCCIH) was established. In Europe, the European Parliament's Committee on the Environment, Public Health and Consumer Protection conducted a study on 'Non-Conventional Medicines,' examining the status of these therapies across member states. This report compiled information on legislation at both the EU and Member State levels concerning the training of professionals to practice these therapies [18]. The World Health Organization (WHO) is presently engaged in the 'WHO Strategy on Traditional Medicine 2014-2023' project. This initiative seeks to provide valuable guidance to governments, health professionals, and users considering traditional medicine. Central to its objectives is the establishment of regulations to govern these practices and the promotion of research to assess their safety and efficacy [19]. The CAMbrella project [20] was initiated due to significant heterogeneity across European Union countries concerning legislation, research, and the training of health professionals in complementary and alternative medicine (CAM). This project marked the first instance of funding being allocated for research in this field. CAMbrella addressed various topics including terminology, patient perspectives, research methodologies, and legislative considerations.

In nursing, the use of CATs has been endorsed by various organizations for many years [10]. In a report by an expert committee on the Practice of Nursing, the WHO recommended that nurses receive training to guide clients in choosing between various complementary and traditional healthcare methods. Nursing education should equip nurses with an understanding of these methods, their compatibility with other treatments, and their cultural acceptability [21]. Furthermore, the Association of Colleges of Nursing in the United States outlined core competencies for nurse education, which include competencies related to complementary therapies. These competencies entail developing an awareness of complementary modalities and their role in health promotion, as well as evaluating the integration of traditional and complementary healthcare practices [22].

The growing use of CAT has significant implications for nurses regarding patient care and safety [23]. Moreover, multiple studies indicated that patients are more inclined to discuss CAT with nurses rather than with general practitioners or other professionals [24]. However, the level of knowledge among nurses regarding CAT remains modest [25].

Despite the previous endorsements, support and evidence, various studies to date have underscored the limited availability of complementary and alternative therapy (CAT) subjects at universities [11,26,27].

To our knowledge, there is currently no study evaluating the availability of complementary and alternative therapy (CAT) subjects in nursing degree programs in Spain. Integrating CAT training

2.1. Design

2.2. Population

2.3. Variables

2.4. Procedure

2.5. Data Analysis

3. Results

In Table 1, out of 62 universities, 16 (29.0%) offer CAT subjects. Among these, 11 are public (68.8%) and five are private (31.3%). This indicates that 27.5% of public universities and 22.7% of private universities offer such subjects. In terms of centers (Table 1), 22 out of 117 (18.8%) offer CAT subjects.

	Total	Offer	
	n	% of total universities/ centres	% of universities offering
Universities	62	16	25.8
Public	40	11	27.5
			68.8

	Private	22	5	22.7	31.3
Centres		117	22	18.8	

In terms of the type of subject offered, CAT subjects are compulsory in two publicly owned centers, optional in 19, and one center offers it as a free-choice subject.

Regarding the names of the subjects, 16 of them are described as "complementary" (with 12 specifically naming therapies). Additionally, the term "alternative" appears in four subjects, with one of them also including "complementary" in its description.

The duration in credits (1 credit equals 10 teaching hours) ranges between 3 and 6 credits for both public and private centers, with a mean of 3.9 and a standard deviation of 1.4 across all centers. For public centers specifically, the mean and standard deviation are 3.9 and 1.4, while for private centers, they are 3.8 and 1.5, respectively.

Out of the 22 subjects offered, 19 incorporate general content. Two subjects focus on specific therapies (mindfulness and lifestyles, and thermalism), while one is tailored for individuals with cancer.

4. Discussion

To our knowledge, our study represents the first analysis of the provision of CAT subjects in the nursing degree in Spain. Our findings reveal that 29% of Spanish universities and 18.8% of centers offering nursing studies include CAT subjects in their nursing degree programs. The majority of these subjects are optional and have a duration of three credits. Notably, we did not observe significant differences between public and private institutions.

Our findings are consistent with similar studies conducted in various countries. For example, in a study by Fenton and Morris (2003) on the integration of Complementary and Alternative Therapies into nursing school curricula in the United States, 125 out of 585 schools (21%) responded to an online questionnaire. While 97% (121) of the schools offered or planned to offer courses on CAT, only 19 (15%) had compulsory CAT courses, and 46 (36.8%) offered optional subjects. It's worth noting the potential selection bias in the study, as those most motivated by the subject may have been more likely to respond, suggesting that the actual prevalence of CAT subjects across all schools may have been higher than observed in the sample.

Al-Rukban, AlBedah [26] conducted a study in Saudi Arabia on the provision of CAT subjects by health sciences faculties from 1971 to 2011, gathering data from 15 nursing faculties out of a total of 16. The study revealed that during the periods 1991-2000 and 2001-2011, 33% and 66% of the 15 nursing faculties, respectively, offered CAT subjects.

Valarezo-Garcia and Valarezo Espinosa [29] conducted a study to investigate the inclusion of CAT subjects in the curricula of medicine and nursing across 59 universities in Ecuador. Among the universities offering nursing degrees (17 public and four private), they discovered that only two public universities included courses related to CAT, accounting for 9.5% of the total.

Valarezo-García, Cartas [30] analyzed the 61 universities offering a nursing degree in Peru. Among them, 26 universities (42.6%, including 7 public and 19 private institutions) offered CAT subjects or modules as part of the nursing degree curriculum. This accounted for 31.8% of public universities and 48.7% of private universities.

Salles, Homo [31] on the other hand, analyzed nursing schools in Brazil and found that only 26.1% offered CAT subjects, of which only 26% were compulsory.

We observed that in previous studies, the provision of subjects related to CAT was less than 50% of the universities or centers offering the nursing degree, failing to reach a quarter of these in Spain.

We believe that the recommendations of official organizations, coupled with the growing interest in these therapies and the demonstrated effectiveness of several, can significantly enrich the nursing therapeutic arsenal. Moreover, the imperative to distinguish between effective and ineffective therapies, in light of the nursing profession's educational and counseling roles as discussed in the Introduction, warrants the widespread inclusion of these therapies in undergraduate nursing studies.

Conversely, the inadequate provision of CAT subjects fosters skepticism. This skepticism not only discourages the pursuit of further training but also has adverse effects on the development and integration of these interventions into practice [11,32]

Hence, we strongly advocate for the promotion of CAT teaching in nursing studies in Spain, urging political decision-makers to recognize its importance.

In terms of limitations, it is important to emphasize that the findings of our study are confined to the specific context of Spain. Although we have observed consistency with studies conducted in other countries, the extrapolation of our results to international contexts should be approached with caution, considering cultural and organizational variations among healthcare systems and professional practices.

5. Conclusions

The provision of CAT training in Spain's Bachelor's Degree in Nursing is exceedingly limited. Therefore, it is imperative for political decision-makers to expand and promote the academic offering of CAT in nursing programs across Spain.

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