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Communication skills training in undergraduate nursing programs in Spain
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ABSTRACT

Objectives of the present cross sectional study were to analyze the offer of subjects with communication skills in the nursing degree in Spain and to describe the distribution of these subjects. Documentary, systematic and independent search of web pages from Spanish universities was carried out to collect the following variables: subjects with communication skills, course in which the subject is taught, type of teaching (exclusive or combined), type of subject (compulsory or optional) and number of credits on communication skills. Although an average of 3.6 subjects per center was offered, most of the subjects were combined and with little communication content load. In one third of the centers, the offer was below 2.3 credits. Only 1 in 6 centers had exclusive communication skills subjects, and a quarter of them were optional. The teaching load of communication contents was highest in optional subjects. The offer of communication skills contents in Spanish Nursing Schools was scarce and very heterogeneous between centers and between courses in a center, with excessive presence of combined and optional subjects. Our results may be useful when developing the teaching guides for subjects with communication skills, as well as when defining communication **competencies** in the different Nursing Schools.

Keywords:

Teaching; Universities; Education, Nursing, Graduate; Curriculum; Health communication; Spain.

1. INTRODUCTION

Communication skills are the abilities we use to communicate and interact with each other, both verbally and non-verbally, through gestures, body language and our personal appearance (Marín Sánchez and León Rubio, 2001). Communication skills did not become an established expression until the seventies, when its theoretical and conceptual basis were set. That was the moment when attention started regarding communication skills in Health Sciences (Werner and Schneider, 1974).

Adequate communication is essential for health care quality and patient safety (Fossli Jensen et al., 2011; Riedl and Schussler, 2017) and represent an important element of care services (Claramita et al., 2016; Mullan and Kothe, 2010). In nursing, moreover, offering technical support or expert advice is not enough. People expect to be accepted, listened and understood, and communication skills are important to reach these expectations (Martínez-Riera et al., 2010). Thus, communication skills are considered as vital component in nursing care (Mullan and Kothe, 2010).

Several studies have shown the beneficial effect of training communication skills on the improvement of these skills, both in health professionals (nurses included) (Moore et al., 2018) and in nursing students (Mullan and Kothe, 2010; Xie et al., 2013). Therefore, communication skills should be a central concept in nursing training, especially during the undergraduate education (McCarthy et al., 2014; Mullan and Kothe, 2010). In this line, the National Association for Practical Nurse Education and Service (Wishes and Marshall, 2007) and the American Nurses Association (2010) highlight the importance of developing an effective nurse-patient communication in undergraduate and postgraduate education.

In contrast with previous recommendations, research suggests that the quality of communication skills may be a concern in nursing practice, probably due to inadequate training (Mullan and Kothe, 2010).

The nursing degree in Spain is a 4-year-degree of university studies with 240 ECTS (European Credits Transfer System). The length is similar in countries such as the United States or Scotland (vs. a 3-year-degree with 180 ECTS in England and Wales). It is one of the most demanded university studies, requiring a high grade of access for its completion. The nursing degree, as well as the rest of university studies, must be accredited by the National Agency for Quality Assessment and Accreditation of Spain (ANECA in Spanish) (ANECA, 2004), before its introduction in any University -public or private. ANECA is the national agency for quality assessment in higher education, responsible for carrying out assessment, certification and accreditation activities of the Spanish university system with the aim of its continuous improvement and adaptation to the European Higher Education Area (EHEA). ANECA recognizes the communication skills as one of the basic specific competencies that nursing and medicine students should acquire (ANECA, 2004, 2005).

The representation of communication skills teaching in the curriculum of Health Sciences has not been systematically studied yet, especially in Spanish-speaking countries (Ferreira Padilla et al., 2015; Moore et al., 2013). Studies analyzing the process of teaching communication skills and the specific weight of this competence in curricula seems to be more developed in medicine than in nursing both in Spain (Ferreira-Padilla et al., 2016; Ferreira Padilla et al., 2015) and in other countries (Liberali et al., 2017).

However, with the establishment of the EHEA there seems to be a certain interest in guaranteeing the ability of the student to communicate fluently with people, families

and communities, as well as providing an optimal emotional support (ANECA, 2004, 2005).

The objectives of the present study were: 1) to analyze the offer of subjects including communication skills in the nursing degree in Spain, 2) to describe the distribution of these subjects by ownership of the centers (public or private), the type of teaching (exclusive or combined) and the type of subject (compulsory or optional).

To our knowledge, no similar studies have been found in the databases reviewed (Cochrane, Dialnet, EBSCO, Google Scholar, Latindex, PubMed, SCOPUS and Scielo).

2. METHODS

In the present study, 3974 subjects belonging to 110 Nursing Degree's curricula of accredited Spanish universities were analyzed. The methodology used is the same that was used in a similar study in the Spanish Medical Schools (Ferreira-Padilla et al., 2016; Ferreira Padilla et al., 2015).

2.1. Design

This study is a cross-sectional study.

2.2. Population

The study was developed in the teaching-university environment of the Undergraduate Nursing Education in Spain. All the Spanish Nursing Schools that meet the following requirements:

- Teach the official Nursing Degree approved by ANECA during the academic year 2014-2015 and/or the equivalent courses to finish the extinct Nursing Degree.
- Offer the information needed (curricula and teaching guides) through each university websites and/or via e-mail or phone.

The impossibility to obtain the pertinent information about the variables of study through the methods previously mentioned was considered an exclusion criterion.

It was not necessary to calculate the size of the sample since the study was not focused in a representative sample, but in nearly the whole population of Spanish Nursing Schools (95.65%).

2.3. Collection of data

With the aim of contrasting and confirming the data, three of the authors carried out a documentary, systematic and independent research in two different periods (August 2014 and January 2015). This part was developed in three stages:

2.3.1. Stage 1. The free-access database of the Spanish Ministry of Education

(Ministerio de Educación y Ciencia. Gobierno de España, 2017) was consulted to determine the number of existing Nursing Schools during the academic year 2014-2015. Three Nursing Schools did not appear in that list, despite being recognized by the ANECA and the Ministry of Education: University of Granada-Campus of Ceuta, University of Granada-Campus of Melilla and University of La Laguna-Campus of La Palma. On the other hand, we noticed two centers repeated: the European University of Madrid-Valencia Superior Education Center and European University of Valencia. The missing Nursing Schools were included and the repetitions were amended. At this stage, the universities were categorized in two groups depending on their ownership: “*private*” or “*public/State*”.

2.3.2. Stage 2. The curricula and teaching guides were exhaustively reviewed by accessing the websites of all Nursing Schools. Within the curriculum structure, the research was focused on the communication skills contents, regardless of the name of the subject. There was no need to use emails or phone calls to collect

this information. We created two categories: “*existence*” or “*absence of communication skills subjects*”. Amongst the Nursing Schools that offered this type of education, two new groups were established: “*exclusive education*” and “*combined education*”. At this point, 3626 out of the total subjects analyzed (3974) were discarded for including other contents. By agreement, a checklist was created to define how to evaluate each subject in relation with the variables. This checklist was carefully followed by the three authors in charge of this stage.

2.3.3. Stage 3. The *White Book: Degree in Nursing* (ANECA, 2004) was thoroughly studied, focusing on the communication skills contents. This book contains recommendations for the design and implementation of the nursing degree in the Spanish state.

Previous studies (Ferreira-Padilla et al., 2016; Ferreira Padilla et al., 2015) have used this methodology consisting on collecting curriculum data from institutional web pages.

2.4. Study variables

Number of subjects including contents on communication skills in each center, ownership of the center (public or private), course in which the subject is taught (1st, 2nd, 3rd or 4th), type of teaching of the subject (exclusive: the whole subject is about communication skills or combined: the subject includes contents about communication skills and about other topics), type of subject (compulsory or optional), number of credits of each subject and number of credits on communication skills of each subject. A credit is computed as 10 hours of teaching.

2.5. Data analysis

For the descriptive analysis, means, standard deviations and ranges for quantitative variables and absolute frequencies and percentages for qualitative variables were used. For the bivariate analysis, the Fisher test was used for differences of two percentages and the Mann-Whitney U test for differences of two independent means.

The statistical package SPSS® version 19.0 (Windows®) was used for the treatment of the data.

2.6. Ethical issues

Data collected in this research were public and have been used only in the context of this research.

3. RESULTS

Currently there are 115 Nursing Schools in Spain, 22 of private ownership (19.13%) and 93 public or belonging to the State (80.87%). A total of 110 centers were included in this study (95.65%). Five Nursing Schools (4.35%) were excluded for not meeting the selection criteria (all of them public/State): 1) University of Cádiz-Campus of Jerez, 2) University of Sevilla-Virgen del Rocío Hospital's affiliated center, 3) Autonomous University of Barcelona-Campus of Manresa, 4) University of Barcelona-Campus of Sant Joan de Déu and 5) Rey Juan Carlos University-Campus of Alcorcón.

Table 1 shows the distribution of the subjects and number of credits with communication skills contents by course, type of teaching (exclusive or combined) and type of subject (compulsory or optional).

We analyzed 90 public and 20 private centers that offered a total of 348 subjects related to communication skills, which means 3.6 subjects on average per center (standard deviation: 1.4, range: from 1 to 6). Ninety-eight centers (80.09%) offered two or more subjects. The subjects offered included an average of 3.9 credits per center on

communication skills, with a standard deviation of 2.6 and a range of 0.36 to 11.8, with one third of the centers below 2.3 credits offered. The average of credits by subject was 1.2, with a standard deviation of 1.4 and a range of 0.1 to 6, being 65% of the subjects below one credit.

For courses, 40.8% of these subjects were offered in the first year and 27.9% in the third year. The average of credits offered per course was 1.3 in 1st, 1.6 in 2nd, 1.1 in 3rd and 0.6 in 4th.

In relation to the exclusivity of the subjects with respect to communication contents, 94.3% are combined subjects (they include contents of communication skills together with others) and 5.7% are exclusive of communication skills. Only 18 centers (16.4%) offered subjects with exclusive teaching in communication skills. Of them, all offered one subject except one that offers three. Among the combined subjects, the communication contents represented a 21.2% of the teaching load. The average of credits offered in each type of subject was 4.7 in subjects with exclusive teaching and 1.0 in those with combined teaching (Mann-Whitney U, $p < 0.001$, Cohen's d: 3.48, confidence interval [CI] at 95% for Cohen's d: 3.14, 3.81).

Regarding the compulsory nature of the subjects, 88.2% of them were compulsory and 11.8% optional. Among the exclusive subjects, 25.0% are optional. The average of credits offered in each type of subject was 1.2 for compulsory subjects and 1.7 for optional subjects (Mann-Whitney U, $p = 0.02$, Cohen's d: -0.38, CI 95% for Cohen's d: -0.6; -0.17). Credits in optional subjects represent 16% of the total credits offered, with 16 centers where elective credits represent more than 33.3% of the offer.

According to ownership of the centers, the average of credits in public centers was 4.1, compared to 3.2 in private centers (Mann-Whitney U, $p = 0.12$). In public schools, 6.8% of subjects have exclusive teaching, compared to 1.5% in private subjects (Fisher's

test, $p = 0.07$). Among the private centers, there was only one center (5%) that offered subjects with exclusive teaching.

4. DISCUSSION AND CONCLUSION

4.1. Discussion

To our knowledge, this study is the first national approach to the situation of communication skills teaching in Spanish Nursing Schools. A new, exhaustive, and updated database for the academic year of 2014-2015 is offered. Several studies have analyzed how to teach communication skills (Kruijver et al., 2000; Shorey et al., 2018) but few have addressed the presence and quantity of this content in Spain (Ferreira Padilla et al., 2015). Our study complements the analysis of communication skills with the quantity perspective.

This study showed that the offer of communication skills subjects and contents in Spanish Nursing Schools was scarce and very heterogeneous. Although an average of 3.6 subjects per center was offered, most of the subjects were combined and with little communication content load. In one third of the centers, the offer was below 2.3 credits. Only 1 in 6 centers had exclusive communication skills subjects, and a quarter of them were optional. The teaching load of communication contents in the optional subjects was higher than that of the compulsory ones.

The ANECA has not defined a standard of contents about communication skills in the nursing degree but it put this standard for the medicine degree in five credits. Taking into account this reference for nursing, contents of communication skills in the nursing degree were below this standard with one third of the centers reached up to only 46% of this standard.

It is worth mentioning that there is a vast scientific evidence (Anderson and Nelson, 2014; Claramita et al., 2016; Grilo et al., 2014) which recommends the inclusion of this education in the Undergraduate Nursing Education. This answers the need of developing a proper communication profile in order to guarantee an effective therapeutic relationship. As noted the UK Nursing and Midwifery Council in the Standards of proficiency document (Nursing and Midwifery Council, 2018), the ability to communicate effectively and to manage relationships with people is central to the provision of high quality person-centered care. In this document, it was considered critical that communication should have its own set of outcomes to achieve and underpin all the other professional outcomes deemed necessary for a UK nurse of the future.

This study shows that in Spain the 100% of analyzed Nursing Schools include this type of education, either in an exclusive or in a combined way, opposite to the 71.43% of Medical Schools in a recent study (Ferreira Padilla et al., 2015). Comparing credits, the average in Medical Schools (2.77) (Ferreira Padilla et al., 2015) is lower than that of Nursing Schools. These findings may be because traditionally nurses start from a conceptual approach (oriented that way since their university education) towards comprehensive attention and holistic vision of the people. Furthermore, the nurse paradigm is aimed towards self-care and the strengthening of people's skills through an interpersonal connection focused on communication (Cumbie et al., 2004). Granados Gámez (Granados Gámez, 2009) affirms that "*the nurse-patient relationship as a relationship of help, provides care with an identity, standing out from other professions*".

The fourth academic year was the least used by Nursing Schools to teach communication skills. Most of the contents taught in the Undergraduate Nursing

Education are transferable and the time spent in teaching can be much more efficient if the transmission of teaching is promoted to the maximum. More specifically, a problem in passing those skills to clinical practice has been reported in medical literature (Bombeke et al., 2012; Shahsavari et al., 2017). If we expect that students apply the theory in a safe way, it would be interesting to plan the curriculum considering the transfer of learning in an equitable and progressive way along the four years of the degree. In order to do that, a well-known method since the 80's with good results would be teaching based on problems, simulations or role-plays (Anderson and Nelson, 2014; Bell et al., 2014; Cant and Cooper, 2014; Martínez-Riera et al., 2011; Yu and Kang, 2017).

Our study showed the need of improve contents of communication skills in the nursing degree in Spain, increasing the teaching load of this contents, improving their proportional distribution in all courses and warranting the presence of exclusive and compulsory subjects. It is known that medicine (Smith et al., 2007) and nursing students (Ammentorp et al., 2007; Grilo et al., 2014; Lau and Wang, 2013) are able to learn communication skills through practice and to adopt a more positive attitude in the attention focused on the patient and the communication process itself. The education of the new nurses it is not only based in a preparation for thinking, but it is focused in teaching for the correct attention and responsible practice at the service of others.

The acquisition of communication skills is very important for nurse development but, as we have seen in this study, this importance does not guarantee its uniform and proper implementation in undergraduate curricula. Therefore, we think it is convenient that, in each country, the number of credits assigned to communication skills in the nursing degree must be normalized. In addition, this study highlights the importance of periodically monitoring this allocation and may serve as example for this task.

The work in good professions depends on the balance between passion and mastery through the acquisition of competencies, in which the current Degrees are based (Damon et al., 2005). It is all about giving the students of nursing enough skills to face situations in which human relationships have a remarkable meaning, as reported by Gilbert and Wilson (2007) and Sanfey (2007). Therefore, emotional factors play a relevant role in the process of decision-making (Sheldon et al., 2006).

4.1.1. Limitations. It was impossible to collect the teaching information of 5 Nursing Schools. On the other hand, there is not a recommendation of the number of communication skills credits in the Undergraduate Nursing Education of the responsible organization, the ANECA. However, the average 5.0 credit value of the *White Book of the Medicine Degree* was used since these contents are defined with the same characteristics in both degrees (ANECA, 2004, 2005). In order to avoid a possible bias of the information during the data collection, three of the authors carried out two exhaustive reviews of the curricula and teaching guides individually with a period of 5 months between both of them. Finally, the lack of similar studies in Spain or other countries, made it impossible to compare results, as well as to establish the evolution of this education through time.

4.2. Conclusions

The offer of communication skills subjects and contents in Spanish Nursing Schools was scarce and very heterogeneous between centers and between courses into a center, with excessive presence of combined and optional subjects. Our study showed the need to improve contents of communication skills in the nursing degree in Spain, increasing the teaching load of these contents, improving their proportional distribution in all courses and warranting the presence of exclusive and compulsory subjects.

4.3. Practice implications

Our results may be useful when developing the teaching guides for subjects including contents on communication skills, as well as when defining communication competencies in the different Nursing Schools. In addition, it provides a new, reliable and updated database on communication skills teaching in Undergraduate Nursing Education in Spain.

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