PREDICTORS OF NURSES' LEVEL OF PARTICIPATION IN STUDENT CARE: A MULTIVARIABLE ANALYSIS

Abstract

Background:

Objective: To Determine the association and predictive nature of certain socio-demographic, education, work and research variables on nurses' participation level in the clinical care of students

Design: A cross-sectional analytical study using a validated questionnaire between February and June 2014.

Setting and Participants: A consecutive sample of 117 nurses who worked in public health centres in the province of Castellón (Spain) in 2014. The nurses who had never mentored students and the questionnaires that were less than 50% complete were excluded.

Methods: A descriptive analysis of the sample and an association analysis between variables were performed. The questionnaire and its dimensions were performed with a logistic regression and the maximum likelihood method, which used a complementary log-log link method. The concordance index was calculated using contingency tables.

Results: The mean age was 42.56 years, and the overall mean questionnaire score was 122.84 (SD=18.69; 95%CI: 119.415-126.26). Across the sample, 58.1% (n=68) of the nurses obtained an Excellent score, followed by Adequate in 41% (n=48). Overall, the predictive variables were age, mentoring of students in the last 5 years and previous training to mentor students.

Conclusion: The main predictive variable for greater participation in the mentorship of students was previous training in mentoring. This study also reflected on other variables that could influence nurses' participation in student mentoring.

Key words: Nursing student; Nursing education; Clinical clerkship; Preceptorship.

INTRODUCTION

In 2010, universities in Spain adopted the European Higher Education Area (EHEA), which promotes a new educational paradigm that focuses on the student and the acquisition of skills through new pedagogical methods. This paradigm marks a transition in universities and their curricula, which include nursing studies (Maciá Soler et al., 2013).

Most studies on the acquisition and evaluation of competences in nursing have focused on learning in university classrooms (Palese et al., 2014). However, the Community Directive of the European Parliament, which was incorporated into the Spanish legal system in June 2017 (Spain, Royal Decree, 581/2017) and amended the European Directive 2005/36/EC (The Council of the European Union, 2005), establishes minimum training requirements for the free movement of nursing professionals in the European Union. This directive specifies that clinical practice in real settings must account for at least 50% of the curriculum.

Clinical practice comprises training outside the university in health centres. In these settings, it is necessary for educators to streamline knowledge, attitudes and theoretical-practical skills with clinicians to ensure that nurses acquire the skills of the profession.

In the clinical field, the acquisition and evaluation of competences, regulated by agreements, is achieved by training clinical nurses in primary and specialised care in different centres. However, clinical nurses' mentorship of students does not always guarantee learning according to objectives; thus, programmes should select nurses who participate in this learning process (Maciá Soler et al., 2014). Research on clinical learning and student mentorship is one of the most prolific areas in nursing education. Nevertheless, very little is known about the factors that influence nurses' participation in student mentorship (Bland, et al., 2011).

BACKGROUND

The literature indicates that different factors can influence nurses' participation in mentorship tasks. Many authors support the idea that one of the most influential factors is previous training in mentoring students (Dobrowolska et al., 2016; Ownby et al., 2012). Jokelaninen et al. (2013) emphasise that professionals must receive training in curricula and assessment in the clinical field. Moseley and Davies (2008) and Broadbent et al. (2014) suggest that knowing the curricula of students' universities can promote higher levels of involvement in mentoring.

Some nurses perform mentorship duties without having received specific training, and many are confused about their responsibilities as mentors (Newton et al., 2016). Jokelainen et al. (2011) affirm that the functions of mentors in clinical practice are confusing and provide a conceptual framework with four main functions: (i) create a supportive learning environment; (ii) allow an individual learning process; (iii) develop professional attributes and identity; (iv) improve professional competence.

These functions are developed in a context that combines the cultures of two complex organisations: universities and health centres. Lack of time may also influence nurses' participation in mentoring students; sometimes mentors indicate that they face

staff shortages (Walker et al., 2013), a busy clinical environment (Bland et al., 2011) and difficulties combining clinical work with mentoring students (Forber et al., 2016). In fact some authors argue that the workload of professionals who mentor students should be reduced (Croxon and Maginnis, 2009) to reflect their additional responsibilities. Koskinen and Tossavainen (Koskinen and Tossavainen, 2003a, 2003b) note that turnover can also be an influential factor in student mentorship among clinical nurses. In the same vein, the level of care (primary, specialized, social, etc.) and type of nursing contract can also influence participation in mentoring activities (Cervera Gasch, 2017).

Other factors that may influence nurses' involvement in student mentorship are age, training (McCloskey, 2008) and involvement in research (Skela-Savič and Kiger, 2015). A study that compared clinical care patterns in nursing education across eleven countries (Dobrowolska et al., 2016) shows variability in professional profiles, experience and education, and argues for the need to streamline these requirements, at least in the European Union context.

The relationship between the mentor and students is an important determining factor of the effectiveness of the mentorship process which, in turn, has a significant impact on student development and learning (Newton et al., 2016). This relationship can be affected by the mentor's level of participation. The existing qualitative and descriptive literature offers information on socio-demographic, academic and professional factors that may influence nurses' participation on student oversight. Thus the main objective of this study was to determine the association between certain socio-demographic, educational, professional and research-related variables and the participation of nurses in clinical mentorship, as well as the predictive nature of the variables.

METHODS

Design

A cross-sectional study with a validated questionnaire was administered online to determine the association between certain socio-demographic, educational, professional and research-related variables and the participation of nurses in clinical mentorship, as well as the predictive nature of the variables. The study used a multivariate statistical analysis and focused on nursing student clinics in the province of Castellón (Spain) between February and June 2014.

Setting and participants

The study population was the nurses who worked in public health centres in Castellón in 2014 (N=1436). A consecutive sample of cases included nurses with active workstations, and excluded the nurses who had never mentored and the questionnaires that were less than 50% complete. A sample of 112 questionnaires was considered sufficient, with 95% confidence, an accuracy of +/- 3 points, a standard deviation of 15 points in the overall IMSOC questionnaire score and a 20% replenishment percentage.

Variables and procedure

The dependent variable was nurses' level of participation in student mentorship, measured by the IMSOC questionnaire (Cervera Gasch et al., 2017). This questionnaire is composed of 33 items along five dimensions (Involvement, Motivation, Satisfaction, Obstacles, Commitment). The questionnaire was validated with a sample of Spanish nurses who mentor students. Table 1 shows the validation results, the number of items and the overall score ranges for each dimension. The questionnaire uses an ascending 5-point Likert-type scale. Three ordinal categories (Excellent, Adequate and Unsuitable) were established to measure overall participation and in each dimension.

INSERT TABLE 1

The independent variables were socio-demographic (age groups: less than 30 years, between 31 and 40 years, between 41 and 50 years, between 51 and 60 years or over 60 years), academic (degree: undergraduate, masters or PhD; official postgraduate education: none, between 1 and 3 courses, or more than 4; unofficial postgraduate education: none, between 1 and 3 courses, or more than 4), research (conference presentations in the last 5 years: none, between 1 and 3, or more than 4; level of English: none, A1-B1 or B2-C2), professional (contract type: temporary, permanent or other; work environment: primary care, specialized care or other) and mentorship-related (mentored students in the last 5 years: yes or no; received previous training to mentor students: yes or no).

Data collection was carried out between February and June 2014. The nurses received an email with a cover letter that stated the study's objectives and methodology, the voluntary and anonymous nature of their participation, and a link to the online questionnaire developed with the Google Drive platform.

Data analysis

A descriptive analysis of the sample and questionnaire results was performed based on the nature of the variables. For the multivariate analysis, an ordinal logistic regression assessed the overall questionnaire results and all the independent variables. The same method was used for each questionnaire dimension. The logistic regressions used the maximum likelihood method and a complementary log-log link method because the higher category of the dependent variable was expected to be the most frequent.

An initial ordinal logistic regression that included all the independent variables was performed to calculate the Wald z-statistics and to determine the dependence of the variables. A subsequent ordinal logistic regression included only the statistically

significant independent variables in at least one category of the dependent variable, and the model's goodness of the fit was analysed using the likelihood ratio G-statistic and Pearson chi square test and chi square on the basis of deviation. The determination coefficient used to study the explained variability was Nagelkerke's pseudo-R^2 (acceptable values $R^2 \approx 0.5$) because it is difficult for this type of statistic to reach values close to 1. A parallel line test was used to verify the adequacy of the independent variables' coefficients and to determine the model's viability. As a last step to evaluate the predictive capacity of the different models, the predicted categories were stored in a database, and a concordance index (observed agreement; both overall and for each category) was obtained through contingency tables.

In the statistical analyses, this study used version 21 of the SPSS software for an IOS operating system and considered a statistical significance level of $p < 0.05$.

Ethical considerations

The ethical principles of biomedical scientific research were respected in accordance with Spanish legislation on data protection (Law 42/2002 of 14 November, Law 15/1999 of 15 December). The questionnaire did not collect personal data that would allow participants to be identified, and its completion was voluntary. To ensure data confidentiality, all the information was password-encrypted.

RESULTS

Description of the sample, questionnaire and categories

The study collected 117 questionnaires. The mean age was 42.56 years (SD=8.48, 95%CI: 40.97-44.14). In education, 89.7% (n=105) of the sample had a technical degree or undergraduate nursing degree, and 10.3% (n=12) had a master's degree. Furthermore, 39% (n=46) of the sample had completed between 1 and 3 official postgraduate training

courses, and 29.1% (n=34) had completed some unofficial postgraduate training. In conference presentations, 59% (n=69) had not presented in recent years. The level of English that predominated was basic, with 59% (n=69) of the sample. In professional categories, 46.2% (n=54) had a permanent contract, and 73.5 (n=86) worked in specialised care. Finally, 76.1% (n=89) had mentored nursing students in the last 5 years, and 76.1% (n=89) had undergone training to mentor students (Table 2).

INSERT TABLE 2

The overall mean questionnaire score was 122.84 (SD±=18.69, 95%CI: 119.415-126.26). The involvement dimension obtained an average score of 29.59 (SD±7.46, 95%CI: 28.22-30.96); motivation, 25.09 (SD±= 3.31, 95%CI: 24.49-15.7); satisfaction, 25.86 (SD±5.92, 95%CI: 24.78-26.94); obstacles, 20.56 (SD±5.04, 95%CI: 16, 64-21,49); and commitment, 21.74 (SD±2.71; 21.24-22.23). Overall, 58.1% (n=68) of the nurses obtained an Excellent score, followed by Adequate in 41% (n=48), and one case fell in the Unsuitable category. Table 3 shows the distribution of the participants in the different categories.

INSERT TABLE 3

Multivariate analysis results.

Overall the results of the first ordinal logistic regression included all the socio-demographic variables of the study. The parallel line test did not confirm that the estimates were the same for all the variables in the dependent category ($p < 0.001$). The variables that had statistically significant categories that were included in the posterior logistic regressions based on Wald's z-statistics were as follows: age, student mentorship in the last 5 years and previous training in mentoring students ($p < 0.05$) (Table 4).

INSERT TABLE 4

The global adjustment test with the G-statistic confirmed that the model that included the variables was an improvement on the model that included only the constant (chi-square = 35,334; p <0.01). The model's goodness of fit was confirmed with the Pearson chi (chi = 14.485, p = 0.983) and chi squared based on deviation (chi = 13.13, p = 0.992). The Nagelkerke pseudo-R^2 obtained a value of 0.355, and the parallel line test confirmed that the ß coefficients were the same for all the categories of the independent variables (chi-square = 4.963; p = 0.549).

Table 5 shows the frequency distribution of the original categories in the IMSOC questionnaire and the categories predicted according to the ordinal logistic regressions. The concordance index was 0.73 points, which established that, overall, the model correctly predicted the categories in 73% (n=82) of cases. The model also predicted 62.2% (n=28) of the cases in the Adequate category and 81.4% (n=54) in the Excellent category, but did not predict the only Unsuitable case.

INSERT TABLE 5

Table 6 shows that, for all questionnaire dimensions, the global fit test with the G-statistic confirmed that the model improved when the variables were included. It also picked up the model's goodness of fit results, the pseudo-R2 of Nagelkerke and the test of parallel lines. In the Motivation and Commitment dimensions, the parallel line test did not confirm that the estimates were the same for all the categories (p <0.001), which indicates lack of feasibility for the models. Table 7 shows the statistically significant variables (p <0.05) after the first logistic regression ordinals for each questionnaire dimension and in their respective models.

INSERT TABLE 6

INSERT TABLE 7

Regarding the models' predictive capacity by dimension, Involvement tended to classify subjects into higher categories. Moreover, the model did not adequately predict any case in the Unsuitable category, but assigned most to the next higher category (66.7%; n=10); most cases in the Adequate category were also assigned to the next higher category (76.5%, n=26), and 80.4% (n=90) of the cases in the Excellent category were adequately predicted. In Satisfaction, the model correctly predicted the categories in 62.2% (n=73) of cases, and the model classified all the cases in the Adequate category. Finally for Obstacles, the model correctly predicted the categories in 68.47% (n=76) of cases. The success rate in the Adequate category was 82.6% (n=57), and the remaining cases (n=12) were classified as Excellent. The model classified the 35 cases in the Excellent category in the same category and in the Adequate category with values that came close to 50%.

DISCUSSION

In nursing education, clinical practice accounts for 50% of the educational programmes in the European Union. Thus supervising nurses has a huge impact on students' training.

This study identified factors that influence nurses' participation in mentoring students. Firstly, the work environment shows a predictive character in involvement, motivation, and commitment, but not at a global level. This finding can be related to the fact that in primary care, students come into contact with their supervisors more; in specialized care, shift work makes this contact difficult (Palese et al., 2017). Moreover in primary care, nursing professionals have more autonomy and engage in more collaboration than they do in specialized care, which may lead to more participation in mentorship.

The research-related variables were not found to predict participation in student mentorship. According to Scala et al. (2016), awareness of the importance of nursing research is poor and an unwillingness to conduct it is frequent. In addition, the level of English among student supervisors was found to predict better participation in the Satisfaction dimension. Some studies (Luk & Maithus, 2012; Mikkonen et al., 2016) also indicate that professionals with good language skills are better able to mentor students, although it is noteworthy that this finding occurred only in Satisfaction, and not in the overall questionnaire or in other dimensions.

The main factor found with a predictive character for nursing professionals who teach in the clinical field, both across the questionnaire and in each dimension, was previous training in mentoring students. These results confirm the findings of previous studies (Jokelainen et al., 2013; Omansky, 2010; Newton et al., 2016), which show that such training is essential to prepare professionals. Thus training programmes, tailored to country characteristics, should be encouraged (Dobrowolska et al., 2016).

Organisational models of clinical practice, such as Dedicated Education Units, particularly emphasise the creation of a positive clinical learning environment by maximising student learning outcomes and fostering student-mentor relationships (DeMeester, 2016; Randon et al. 2017; Jones et al., 2011). The pillars of this model include pre-service training for nursing students, close ties with universities for nurses to provide clinical instruction with faculty support (Nishioka et al., 2014), and periods of clinical practice that last at least 6 weeks during which each nurse supervises a student (1:1 ratio) (McKellar and Graham, 2017). Other authors concur that the relationship between mentors and universities can promote improved clinical practice education (Kim and Shin, 2017).

The model implemented **into** the Universitat Jaume I, where this study was conducted, is similar to the Dedicated Education Units model (Franklin, 2013). The selection criteria for nurses were_as follows: nursing experience, previous training in mentorship of university students and commitment to the position for the duration of the clinical practice period. In addition, mentors and students were assigned with a 1:2 ratio, and a link teacher played a supporting role, did_a teaching job at the same institution, and provided the link between care centres and the university without receiving teaching credits. It should be noted that professionals in Spain are accustomed to a traditional clinical practice model, with little or no relationship between health centres and universities, and very few universities have adopted innovative teaching methodologies in clinical practice (Zabalegui and Cabrera, 2009; Arrogant, 2017).

This study limitations are its small sample size_was small and limited to one province in Spain. Despite these limitations, the results are interesting because they provide evidence for the variables that influence nurses' participation in supervising students and can be used in selection processes. The results also allow the screening of nurses with a low mentoring predisposition, and for universities and care centres to undertake_collaborative activities that improve nurse participation and the quality of learning.

Future research might address the association of the variables that were not included in this study and expand the sample population. In addition, the IMSOC questionnaire could be combined with tools that measure other variables in clinical practice. For example, the CLES + T questionnaire (Saarikoski et al., 2008) is designed and validated to measure the quality of a learning environment and to mentor from the student's perspective. This measure is also validated in Spanish (Vizcaya-Moreno et al.,

2015), which would permit the selection of highly involved clinical mentors and optimal learning environments.

CONCLUSION

The variables that predict higher levels of participation in student mentorship are working environment, level of English and, mainly, previous training in mentorship.

The results on the obtained models' predictive value are limited, which may prompt reflection on other variables that may influence nurses' involvement in supervising students. Such variables may be seniority in the workplace, work stress and the fit between professional training and a nurse's current position.

REFERENCES:

Arrogante, O. 2017. Nursing education in Spain. Nurse Education in Practice, 24, 27-28. https://doi.org/10.1016/j.nepr.2017.03.003

Bland, M., Oakley, D., Earl, B., & Lichtwark, S. 2011. Examining the barriers to RN transition for students on competency assessment programmes. Nursing New Zealand. 17(5), 18-21.

Broadbent, M., Moxham, L., Sander, T., Walker, S., Dwyer, T. 2014. Supporting bachelor of nursing students within the clinical environment: perspectives of preceptors. Nurse Education in Practice, 14(4), 403-409. https://doi.org/10.1016/j.nepr.2013.12.003

Cervera Gasch, A., Macia Soler, L., Torres Manrique, B., Mena Tudela, D., Salas Medina, P., Orts Cortes, MI., Gonzalez Chordá, VM., 2017 Questionnaire to Measure the Participation of Nursing Professionals in Mentoring Students. *Investigacion y Educación en Enfermeria*. 35(2):182-90. http://dx.doi.org/10.17533/udea.iee.v35n2a07

Cervera Gasch, A., Gonzalez Chorda, VM., Mena Tudela, D., Salas Medina, P., Folch Ayora, A., Macia Soler, L., 2017. Participation of clinical nurses in the practical education of undergraduate nursing students. *Enfermeria Clinica*. In press. https://doi.org/10.1016/j.enfcli.2017.11.003

Croxon, L., Maginnis, C. 2009. Evaluation of clinical teaching models for nursing practice. Nurse Education in Practice, 9(4), 236-243. https://doi.org/10.1016/j.nepr.2008.06.004

DeMeester, DA. 2016. The Lived Experience of Nursing Faculty in a Dedicated Education Unit. *The Journal of Nursing Education*, *55*(12), 669-674. https://doi.org/10.3928/01484834-20161114-02

Dobrowolska, B., McGonagle, I., Kane, R., Jackson, C. S., Kegl, B., Bergin, M., Cabrera E, Cooney-Miner, D., Di Cara, V., Dimoski, Z., Kekus, D., Pajnkihar, M., Prlić, N., Sigurdardottir, AK., Wells J, Palese, A. 2016. Patterns of clinical mentorship in undergraduate nurse education: A comparative case analysis of eleven EU and non-EU countries. *Nurse Education Today*, 36, 44-52. https://doi.org/10.1016/j.nedt.2015.07.010

Forber, J., DiGiacomo, M., Carter, B., Davidson, P., Phillips, J., Jackson, D. 2016. In pursuit of an optimal model of undergraduate nurse clinical education: An integrative review. *Nurse Education in Practice*, 21, 83-92. https://doi.org/10.1016/j.nepr.2016.09.007

Franklin, N. 2013. Clinical supervision in undergraduate nursing students: a review of the literature. E-J. Bus. Education. Scholarsh. Teacher.7:34–42.

Jokelainen, M., Turunen, H., Tossavainen, K., Jamookeeah, D., Coco, K. 2011. A systematic review of mentoring nursing students in clinical placements. Journal

of Clinical Nursing, *20*(19-20), 2854-2867. https://doi.org/10.1111/j.1365-2702.2010.03571.x

Jokelainen, M., Jamookeeah, D., Tossavainen, K., Turunen, H. 2013. Finnish and British mentors' conceptions of facilitating nursing students' placement learning and professional development. Nurse Education in Practice, 13(1), 61-67. https://doi.org/10.1016/j.nepr.2012.07.008

Jones, P. W., Brusselle, G., Negro, R. W. D., Ferrer, M., Kardos, P., Levy, M. L., Perez T, Soler Cataluña, JJ., Van der Molen, T., Adamek, L., Banik, N. 2011. Properties of the COPD assessment test in a cross-sectional European study. European Respiratory Journal, 38(1), 29-35. https://doi.org/10.1183/09031936.00177210

Kim, EK., Shin, S. 2017. Teaching efficacy of nurses in clinical practice education: A cross-sectional study. Nurse Education Today, 54, 64-8. https://doi.org/10.1016/j.nedt.2017.04.017

Koskinen, L., Tossavainen, K. (2003a). Characteristics [correction of charactersistics] of intercultural mentoring--a mentor perspective. Nurse Education Today, 23(4), 278-85.

Koskinen, L., Tossavainen, K. (2003b). Relationships with undergraduate nursing exchange students--a tutor perspective. Journal of Advanced Nursing, 41(5), 499-508.

Lu, H., Maithus, C. 2012. Experiences of clinical tutors with English as an additional language (EAL) students. Nursing Praxis in New Zealand Inc, *28*(3), 4-12.

Maciá Soler, L., Orts Cortés, I., Galiana Sánchez, M., Ors Montenegro, A., 2013. Simultaneous implementation of the bachelor, master and PhD degrees in the Universidad Jaume I. Castellón de la Plana, Spain. Investigacion y Educacion en

enfermeria. 31 (2), 305–314. Disponible en: http://aprendeenlinea.udea.edu.co/revistas/index.php/iee/article/view/14121

Maciá Soler, ML., González Chordá, VM., Salas Medina, P., Mena Tudela, D., Cervera Gasch, Á., Orts Cortés, MI., 2014. Level of involvement of clinical nurses in the evaluation of competence of nursing students. Investigación y Educación en Enfermería, 32(3):461-70. https://doi: 10.1590/S0120-53072014000300011

McCloskey, D. J. 2008. Nurses' perceptions of research utilization in a corporate health care system. Journal of Nursing Scholarship: An Official Publication of Sigma Theta Tau International Honor Society of Nursing, 40(1), 39-45. https://doi.org/10.1111/j.1547-5069.2007.00204.x

McKellar, L., Graham, K. 2017. A review of the literature to inform a best-practice clinical supervision model for midwifery students in Australia. Nurse Education in Practice, 24, 92-98. https://doi.org/10.1016/j.nepr.2016.05.002

Mikkonen, K., Elo, S., Tuomikoski, A.-M., Kääriäinen, M. 2016. Mentor experiences of international healthcare students' learning in a clinical environment: A systematic review. Nurse Education Today, 40, 87-94. https://doi.org/10.1016/j.nedt.2016.02.013

Moseley, L. G., Davies, M. 2008. What do mentors find difficult? Journal of Clinical Nursing, *17*(12), 1627-1634. https://doi.org/10.1111/j.1365-2702.2007.02194.x

Newton, L., Pront, L., Giles, TM. 2016. Experiences of registered nurses who supervise international nursing students in the clinical and classroom setting: an integrative literature review. Journal of Clinical Nursing, *25*(11-12), 1486-1500. https://doi.org/10.1111/jocn.13127

Nishioka, VM., Coe, MT., Hanita, M., Moscato, SR. 2014. Dedicated education unit: nurse perspectives on their clinical teaching role. Nursing Education Perspectives, 35(5), 294-300.

Omansky, G. L. 2010. Staff nurses' experiences as preceptors and mentors: an integrative review. Journal of Nursing Management, 18(6), 697-703. https://doi.org/10.1111/j.1365-2834.2010.01145.x

Ownby, K., Schumann, R., Dune, L., & Kohne, D. 2012. A comparison of a traditional clinical experience to a precepted clinical experience for baccalaureate-seeking nursing students in their second semester. Nursing Research and Practice, 276506. https://doi.org/10.1155/2012/276506

Palese, A., Zabalegui, A., Sigurdardottir, AK., Bergin, M., Dobrowolska, B., Gasser, C., Pajnkihar, M., Jackson, C. (2014). Bologna process, more or less: nursing education in the European economic area: a discussion paper. International Journal of Nursing Education Scholarship, 2; 11. https://doi.org/10.1515/ijnes-2013-0022

Palese, A., Basso, F., Del Negro, E., Achil, I., Ferraresi, A., Morandini, M., Mansutti, I. 2017. When are night shifts effective for nursing student clinical learning? Findings from a mixed-method study design. Nurse Education Today, *52*, 15-21. https://doi.org/10.1016/j.nedt.2017.02.005

Randon, G., Bortolami, E., Grosso, S. (2017). Un ritorno ai «reparti scuola»? Le unità dedicate alla formazione (DEU). Assistenza Infermieristica e Ricerca, *36*(1), 24-30.

Saarikoski, M., Isoaho, H., Warne, T. Leino-Kilpi, H. 2008. The nurse teacher in clinical practice: developing the new sub-dimension to the Clinical Learning

Environment and Supervision (CLES) Scale. International Journal of Nursing Studies, 45(8), 1233-1237. https://doi.org/10.1016/j.ijnurstu.2007.07.009

Scala, E., Price, C., Day, J. 2016. An Integrative Review of Engaging Clinical Nurses in Nursing Research. Journal of Nursing Scholarship: An Official Publication of Sigma Theta Tau International Honor Society of Nursing, 48(4), 423-430. https://doi.org/10.1111/jnu.12223

Skela-Savič, B., Kiger, A.(2015. Self-assessment of clinical nurse mentors as dimensions of professional development and the capability of developing ethical values at nursing students: A correlational research study. Nurse Education Today, *35*(10), 1044-1051. https://doi.org/10.1016/j.nedt.2015.04.003

Spain, 2017. [Royal Decree 581/2017 of 9th June, Incorporating into the Spanish legal order Directive 2013/55 / EU of the European Parliament] (Real Decreto 581/2017, de 9 de junio, por el que se incorpora al ordenamiento jurídico español la Directiva 2013/55/UE del Parlamento Europeo). Boltín oficial del Estado pp. 48159-19 del 10 de Junio de 2017. Available from: https://www.boe.es/diario_boe/txt.php?id=BOE-A-2017-6586

The Council of the European Union, 2005. European Directive 2005/36/CE, 7th September 2005, on the Recognition of Professional Qualifications. Available from:

https://www.educacion.gob.es/educa/incual/pdf/rec/03_Directiva_reconocimiento_cualificaciones.pdf

Vizcaya-Moreno, MF., Pérez-Cañaveras, RM., De Juan, J., Saarikoski, M. 2015. Development and psychometric testing of the Clinical Learning Environment, Supervision and Nurse Teacher evaluation scale (CLES+T): the Spanish version.

International Journal of Nursing Studies, *52*(1), 361-367. https://doi.org/10.1016/j.ijnurstu.2014.08.008

Walker, S., Dwyer, T., Moxham, L., Broadbent, M., Sander, T. 2013. Facilitator versus preceptor: which offers the best support to undergraduate nursing students? Nurse Education Today, *33*(5), 530-35. https://doi.org/10.1016/j.nedt.2011.12.005

Zabalegui, A., Cabrera, E. 2009. New nursing education structure in Spain. Nurse Education Today, 29(5), 500-504. https://doi.org/10.1016/j.nedt.2008.11.008