

Are knowledge and skills acquired during the Master Degree in Nursing actually put into practice? A pilot study in Italy

Azzurra Massimi⁽¹⁾, Carolina Marzuillo⁽¹⁾, Marco Di Muzio⁽¹⁾, Maria Rosaria Vacchio⁽¹⁾,
Elvira D'Andrea⁽¹⁾, Paolo Villari⁽¹⁾, Corrado De Vito⁽¹⁾

(1) Department of Public Health and Infectious Diseases, Sapienza University of Rome, Piazzale Aldo Moro, 5 – 00185 Rome, Italy

CORRESPONDING AUTHOR: Prof. Paolo Villari, Department of Public Health and Infectious Diseases, Sapienza University of Rome, Piazzale Aldo Moro 5, Rome, 00185, Italy, phone: +39 06 49914886, fax: +39 06 49914449, E-mail: paolo.villari@uniroma1.it

DOI: 10.2427/11684

Accepted on February 16, 2016

ABSTRACT

Background: Literature on the evaluation of the Master's Degree in Nursing is scarce. The objective of this pilot study was to test a questionnaire aimed at monitoring the activities of nurses after receiving the Master's degree.

Methods: An electronic questionnaire was administered to 36 graduates who obtained the Master's degree during the academic year 2010/2011.

Results: Almost 80% of the participants judged their level of improvement in knowledge and skills during the course to have been satisfactory, but the level of implementation of these competencies at work was quite low. The quality of the course was judged more than acceptable by 62.8% of the respondents. Graduation has resulted in general career advancement for 8.6% of the respondents.

Conclusion: Competencies acquired during the Master's degree course are not always put into practice.

Key words: Master's degree, nursing, survey

INTRODUCTION

Both the aging of the population and the success of modern medicine, which extends lifespan with improved medications, surgical techniques, diagnostic imagery, etc., increase the demand and complexity of healthcare systems [1,2]. As a consequence, the need for nurses will grow hugely and the availability of nurses specifically trained to address the issues of an aging population will be critical to a nation's ability to meet its citizens' healthcare requirement [3]. The increasing number of graduate nurse specialists is a reflection of these complex needs. European

nursing education has evolved as a result of the Bologna process that has led to a shift of nurse training from vocational to higher education. In Italy, there have been several reforms in nursing education that have implemented EU directives aimed at harmonising curricula and degree structures. Several surveys have been conducted to assess knowledge and/or level of competence of nurses after their bachelor degree [4,5], but to our knowledge there is a lack of studies aimed at evaluation self-assessed quality and effectiveness of the post-graduate education in Nursing, except for some thematic knowledge areas [6]. The objective of this pilot study was to test a specific

questionnaire aimed at monitoring the activities of nurses after receiving the Master's degree. In particular, the questionnaire interrogates i) the level of knowledge and skills acquired during the degree course; ii) the level of implementation at work of knowledge and skills acquired during the degree course; iii) the professional advancement ascribable to the Master's degree; iv) the quality of the course as judged by respondents.

METHODS

The questionnaire was administered electronically to the graduates of a Master's Degree in Nursing at the Sapienza University of Rome, Italy, during the period December 2013-January 2014. The 36 graduates involved obtained the Master's degree during the academic year 2010/2011. The questionnaire, developed on the basis of the AlmaLaurea Survey [7] – a tool that provides an annual profile of the main characteristics of graduates and their satisfaction with the course of study just completed – consists of 36 items grouped into six categories to identify demographic characteristics (7 items), occupational status (10 items), acquisition of knowledge and skills during the degree course (6 items), implementation at work of the knowledge and skills acquired (4 items), professional advancement after the course (4 items), and perception of the quality and attractiveness of the course (5 items). The demographic characteristics investigated were gender, age, age at graduation, final grades, length of study and previous professional qualification. Items related to occupational status included employment, profession, health facility, type of work contract and hierarchical position. Questions on the acquisition and implementation of knowledge and skills focused on the four study areas of the degree course: clinical, educational, managerial and research. Career progress was explored in relation to professional, hierarchical and economical advance, as well as changes in duties and/or responsibility assigned. Each of these items was rated using a scale from 0 ("not at all") to 4 ("to a large extent"). Quality and attractiveness of the course were judged using a five-point scale (from "poor" to "excellent"), which was also used to assess changes in this opinion over time; relevance of the course for the present employment; whether, in hindsight, the same course would be chosen again; and whether the course would be recommended to future students (see Appendix for further details).

An information letter with details of the study, including its purpose and an internet link for the survey, was sent to the participants by email. A reminder email, preceded by phone contact, was sent four weeks later to those participants who had not answered the first email.

Statistical analysis was performed with Stata version 12.0 software (Stata Corporation, College Station, TX, USA) using, for this pilot phase, descriptive analysis

(frequencies, percentages, mean values, SD).

The ethics committee of Sapienza University gave ethical approval for the study. All data were processed anonymously.

RESULTS

A total of 35 participants (response rate: 97.0%) completed the survey after the reminder. The age of the respondents ranged from 27 to 57 years (mean age: 38 years), 69.0% were female, more than 90% were nurses, with 65.7% of participants working in a hospital or a teaching hospital. The degree course lasted two academic years for 86.0% of graduates; the final grades ranged from 93 to 110 cum laude, with a mean value of 105 (\pm 5.7 SD) (Table 1).

TABLE 1. Socio-demographic characteristics of the respondents.

CHARACTERISTICS	N (%)
Gender	
Male	11 (31.4)
Female	24 (68.6)
Age at the time of survey, in years	
≤35	15 (42.9)
36-45	12 (34.3)
>45	8 (22.8)
Graduation age, in years	
≤35	18 (51.5)
36-45	11 (31.4)
>45	6 (17.1)
Final grade of the degree (maximum 110)	
≤ 99	6 (17.1)
100-108	14 (40.0)
≥109	15 (42.9)
Title of current position	
Nurse	32 (91.4)
Pediatric Nurse	0 (0)
Midwife	3 (8.6)
Hierarchical position	
Basic	32 (91.4)
Expert	3 (8.6)
Health facility	
Hospital	18 (51.4)
Teaching hospital	5 (14.3)
Private hospital	7 (20.0)
Primary care	2 (5.7)
Private practice	0 (0)
Other	3 (8.6)

Overall, 65.7% of respondents believed, at the time of graduation, that they had acquired knowledge and skills useful for their future job; 57.2% of the respondents still considered the knowledge and skills acquired useful at the time of the survey. A total of 80.0% of participants believed that their knowledge and skills were somewhat or totally improved during the course in educational area; similar results were obtained in research (80.0%) and managerial areas (74.3%). The level of implementation of

these competencies at work was lower, however, since 54.3% of the respondents declared to have implemented in their job the skills acquired in the educational area, 48.6% in the research area and 40.0% in the managerial area. Graduation had resulted in career advancement for 8.6% of the respondents, while 11.4% reported an advancement in responsibility assigned; only 5.8% thought they were financially better off (Table 2).

The quality of the course was judged more than

TABLE 2. Opinions of the respondents on the acquisition and implementation of knowledge and skills, professional advancement, relevance and attractiveness of the course.

QUESTIONS	N (%)			
	Not at all	Very little	Somewhat	To a large extent
Acquisition of knowledge and skills				
On graduation, did you believe that you had acquired knowledge and/or skills useful for your future job?	3 (8.6)	9 (25.7)	14 (40.0)	9 (25.7)
In retrospect, do you believe that you acquired knowledge and/or skills useful for your job during the degree course?	2 (5.7)	13 (37.1)	10 (28.6)	10 (28.6)
Do you believe that your clinical skills improved during the degree course?	5 (14.4)	13 (37.1)	11 (31.4)	6 (17.1)
Do you believe that your educational skills improved during the degree course?	1 (2.9)	6 (17.1)	18 (51.4)	10 (28.6)
Do you believe that your management skills improved during the degree course?	3 (8.6)	6 (17.1)	16 (45.7)	10 (28.6)
Do you believe that your research skills improved during the degree course?	5 (14.3)	2 (5.7)	20 (57.1)	8 (22.9)
Implementation of knowledge and skills				
Have you effectively implemented in your job the clinical skills acquired during the degree course?	5 (14.3)	17 (48.5)	10 (28.6)	3 (8.6)
Have you effectively implemented in your job the educational skills acquired during the degree course?	3 (8.6)	13 (37.1)	15 (42.9)	4 (11.4)
Have you effectively implemented in your job the management skills acquired during the degree course?	8 (22.9)	13 (37.1)	10 (28.6)	4 (11.4)
Have you effectively implemented in your job the research skills acquired during the degree course?	6 (17.1)	12 (34.3)	13 (37.2)	4 (11.4)
Professional advancement				
Did graduation allow you to advance professionally?	28 (80.0)	4 (11.4)	2 (5.7)	1 (2.9)
Did graduation allow you to advance economically?	32 (91.3)	1 (2.9)	1 (2.9)	1 (2.9)
Did graduation allow you to advance hierarchically?	30 (85.7)	3 (8.6)	2 (5.7)	0 (0)
Did graduation allow you to advance in terms of responsibility?	24 (68.6)	7 (20.0)	2 (5.7)	2 (5.7)
Relevance and attractiveness of the course				
Do you believe that the degree course is essential for your present job?	3 (8.6)	15 (42.9)	11 (31.4)	6 (17.1)
Would you recommend the degree course to other students?	3 (8.6)	11 (31.4)	10 (28.6)	11 (31.4)

acceptable (good/very good) by 62.8% of the respondents; this judgment remains unchanged or improved by the time of graduation for almost all respondents (94.3%) (data not shown); 68.6% would choose the same course again and 60.0% would recommend the course to other students.

DISCUSSION

This sample of Italian graduates of the Master's Degree in Nursing reported high levels of satisfaction with the course, as well as high levels of improvement in knowledge and skills in all areas, but there was a lower level of implementation of the acquired competencies at work, in particular in management.

It is perhaps surprising that the literature on the evaluation of the Master's Degree in Nursing is scarce, because there is heated debate about the importance of training nurses with good managerial skills. Providing nurses with advanced leadership skills, management skills and team working skills is one of the stated outcomes of the Master's degree [8] and forms part of the nursing competency categories that are required for compliance with the Bologna process [9]. This vocation of the Master's Degree in Nursing reflects the increasing specialisation of the profession and the need to prepare nurses to work in advanced management roles [8]. However, it has been reported that the Master's Degree in Nursing, although perceived as relevant for recruitment to jobs in academia, is not thought by nurse managers to be useful for positions in clinical nursing or nurse management [10,11]. This finding was refuted by the results of a recent study showing that Master's level education has a positive impact on the development of leadership competencies [6]. As also shown by this pilot study, nurses maintain that completing a higher degree course in itself develops higher order thinking skills. Subsequent applications for senior clinical, managerial and educational positions, however, are sporadic. The main limitation of this study concerns the administration of the questionnaire two years after graduation: this short follow-up may result in an underestimation of some events. However, the fundamental purpose of this study was to pretest and pilot the questionnaire; specific aspects such as the level of implementation at work of knowledge and

skills acquired during the degree course or the professional advancement ascribable to the Master's degree will be appropriately measured through a large multicenter study that will involve all Italian Universities and will allow us to provide an overview of the Italian context.

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