



“Where would I prefer to work after graduation?” Career preferences of students attending Italian nursing schools



Maria Matarese*, Marzia Lommi, Michela Piredda, Anna Marchetti, Maria Grazia De Marinis

Research Unit Nursing Science, Campus Bio Medico University, Via Álvaro del Portillo 21, Rome, Italy

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ABSTRACT

Background: Worldwide, nursing students have reported a preference for working in intensive care, paediatrics, and operating theatres after graduation, disregarding psychiatry and geriatrics. Many factors can influence student choices. Educators need to know students' preferences and influencing factors in order to plan appropriate interventions to orient future nurses towards the clinical areas that are most in need of trained and motivated nurses.

Objectives: To identify career preferences and student-related factors that influence the career intentions of students attending Italian nursing schools.

Design: A cross sectional design.

Setting: The study was conducted in 14 Italian nursing schools.

Participants: Students enrolled on a three-year undergraduate nursing program were invited to participate.

Methods: A questionnaire was used to collect sociodemographic data and clinical area preferences. A multivariate binary logistic regression was performed to identify the student characteristics influencing career choices.

Results: 1534 students were enrolled in the study. Students preferred working in paediatrics, emergency departments and operating theatres, and these preferences were consistent in all of the three years. Psychiatry and geriatrics were the clinical areas least preferred in all the three years. Age, gender, nationality, and university attended were the factors that predicted students' preferences for specific clinical areas.

Conclusions: In line with international literature, students attending Italian nursing schools expressed preferences for working in some clinical areas and to disregard others. Nursing curricula and internships need to be reviewed in terms of declared and hidden curriculum in order to enable students to view all areas of practice as equally valuable.

1. Introduction

Worldwide, nursing students seem to prefer working in some clinical areas and to disregard others. Studies conducted in Australia show that the career aspirations of nursing students at the beginning of their education is to work with children, in maternity wards, in operating theatres and intensive care; at the end of their course, working with children or in intensive care remain their first choices together with surgical wards. Elderly and psychiatric care are the least popular areas of choice during the whole length of the course (Stevens and Crouch, 1995; Happell, 2002). Similarly, in Sweden the most preferred areas of practice for first-year nursing students are emergency departments, surgical, paediatric and maternity wards, while the least favoured are

geriatric wards and homecare (Fagerberg et al., 1997). Norwegian first-year nursing students prefer midwifery and paediatrics, and identify aged care as the least preferred option; at the end of the course they confirm these preferences, but medical/surgical areas increase in popularity (Kloster et al., 2007). Similarly, Chinese nursing students desire to work in paediatrics, maternity wards and operating theatres, with surgical and medical wards, and community care becoming more popular at the end of the course; psychiatrics and elderly care are the least preferred in all the four years of the course (Shen and Xiao, 2012). In Israel, nursing students prefer critical care, paediatrics and emergency departments at the beginning and at the end of their education, with an increased preference for community care at graduation, whereas geriatrics and psychiatrics are constantly reported as the least

* Corresponding author.

E-mail addresses: m.matarese@unicampus.it (M. Matarese), m.piredda@unicampus.it (M. Piredda), a.marchetti@unicampus.it (A. Marchetti), m.demarinis@unicampus.it (M.G. De Marinis).

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preferred areas (DeKeyser Ganz and Kahana, 2006). In the USA nursing students prefer working in paediatrics and intensive care rather than in medical or surgical wards (Fenush and Hupcey, 2008).

In summary, international literature shows that working with children or new-borns, intensive care and emergency departments are the most widely preferred career areas for nursing students at the beginning of their course, and these areas continue to attract students throughout their education. Other clinical areas, such as surgery and community care, which are not considered appealing at the beginning, appear more desirable at the end of nursing education. Psychiatric and geriatrics are constantly the least preferred areas.

2. Background

Many studies have been conducted to identify the factors that can affect nursing students' career preferences, but their results are conflicting. For example, clinical experience with healthy and sick older people can increase positive perceptions of the elderly (Burbank et al., 2006; Fox and Wold, 1996; Haight et al., 1994; Sheffler, 1995) or increase negative attitudes (Aud et al., 2006; Brown et al., 2008; Treharne, 1990). Even when the learning experiences affect attitudes positively, students do not express any intention of working in aged care (Dellasega and Curriero, 1991; Herdman, 2002; Mezinskis and Purdon, 1995). Similarly, clinical placements in mental health settings and attending specific theoretical courses can have a positive influence on students' attitudes towards mentally ill people, but these attitude modifications do not result in changes in working preferences (Happell, 2009; Rushworth and Happell, 2000). Unlike some clinical areas of nursing practice, such as surgery wards or community care that become more popular after clinical training, the psychiatric or geriatrics areas remain unpopular even following a positive clinical experience, as if these areas possess intrinsic characteristics that make them less appealing and desirable (Marsland and Hickey, 2003).

Other factors that can influence career intentions are student age and gender. Some studies have shown that older students have a more positive attitude towards the elderly and report greater interest in working with them than younger ones (Haight et al., 1994; Hweidi and Al-Obeisat, 2006; Sheffler, 1995; Soderhamn et al., 2001) whereas others show that younger students have more positive attitudes towards the elderly than older students (Shen and Xiao, 2012). Moreover, male and female students may have different attitudes towards diverse age groups: male students may present negative (Slevin, 1991; Soderhamn et al., 2001) or positive attitudes towards elderly care (Hweidi and Al-Obeisat, 2006) and female students show more favorable dispositions towards children and maternity care (Shoqirat and Abu-Qamar, 2015).

Family experiences, mass media, or cultural background also seem to play a role in selecting the clinical area of work since students may wish to work in some clinical areas even if they never had clinical experience in them during nursing education (Dekeyser Ganz and Kahana, 2006; Marsland and Hickey, 2003).

Job availability can also influence the decision to work in a particular clinical specialty after graduation; however, this cannot reflect long-term career plans. A study that compared the career preferences for the first job of English nurses at graduation showed that, even though clinical experiences in elderly care, operating theatres and with outpatients during education had not encouraged students to consider them as desirable work environments, new graduates agreed to work in these settings, but they expressed a wish to change within a short time (Marsland and Hickey, 2003).

Published studies describing the work preferences of nursing students were carried out mainly in Australia, USA, Scandinavia, Middle Eastern countries and Asian countries. No study has been conducted in Italy and therefore we do not know if the popularity or unpopularity of certain areas of practice, and the factors influencing career choices, are similar in this country too. The lack of interest in specific areas of clinical practice could have a great impact on recruitment of Italian

nurses in those areas, threatening to leave the needs of specific population groups unmet. Increased knowledge of preferences and influencing factors could help Italian nursing educators to plan appropriate interventions to direct future nurses towards the clinical areas that are in most need of trained and motivated nurses.

Objectives

The study aimed to 1) identify the most and least preferred areas of clinical practice for their future career of undergraduate students attending Italian nursing schools, and 2) determine the student characteristics that influence their career preferences.

3. Methods

3.1. Design

We used a cross-sectional correlational design.

3.2. Participants and settings

Undergraduate nursing students attending two Universities in Rome, one public and one private, were recruited. The public university comprised 13 nursing schools located in Rome and province. The private university consisted of a single school located in a suburban area of Rome. Two different nursing education programmes are offered in Italy, one for paediatric nursing and one for general nursing. Only the general nursing programme enables graduates to work in all settings of practice and for this reason only students attending this programme were considered. As nursing education in Italy lasts three years, corresponding to 180 university credits, according to the Bologna agreement that standardized university education in European Community countries, students enrolled in the first, second and third years were included.

3.3. Instrument

A questionnaire used in a previous study was chosen to collect data (Happell, 2002). The first section of the questionnaire collected the socio-demographic data, including age, gender, marital status, nationality, previous work experience, school of nursing attended and the year of the course. The second section investigated the students' preferences in nine areas of clinical practice: paediatrics, intensive care, emergency department, operating theatre, general surgery, general medicine, community care, psychiatrics, and geriatrics. The option for maternity ward was omitted (in contrast to the original questionnaire), because in Italy nurses are not qualified to assist pregnant women, while midwives trained through a specific midwifery education programme are employed in the maternity wards. The students were asked to rank the areas of practice from 1 to 9 according to their preferences, with 1 indicating the most preferred and 9 the least preferred area.

3.4. Data collection

Data were collected during the second semester (spring term). This period was considered the most appropriate because the first-year students were at the very beginning of their clinical experience, and the second- and third-year students had already experienced different areas of clinical placement and had attended most of the theory courses. Moreover, in this period all the students attended some theory classes, making it possible to obtain the highest rate of response. The questionnaire was distributed during class time. Teachers left the class during the administration of the questionnaire to avoid influencing students' responses, and a research assistant remained in the class to clarify any doubts the students might raise.

3.5. Statistical analysis

Descriptive statistics (mean, standard deviation [SD], range, frequency and percentage) were used to describe the socio-demographic characteristics and student preferences. Frequencies were compared among groups using the chi-square test and its variants (Fisher's exact test) for categorical variables and the one-way ANOVA for continuous variables. Student preferences for the nine areas of practice were transformed into dichotomous variables considering the choice indicated as 1 by students as "first choice" and all the others listed 2 to 9 as "not first choice"; and the choice ranked as 9 as "last choice" and the others from 8 to 1 as "not last choice". The chi square test was used to determine differences in the frequencies of the first and last choice among first-, second- and third-year students. Standardized residuals were used to determine the significant difference between observed and expected frequencies. A multivariate binary logistic regression was performed to determine the student characteristics associated with the career choices. The independent variables entered into the model were age, gender (female vs male), previous work experience (no vs yes), nationality (not Italian vs Italian), marital status (single vs married/divorced), and type of University attended (private vs public); the dependent variables were the first and last career choice for each clinical area. The results were presented as odds ratios (OR) with 95% confidence intervals (CI), with *p* value of 0.05 or lower considered statistically significant. Data analysis was performed using SPSS IBM statistics, Version 22.

3.6. Ethical considerations

The study was approved by the nursing directors of the two universities involved in the study. No approval was required from an ethics committee, as the study was descriptive and did not involve patients. On the day fixed for the data collection research assistants informed the students about the aims of the study and the fact that participation was voluntary. Consent was implied by returning the completed questionnaire. The questionnaires were anonymous and the data were processed by research assistants who were not involved in the respondents' education.

4. Results

4.1. Demographic characteristics

Among the 2240 nursing students enrolled in the two universities a total of 1637 (73%) students filled in the questionnaire. The remaining students were absent on the day of the data collection or did not consent to participate. One hundred and three questionnaires were not fully or correctly filled in and were excluded. The main reason for exclusion was the indication of more than one clinical area as first or last choice. The remaining 1534 questionnaires were analysed.

Female students comprised the majority of participants (69.3%). Student ages ranged from 18 to 54 years with a mean of 25 years (SD = 5.80). Most students were Italian (91.4%) followed by Romanian (4.2%); 86.3% of the students were single and 65% had previous work experience (Table 1).

The characteristics of the first-, second- and third-year students were compared to verify their homogeneity. No differences were found regarding gender, nationality, marital status and work experience. Age, as expected, increased in the second- and third-year group (Table 1).

4.2. Student career preferences

Most first-year students reported that they would prefer to work with children, in operating theatres and emergency departments, totalling altogether 71.6% of the first-choice preferences, and that they would not like to work in community care, with mentally ill people and

with older people, totalling altogether 65.1% of the last-choice preferences (Table 2). The second-year students showed interest in other clinical areas not considered by first-year students, such as surgical areas, although working with children, in emergency departments and operating theatres still represented the majority of student choices (59.8%). Psychiatric, community and elderly care remained the least desirable areas (66.2%). In the third year, the popularity of the emergency department, operating theatre and working with children was confirmed, accounting for 59% of student preferences, although working with children decreased in popularity with respect to the previous years. Intensive care and community settings became more popular. The lack of appeal of the psychiatric and geriatrics settings was confirmed (57.7%); working with children was indicated as last choice by a higher number of third-year students (13.2%). Overall, between first and third year, working with children decreased significantly in popularity whereas intensive care units and community care grew in popularity (Table 2).

4.3. Factors influencing students' preferences

The student-related characteristics significantly associated with the career choices in the sample were age, gender, nationality, previous work experience and university attended. Marital status was not associated with any preference, and no student characteristic influenced the first and last choice for general surgery and medicine wards. Younger, female students were more likely to choose working with children. Male students of Italian nationality were more likely to choose emergency departments. Younger students were more likely to choose operating theatres, whereas older student chose intensive and community care. Older students of other nationalities than Italian and attending a private university were more likely to indicate working with older patients as their first choice (Table 3).

Regarding the last choice, male students were more likely to indicate working with children. Younger students, especially female, of Italian nationality were more likely to dislike community care. Older students of non-Italian nationality, and without previous working experience, were more likely to report disliking psychiatric settings. Finally, male students attending a public university were more likely to indicate working with elderly as their last choice (Table 3).

5. Discussion

The study aimed to identify the most and least preferred clinical areas for the future career, and to determine the characteristics influencing the career preferences, of undergraduate nursing students in Italian universities. In accordance with international literature, nursing students in Italy begin their studies with a precise idea of the professional areas where they wish to work, showing interest in the care of children, operating theatres, and emergency departments (DeKeyser Ganz and Kahana, 2006; Happell, 1999a; Happell, 2002; Kloster et al., 2007; Stevens and Crouch, 1995), whereas they are less attracted by psychiatric (Happell, 1999b; Ong et al., 2017) and geriatrics care (Gould et al., 2012; Happell and Brooker, 2001; Neville et al., 2014).

Student age and gender were associated with preferences for specific areas of practice, as shown in previous studies (DeKeyser Ganz and Kahana, 2006; Fagerberg et al., 1997; Happell, 2002; Kloster et al., 2007; Rogstad et al., 2004; Stevens and Crouch, 1995). In particular, the female students in this study preferred working with children, while the male students showed an interest in more dynamic and life-saving clinical areas such as emergency departments and intensive care units. Differences were also found regarding the least preferred areas. Female students were seen to dislike community care, whereas male students indicated as their last choices areas with more basic caring activities such as paediatrics and geriatrics. Moreover, our study identified students' nationalities as another factor that can influence professional choices, showing that non-Italian students would like working with

Table 1
Sociodemographic characteristics of student sample (n = 1534).

	First year n (%)	Second year n (%)	Third year n (%)	p	Total n (%)
University nursing school	553 (36.0)	435 (28.4)	546 (35.6)		1534 (100)
A	96 (17.4)	67 (15.4)	78 (14.3)		241 (15.7)
B	23 (4.2)	23 (5.3)	23 (4.2)		69 (4.5)
C	46 (8.3)	37 (8.5)	31 (5.7)		114 (7.4)
D	23 (4.2)	24 (5.5)	17 (3.1)		64 (4.2)
E	62 (11.2)	45 (10.3)	107 (19.6)		214 (14.0)
F	55 (9.9)	54 (12.4)	52 (9.5)		161 (10.5)
G	27 (4.9)	15 (3.4)	27 (4.9)		69 (4.5)
H	44 (8.0)	31 (7.1)	38 (7.0)		113 (7.4)
I	38 (6.9)	25 (5.7)	35 (6.4)		98 (6.4)
L	18 (3.3)	5 (1.1)	22 (4.0)		45 (2.9)
M	29 (5.2)	23 (5.3)	26 (4.8)		78 (5.1)
N	6 (1.1)	13 (3.0)	29 (5.3)		48 (3.1)
O	19 (3.4)	25 (5.7)	44 (8.1)		88 (5.7)
P	67 (12.1)	48 (11.0)	17 (3.1)		132 (8.6)
University type					
Private	67 (12.1)	48 (11.0)	17 (3.1)		132 (8.6)
Public	486 (87.9)	387 (89.0)	529 (96.9)		1402 (91.4)
Gender					
Male	169 (30.6)	135 (31.0)	167 (30.6)	ns	471 (30.7)
Female	383 (69.4)	300 (69.0)	378 (69.4)		1061 (69.3)
Marital status					
Single	498 (91.0)	382 (88.2)	460 (85.5)		1340 (88.3)
Married	36 (6.6)	39 (9.0)	62 (11.5)	ns	137 (9.0)
Separate/Divorced	13 (2.4)	12 (2.8)	16 (3.0)		41 (2.7)
Work experience					
Yes	350 (63.4)	272 (63.0)	368 (68.1)	ns	990 (65.0)
No	202 (36.6)	160 (37.0)	172 (31.9)		534 (35.0)
Nationality					
Italian	493 (91.1)	387 (93.3)	484 (90.3)		1364 (91.4)
Other European country	20 (3.7)	14 (3.4)	29 (5.4)	ns	63 (4.2)
American	10 (1.8)	7 (1.7)	10 (1.9)		27 (1.8)
African	6 (1.1)	4 (1.0)	5 (0.9)		15 (1.0)
Asian	12 (2.2)	3 (0.7)	8 (1.5)		23 (1.5)
Age					
mean (SD)	23.5 (5.8) ^a	24.8 (5.3) ^b	26.8 (5.8) ^c	< 0.01	25.0 (5.8)
range	18-54	19-47	20-49		18-54

Note: SD = standard deviation; ns = not statistically significant. The age means by line with different letters are significantly different from the other pairwise comparisons with Tukey post-hoc test. The University nursing schools are indicated by a capital letter.

elderly people more than Italian students, though they would still dislike working in psychiatrics. The cultural background has also been shown to influence students' views of care in other studies. For example, in China, where the collectivist culture supports the duty of caring for elderly people and family members (Li and Buechel, 2007), nursing students tend to show better attitudes towards elderly people; yet at the same time, they do not choose to work with the elderly (Shen and Xiao, 2012) confirming the lack of a clear link between attitudes and career preferences (Herdman, 2002).

This study showed that most students selected as first choice clinical specialties located in acute hospitals, preferring to start their careers in hospitals rather than in a community setting. This could be due to the students' need to acquire or consolidate their professional skills under the guidance of experienced nurses and doctors before pursuing a career in community settings where the work is carried out in autonomy (Marsland and Hickey, 2003).

At the beginning of nursing education, student preferences derive mainly from stereotypes coming from the media or the social group of origin, as these students have limited knowledge of the nursing profession (Zampieron et al., 2012). For example, the preference for working in operating theatres may derive from the influence of mass media that often represent nurses at the operating table next to doctors. The choice of paediatrics seems to be influenced by positive stereotypes related to the social value of dealing with youth, considered to be the future of society. The media can also transmit a fascination for

technology and the intensive and emergency areas (Hayes et al., 2006; Happell, 2002; Stevens and Crouch, 1995).

As students continue their education and gain theoretical and practical experiences, their preferences are directed towards other areas, such as surgical wards and intensive care. This suggests that learning experiences can enable students to get to know and appreciate areas of practice not considered at the beginning of their studies (Matarese et al., 2008). However, the stereotypes about psychiatrics and geriatrics care remain. The fact that older students show more positive attitudes towards psychiatry and geriatrics care suggests that younger students are more easily influenced by dominant social ideas and cultural stereotypes in the absence of personal experience (Herdman, 2002). Although significant changes in students' preferences for psychiatric area at the end of their studies were recorded in a few studies (Kloster et al., 2007), the perspective of working with mentally ill people is still seen with fear and apprehension by most students (Happell, 2002). Similarly, working with older people is considered by students to be repetitive, not stimulating or gratifying, performed in settings with limited resources and personnel, and consequently to be work of poor quality (Happell, 2002; Moyle, 2003; Squaglia and Matarese, 2007; Stevens and Crouch, 1995). This view is shared by nurses met by students during their training experiences (Squaglia and Matarese, 2007). In their efforts to integrate into the groups, students tend to adopt the model provided by nurses during their clinical practice, rather than reflecting the model transmitted through theoretical

Table 2
Work preferences of nursing students described per year (n = 1534).

Career options	First year n (%)	Second year n (%)	Third year n (%)	Total n (%)
First Choice				
With Children	157 (28.4) ⁻⁽⁺⁾	96 (22.1)	96 (17.6) ⁻⁽⁺⁾	349 (22.8)
Operating theatre	139 (25.1) ⁻⁽⁺⁾	72 (16.6)	106 (19.4)	317 (20.7)
Emergency department	100 (18.1)	92 (21.1)	120 (22.0)	312 (20.3)
Intensive/critical care	25 (4.5) ⁻⁽⁺⁾	29 (6.7)	49 (9.0) ⁻⁽⁺⁾	103 (6.7)
General surgery	47 (8.5)	61 (14.0) ⁻⁽⁺⁾	41 (7.5)	149 (9.7)
General medicine	31 (5.6)	38 (8.7)	30 (5.5)	99 (6.5)
Community health	17 (3.1) ⁻⁽⁺⁾	16 (3.7)	46 (8.4) ⁻⁽⁺⁾	79 (5.1)
Psychiatrics	18 (3.3)	13 (3.0)	29 (5.3)	60 (3.9)
With older people	19 (3.4)	18 (4.1)	29 (5.3)	66 (4.3)
Last Choice				
With Children	41 (7.4)	41 (9.4)	72 (13.2) ⁻⁽⁺⁾	154 (10.0)
Operating theatre	27 (4.9)	28 (6.4)	47 (8.6)	102 (6.6)
Emergency department	46 (8.3)	23 (5.3)	28 (5.1)	97 (6.3)
Intensive/critical care	44 (8.0)	17 (3.9) ⁻⁽⁺⁾	43 (7.9)	104 (6.8)
General surgery	6 (1.1)	6 (1.4)	9 (1.6)	21 (1.4)
General medicine	29 (5.2)	32 (7.4)	32 (5.9)	93 (6.1)
Community health	135 (24.4)	106 (24.4)	82 (15.0) ⁻⁽⁺⁾	323 (21.1)
Psychiatrics	106 (19.2)	78 (17.9)	89 (16.3)	273 (17.8)
With older people	119 (21.5)	104 (23.9)	144 (26.4)	367 (23.9)

Note: The frequency by line with the symbol ^ is significantly different from the others, with (+) indicating significant positive standardized residual value and (-) significant negative standardized residual value.

education (Brown et al., 2008). This process, called professional socialization, contributes to the creation and/or confirmation of professional stereotypes (Price, 2008). The influence that operates at the level of the organizational structure and the culture of the education programmes has been described as the hidden curriculum (Hafferty, 1998). The hidden curriculum sends messages through cultural subtexts that shape the way students make sense of their learning environments and internalize the aims, values, categories of thought and behaviours of the

Table 3
Associations between student characteristics and preferences of clinical areas analysed through binary logistic regression model.

Career options	University type OR (IC 95%) (public as referent)	Age OR (IC 95%)	Gender OR (IC 95%) (male as referent)	Previous work experience OR (IC 95%) (yes as referent)	Nationality OR (IC 95%) (Italian as referent)
First choice					
With children	-	0.95** (0.93-0.98)	1.81** (1.35-2.42)	-	-
Intensive/critical care	-	1.04* (1.00-1.08)	-	-	-
Emergency department	-	-	0.54** (0.41-0.69)	-	0.55* (0.65-1.18)
Operating theatre	-	0.95** (0.93-0.98)	-	-	-
General surgery	-	-	-	-	-
General medicine	-	-	-	-	-
Community care	-	1.10** (1.06-1.14)	-	-	-
Psychiatrics	-	-	-	-	-
With older people	3.40* (1.59-7.28)	1.06* (1.01-1.10)	-	-	3.15** (1.64-6.08)
Last choice					
With children	-	-	0.58* (0.41-0.82)	-	-
Intensive/critical care	-	-	-	-	-
Emergency department	-	-	-	-	-
Operating theatre	-	-	-	-	-
General surgery	-	-	-	-	-
General medicine	-	-	-	-	-
Community care	-	0.95** (0.93-0.98)	1.72** (1.21-2.32)	-	0.43** (0.23-0.80)
Psychiatrics	-	1.03* (1.00-1.05)	-	1.40* (1.03-1.92)	2.26** (1.48-3.45)
With older people	0.52* (0.31-0.86)	-	0.68* (0.53-0.88)	-	-

-: no significant values; *: p < 0.05, **: p < 0.01; IC: interval of confidence; OR: Odds Ratio.

Note: In a continuous variable, odds ratios that are greater than 1 indicate that the event is more likely to occur as the predictor increases. In a categorical variable, when A is the reference level for the variable, odds ratios that are greater than 1 indicate that the event is less likely in A; odds ratios that are less than 1 indicate that the event is more likely in A.

professional group (Allan et al., 2011; Goldenberg and Iwasiw, 1993; Tharani et al., 2017). The hidden curriculum is more difficult to control than the formal one because it is transmitted through culture (Hafferty and O'Donnell, 2014; Nouri et al., 2014) and so it is not easily identified. Nurse educators should develop the ability to comprehend how the culture influences the student's view of care and try to identify what falls outside the formal curriculum (Allan et al., 2011; Day and Benner, 2014). Also, consideration should be given to the fact that mentors, peers and role models play an important role in the formulation of career expectations, career choices (Price, 2008), and dispelling stereotypes (McLafferty, 2005). Therefore, the formal and hidden nursing curricula should be reviewed in terms of contents and clinical experiences to reinforce a positive image of nursing in less popular areas, such as psychiatric and geriatric settings (Happell, 2002). Students need to reflect about the nature and value of nursing care in all areas of practice and to view each clinical area as equally valuable (Happell, 2002; Matarese et al., 2008).

5.1. Limitations

Our study has a few limitations. Although a large number of students were enrolled, the sample was recruited in a single city in Italy and could be unrepresentative of the Italian nursing student population, and thus the results may not be generalizable to all Italian students. Moreover, the cross-sectional design did not permit comparison of changes within the same cohorts of students, or analysis of the specific factors influencing the sample. The cross-sectional design was preferred to the longitudinal one as it required less time to collect data; moreover, previous longitudinal studies (Kloster et al., 2007; DeKeyser Ganz and Kahana, 2006) showed a high attrition rate due to students dropping out during the course, or to their difficulty in remembering their code in later years. Despite these limitations, this is the first study to analyze the career preferences of Italian nursing students.

6. Conclusions

In Italy, most nursing students initially picture their careers in paediatrics, emergency departments and operating theatres, showing

scant interest in the areas of psychiatrics and geriatrics. During their education their preferences change slightly, with an increase of interest in community care, not previously expressed. Although nursing education enables students to appreciate other areas of specialization, the stereotypes about psychiatry and geriatrics remain. Nurse educators can influence their students' career expectations and career choice decisions. Therefore, nursing curricula and internships need to be reviewed in terms of their declared and hidden contents to allow students to view all areas of practice as equally important.

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Declaration of competing interest

No conflict of interest has been declared by the authors.

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