Emirati student recruitment and retention in nursing education

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Abstract

The purpose of this study is to investigate factors surrounding low Emirati student recruitment and retention within a nursing programme in the Abu Dhabi Emirate. A sequential explanatory mixed methods research design was used to collect data from 140 Emirati students at different levels of the nursing program. Questionnaires, semi-structured interviews and related document analyses were used to collect information for this study. Quantitative analysis revealed that overall participants perceived the Emirati society as holding a positive image of nursing, though a majority of them indicated that nursing as a profession, would be a third or last choice of career for them. Inferential analysis on the reasons to choose or not choose nursing, revealed an opportunity to work as part of the team; and as a stepping stone to other professions as significant reasons, versus perceived program difficulty level, and perceived unpleasant tasks. Thematic analysis of interviews highlighted: 1) personal interest; 2) parental support; 3) awareness of the profession; 4) perceived barriers; 5) potential benefits, and 6) policies at the local and national levels. The study has several implications for nursing education and policy in the United Arab Emirates and the region.

الغرض من هذه الدراسة هو دراسة العوامل المحيطة بقلة عدد الطلبة الإماراتيين والاحتفاظ بهم ضمن برنامج التمريض في إمارة أبوظبي. وقد تم استخدام تصميم بحثي متسلسل في طرق مختلطة لتجميع البيانات من 140 طالبا إماراتيا على مختلف مستويات برنامج التمريض. استعملت الاستبيانات والمقابلات شبه المنظمة وتحليلات الوثائق ذات الصلة لجمع المعلومات لهذه الدراسة. و كشف التحليل الكمي أن أغلبية المشاركين ينظرون إلى المجتمع الإماراتي على أنه يحمل صورة إيجابية للتمريض، على الرغم من أن أغلبيتهم أشارت إلى أن التمريض كمهنة، سيكون خيارهم الثالث أو الأخير من الحياة الوظيفية بالنسبة لهم. و في التحليل الاستدلالي لأسباب اختيار أو عدم اختيار التمريض مقابل الأسباب الإيجابية والسلبية، كشفت النتائج عن فرصة للعمل كجزء من الفريق؛ أو كنقطة انطلاق لمهن أخرى، كأسباب إيجابية هامة لاختيار التمريض،و في المقابل، النظر إلى مستوى صعوبة البرنامج، والمهام غير المرغوب فيها ، على أنها أسباب سلبية كبيرة لعدم اختيار التمريض كمهنة. وأبرز التحليل المواضيعي للمقابلات: 1) المصلحة الشخصية؛ 2) دعم الوالدين؛ 3) الوعي بالمهنة؛ 4) الحواجز المتوقعة؛ 5) الفوائد المحتملة، و 6) السياسات على المستويين المحلي والوطني. ولهذه الدراسة عدة تصورات على تعليم التمريض وسياساته في دولة الإمارات العربية المتحدة والمنطقة.

Introduction

The United Arab Emirates, since its unification in 1971, has developed at a remarkable pace with modernization in oil, tourism and education, followed closely by a need for better health care services. (El-Haddad, 2006). The nursing profession started in the UAE with the arrival of expatriate nurses in the early 1960s (El-Haddad, 2006); nearly fifty years on, though, the nursing profession in the country is still in its infancy. According to the International Council of Nurses (ICN) position statement on "Nurse Retention and Migration" (2007), reasons for the decreased supply of nurses include "an increase in various other career opportunities for women and a poor image of nursing as a career" (p. 3).

Educational reform in UAE nursing education would contribute towards advancing the profession from the diploma level to the baccalaureate degree, and towards a solution to the nursing shortage in schools and hospitals (Wollin & Fairweather, 2012). With only 3% of the nursing workforce being Emirati locals, the country relies heavily on an expatriate workforce to meet the society's nursing health care needs. In the UAE, according to Health Authority Abu Dhabi's (2011) statistics, by 2021 an estimated 5,900 more nurses will be required in the Emirate, and if present turnover rates continue this would translate into an annual recruitment of approximately 1,600 nurses.

Within the Emirate of Abu Dhabi, there is currently only one College of Health Sciences offering a baccalaureate degree in nursing, and students entering the college complete a pathway of one foundational year followed by a three year degree in their area of specialization – selecting from nursing, pharmacy, medical imaging, radiology, or paramedics. During the foundation year, Emirati students join the College; but following the first year, they either discontinue the Nursing programme in favour of another programme in another university, or choose one of the other specializations excluding nursing.

The UAE Nursing Midwifery Council (UAE NMC) developed strategies to fulfil the goals of increasing nursing graduates. For Strategic Goal 1, these include

> Identify barriers to the selection of nursing and midwifery as career options by Emiratis and develop effective strategies to reverse this trend. [...] Increase access to nursing and midwifery education for UAE Nationals with appropriate funding and support to substantially increase the number of Emirati Nationals in the profession. (UAE NMC, 2013, p. 28)

An action plan to tackle the barriers mentioned above includes the following:

> Conduct a scientific study evaluating factors influencing choice of nursing and midwifery as a career option. (ibid.)

The present study is a preliminary attempt to investigate these factors, with a view to

> identify[ing] strategies to increase recruitment and retention using findings from studies.

Literature review

Even though successful recruitment and retention of nursing students is a universally desired outcome, the phenomenon remains elusive and challenging the world over. Jeffreys (2004) believes that students within the nursing discipline have distinctive characteristics that distinguish them from those in other professions and necessitate the development of a uniquely suited model. She developed the Nursing Undergraduate Retention and Success (NURS) model to examine the wide range of factors that influence retention among nursing students in order to guide administrators and educators in identifying at-risk students and developing strategies towards effective recruitment and retention.

According to this model, successful student recruitment and retention in a nursing program is based on an interplay between student profile characteristics, student affective factors, academic factors, environmental factors, academic outcomes, psychological outcomes, societal surrounding factors, and professional integration factors. The model can be appropriately applied to the Emirati nursing student in the UAE, who is faced with a particular configuration of all these factors while contemplating a professional career as a nurse in the country. Jeffreys (2014) explains that student profile characteristics include age, ethnicity, race, and heritage, gender and sexual identity, first language, prior educational experience, family's educational background, prior work experience, and enrolment status. This study may help to identify influencing factors categorizing the student as a member of an under-represented group, 'non-traditional', or first generation college student. According to Jeffreys (2014), a non-traditional nursing student would be one who meets one or more of the following criteria: a) older than 25 years; b) studying in a part-time mode; c) male; d) a member of a minority community; e) having children; f) entering the program from another pathway; or g) having prior exposure to the health care field.

Jones (2011) conducted a scoping quantitative study for the Al Qasimi Foundation in Ras Al Khaimah Emirate (UAE) to ascertain the career goals and aspirations of Emirati youth. Students (N=62) were selected from grades 10 and 11 of five higher secondary schools in Ras Al Khaimah Emirate, including

both private and public schools. The study focused on economic, social, and political attitudes and compared Emirati (n=34) and non-Emirati (n=28) youth, regarding their choice of career, and the reasons behind the choices. Jones found that most of the young Emiratis were interested in public sector careers: 23 percent of the Emiratis in the study selected "government positions" while another 32 percent selected "military or police related careers" (Jones 2011), whereas the majority of the non-Emiratis selected private sector careers. Regarding societal attitudes, Jones found that "Emiratis reported significantly more favourable attitudes toward the role of science and technology in society" (p. 16).

Politically, Jones (2011) study shows that Emiratis are significantly more interested in local politics and federal politics of the UAE than in politics of the Middle East region, and while non- Emiratis in the study sample felt that business people should have more influence in society, Emiratis felt that elected representatives (such as members of the Federal National Council) should have more influence in the political arena. Jones' (2011) study has several implications for our understanding of the Emirati student exploring career options. Though the study did not specifically target the health care sector, and Emirati youth's thoughts on a career in the health sciences and medical field were not investigated, the study still suggests a trend for the kind of careers that Emiratis youth might be interested in.

In the Middle East more broadly, there are disappointing views regarding nursing as a career choice. A study in Qatar by Okasha and Ziady (2001), using a self-administered questionnaire, found that even though female Gulf national nursing students joined the profession out of an interest in medical services and the humanitarian nature of nursing, interaction with male patients and colleagues in the workplace and the long working hours continue to contribute to a negative community attitude toward the profession. Within the Gulf region, a study by Al-Mahmoud (2013) among first year nursing students in Saudi Arabia found that students considered the heavy workload, the rigorous theoretical component of the programme, and the difficulty of studying in the English language, as important contributing factors leading to student dropout.

A study in Bahrain conducted by Eman et al. (2012) involved the usage of a triangulation research design engaging quantitative and qualitative data collection methods, among 5 male and 33 female Bahraini first year nursing students, to study the situation in the small Gulf island. Data was obtained through self-reporting questionnaires and group interviews collected during the nursing programme. Results indicated that while participants perceived nursing as caring, helping people, and a humanitarian job, the profession was also considered to be a tough job and not well accepted socially with cultural issues impacting negatively the values attached to nursing as a career choice. Challenges in nursing education in other countries such as Malaysia (Barnett et al., 2010), the US (Goodin, 2003), China (Yun et al., 2010), Singapore (Arthur, 2008), Japan (Turale et al., 2009), and Taiwan (Turale et al., 2010) have identified several areas for change and improvement with the first and foremost being a global shortage in nurses as a result of attrition and low retention in the profession. Varaei et al. (2012) conducted a descriptive survey among Iranian nurses, finding that having a family member working in a hospital had the greatest *negative* impact on the establishment of a nurse's professional image.

The UAE is different from other Gulf nations in terms of developments in all sectors of life during the last four decades. The Ministry of Higher Education and Scientific Research was established in 1992 to regulate and accredit all higher education institutions and programs, both private and public. However, educational reforms and growth have not matched this national political and economic gain. The vast majority of young women in higher education today are first generation college students and it is very likely that their mothers are less educated than their fathers because Emirati men had access to education and diverse employment opportunities well before their female counterparts (Abdulla, 2005).

Within this arena of urgency, the factors influencing poor student numbers entering the nursing programmes are multifactorial, and in part dependent on each individual student; thus the need for this study in exploring this problem within the UAE context.

Methods

Philosophically oriented researchers have long debated whether mixing of research approaches (e.g. quantitative and qualitative) is possible. Guba and Lincoln (2005) acknowledged that elements of different research paradigms may be "blended together in a study" (p. 275). This "delinking of the paradigms suggested that many different research methods could be linked to certain paradigms" (Johnson & Onwuegbuzie, 2004). Creswell (2007) suggests that different paradigms can be related to different phases of a research design, thus re-linking paradigms to research designs. An example he provides elsewhere is particularly relevant to this investigation:

> A mixed methods study that begins with a quantitative survey phase reflects an initial post positivist leaning, but, in the next qualitative phase of focus groups (or interviews), the researcher shifts to a constructivist paradigm. Relinking paradigms and designs makes sense.
> (Creswell, 2012, p. 275)

My assumption, based on a review of similar studies from other countries in the region and internationally, is that societal perception regarding the nursing profession is a factor in the recruitment and retention of students, and is likely to be a factor in the UAE as well. To investigate my assumption and those arising from the literature, I identified the following research question that would help to guide the study: *What are the factors influencing Emirati student recruitment and retention within the nursing programme(s)?* A mixed methods design can enable clarity in understanding of the problem by integrating findings from a quantitative section with perceptions from a qualitative stage (Creswell 2009), to provide richer data on the issue of Emirati student recruitment and retention within the nursing programme(s) in the UAE. Creswell's (2012) steps to conducting a mixed methods study are used as a guide to inform this study (Figure 1).
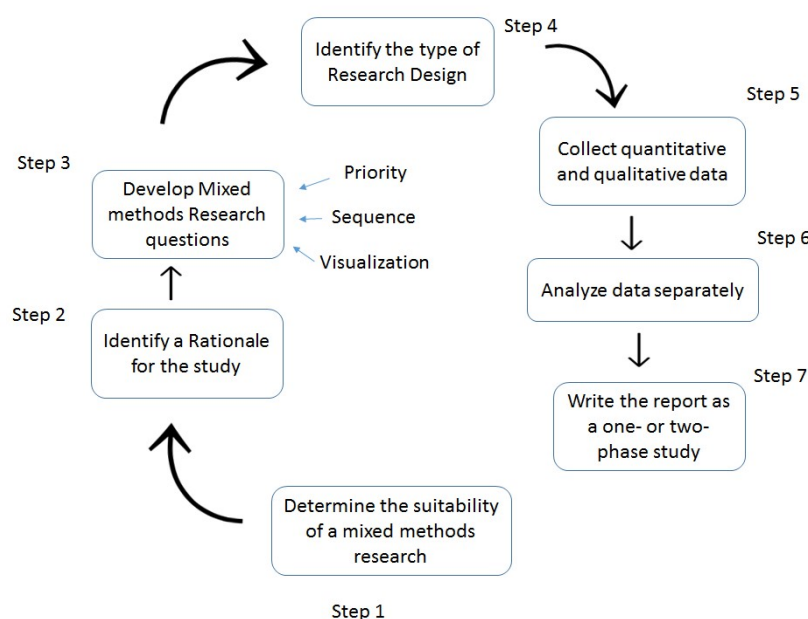
Figure 1: Steps in the process of conducting a mixed methods study (Creswell, 2012, p. 555).

Research approach

Creswell and Clark (2012) describe four types of mixed methods designs commonly used in educational research. They are the convergent parallel design, the explanatory sequential design, the exploratory sequential design and the embedded design. The purpose in a *convergent design* is the simultaneous collection of both quantitative and qualitative data together for merging of data, followed by analysis and understanding of the problem; while in a sequential design the investigator collects both sets of data in a sequential manner in two phases, either quantitative followed by the qualitative or qualitative followed by the quantitative, followed by an analysis of each phase leading to the results which are then integrated for further understanding of the problem. In *exploratory sequential* research design, the investigator collects qualitative data in the first phase, followed by the collection of quantitative data. This type of data collection is usually done for exploration of phenomenon, identification of themes, or designing an instrument and subsequently testing it (Creswell, 2012). In the *explanatory sequential* research design, a first phase of quantitative data collection is followed by a second phase of qualitative collection of data, the intention being that the former would present a general picture of the research problem while the latter would refine and add depth to the initial picture through a more detailed rich description.

In this investigation, an explanatory sequential design is used, as an initial quantitative data collection of Emirati student profiles and factors related to recruitment and retention in the nursing program would then form a database on a topic where prior research has not been done. Data gained in this phase would be added to by the qualitative phase of the study. Both the quantitative and the qualitative data have equal priority in this study – that is, the researcher placed equal emphasis on the two sets of data.

Site and participant selection

Data for this investigation was collected over a period of three months, from students studying at a College of Health Sciences in Abu Dhabi, having initial program accreditation from the Ministry of Higher Education for Scientific Research (MOHESR), and initial institutional accreditation from the UAE Commission of Advanced Accreditation (CAA). In this study a convenient purposive sampling scheme was adopted because of the availability of only one College of Health Sciences in the Emirate, and because the purpose of the study is to investigate the Emirati student in the nursing program, in Abu Dhabi, UAE. The college admitted only female students; female Emirati students at different levels of the program who accepted the invitation to participate in the study included: pre-entry students (n=80), undergraduates (n=48), and 'bridging' students (diploma graduates taking selected courses to obtain the bachelor degree; n=12), making a total of 140 participants (Table 1). This sample size is adequate for small population sizes, as according to Brace et al. (2000), for a statistical test to be administered, an acceptable sample size should include at least 100 participants.

There was very little risk involved in this study; all the participating nursing students were assured that they could leave the study at any time. Ethical approval for the study was obtained based on the university's guidelines for ethics in educational research. The ethical approval stage at the research site took about six months to complete because of more urgent administrative priorities in the college. For purposes of confidentiality and anonymity, no identifiers were requested on the questionnaire. After obtaining ethical approval from the institutional review board at the College of Health Sciences, 160 questionnaires were prepared, including participation information sheets regarding the research topic. In addition, a consent form was included along with the questionnaire. A copy of the consent form was also given to the participants to retain. As soon as the questionnaires were analysed and the interviews were transcribed, they were kept in a locked cabinet to which only the researcher had access.

Table 1: Sample size distribution in this study.

Data Collection Method	Students			Total
	Pre-entry	**Undergraduate**	**Bridging**	
Questionnaire	80	48	12	140
Semi structured Interviews	4	6	2	12

Data collection methods

In this investigation, quantitative data from Emirati students to establish student profiles and ascertain influencing factors related to their career choices in the nursing programme(s) was collected using questionnaires, followed by the collection of qualitative data from a subset of the questionnaire respondents using semi-structured interviews. Related policy documents were also considered, to compare with the information collected.

Questionnaire

The questionnaire was designed after an extensive literature review of studies using this approach to research the problem of student recruitment and retention in nursing education. The questionnaire consisted of three sections: a demographic data collection section, the Porter Nursing Image scale (Porter & Porter, 1991), and a personal goal instrument career choice scale developed for this study. According to Jeffreys (2007), today nursing students represent greater variability in terms of age, gender, ethnicity and race, prior educational experience, prior work experience, family's educational background, and enrollment status than ever before. These factors were taken into consideration during

the formulation of the demographic data section of the questionnaire for this study, in congruence with the NURS model (Jeffreys, 2004), to determine the Emirati student profile.

The second section of the questionnaire consists of the Porter Nursing Image scale (Porter & Porter, 1991), including 30 matched-pair bipolar items aiming to ascertain the participant's perception of the societal image of nursing. Responses were given using a seven-point semantic differential scale with lower scores reflecting more positive images (see Appendix A). The Porter Nursing Image Scale has been used in several studies to ascertain perceptions of nursing, originally by Porter and Porter (1991):

> To describe the self-image of nurses working in a hospital setting and to determine whether there are differences in self-image between beginning and expert nurses, between caregivers and non-caregivers, between nurses with different levels of education, and between full-time and part-time nurses. (p. 210)

More recently, Takase (2006) used the scale to determine nurses' perception of the image of nurses held by the public, as well as nurses' perception of their actual roles; Wallace (2007) also used the scale for a convenience sample of associate degree nursing students to measure their perception of the public image of nursing.

The third section of the questionnaire consists of a personal goal instrument, in which participants were asked four questions. The two closed ended questions elicited whether, if they had a choice, they would choose nursing as a career to pursue, and whether it would be a first, second or third choice of career. Pre-entry students had the opportunity to declare whether they would choose or reject nursing, and those currently in the nursing program were asked to respond about whether they plan to continue in the profession, thereby eliciting quantitative information on their recruitment and retention behaviour. The two open ended questions gave an opportunity for them to elaborate on the reasons for their choice.

Since only the second section of the questionnaire had established reliability and validity (Porter & Porter, 1991), a pilot study was conducted with 25 undergraduate students to test the draft questionnaire in its entirety for face and content validity. Participants were informed about the nature of the study and gave consent to be involved. Student feedback revealed that two words in the Porter Nursing Image scale were found to be difficult to comprehend because of students' developing English language proficiency levels. Therefore, the word 'timid' was revised to 'not bold' (the negative of the matched pair at the other end of the spectrum), and 'intuitive' to 'not logical' (again the same word from the other end of the spectrum, prefixed with a 'not', to suggest its opposite meaning) – see Appendix A. It was noted that participants took 15-20 minutes to complete the pilot questionnaire. An analysis of their responses then informed the preparation of the semi-structured interview guide, and a review of documents at the local, regional and national level related to the issue.

Semi-structured interviews

For the study, the researcher chose participants who were representative of the student body at the College of Health Sciences. An expression of interest was announced at the return of the questionnaire, and 12 students (four from the pre-entry group, six from the under graduate group and two from the bridging group) expressed willingness to participate further in an interview session. The semi-structured interviews each lasted 20-30 minutes, until the researcher reached 'saturation' in the variety of information received. Patton (2002) explains that saturation is when the researcher no longer hears or sees new information from the participants. The researcher audio taped all of the interviews and later transcribed them verbatim. The transcripts were checked with the participants for content accuracy.

The analysis of the transcripts involved several important steps. Initially, the researcher made notes in the right and left margins of the all transcripts. The notes were then reviewed to select the key ideas. The researcher then compared the notes in the margins and the ideas across all the transcripts; this led to emerging themes and the transcripts were checked again to ascertain that all notes were accounted for, and to identify anecdotal quotes that would enrich and provide evidence for the themes. This methodology follows Patton's (2002) and Tesch's (1990) recommendation that transcripts of this type should be evaluated a number of times to ensure that the information contained therein is interpreted accurately. Patton (2002) recommends the constant comparative data analysis method for grouping items. In this way, the researcher can use different perspectives to look at the issues.

Kvale (2007) observes that interview questions should be planned and used

> thematically with regard to producing knowledge, and dynamically with regard to the interpersonal relationship in the interview. (p. 57)

See Appendix B for the interview guide. The interview guide for this proposed study consisted of two sections. The first consists of questions about the participant's experience of being a student in health care in the UAE. This was followed by a further question, asking the interviewee to share examples to illustrate their statement, in accordance with Patton's (2002) argument that probing deepens the response to a question and increases the richness of the data being obtained. The third question asked the participant to give their opinion about society's views regarding the nursing profession in Abu Dhabi.

The next section introduced more controversial topics, allowing for the interviewer to 'funnel' the questions from broad, exploratory questions to ones focusing on details. Question 4 asked about challenges faced by Emirati nurses practicing the nursing profession in the country and sociocultural factors responsible for the perception of nursing in the country. Finally, the researcher concluded by asking whether there was anything else that the participant would like to comment on or add. The interview guide was pilot tested with a bridging nursing student who was briefed about the nature of the study and gave consent. The participant was later given the opportunity to review and comment on the transcript but did not make any changes. All interviews were tape recorded with permission, and were then transcribed in detail.

Document analysis

Glesne (2006, p. 65), suggests that in order "to understand a phenomenon, you need to know its history". As this study aimed to investigate the issue of the Emirati student within the nursing programme(s) in a college of Health Sciences in the Abu Dhabi emirate, college documents relating to students and the college were included. After completing their program, graduates working within the Emirate of Abu Dhabi get recruited in one of the hospitals run by SEHA (Abu Dhabi Health Services) and come under the licensure regulations of the Health Authority of Abu Dhabi (HAAD); so at the Abu Dhabi emirate level, policies related to SEHA and HAAD were also considered. At the national level, governmental policies related to the health care sector, to the nursing profession, and to Emiratization within the nursing sector in the country could affect all health care related entities down to the grassroot college of Health Sciences level. Also at the national level, the UAE Nursing and Midwifery council (UAE NMC) provided strategic direction and guidelines for the nursing profession in the country. Therefore documents related to nursing education and practice from the UAE NMC, and documents related to healthcare and higher education from the Government, were also considered in this study.

Data analysis

The Statistical Package for Social Sciences (SPSS) 22.0 was used to conduct statistical analyses. For the qualitative section of the study, thematic analysis was carried out according to the constant comparative method (Glaser & Strauss, 1967), breaking down the information gathered into discrete units and categorizing them across sources using thematic codes. The researcher is the sole investigator for this research. Glesne (2006) argues that the researcher plays two roles in a mixed-methods study: as researcher and as learner. Researcher bias is thus acknowledged and indeed becomes a possible resource:

> When you monitor your subjectivity, you increase your awareness of the ways it might distort, but you also increase your awareness of its virtuous capacity. Seen as virtuous, subjectivity is something to capitalize on rather than to exorcise. (p. 109).

A number of strategies were used to increase validity and reliability in the study. Findings were triangulated by integrating results from the questionnaire, the semi-structured interviews with selected student participants, and consideration of key documents (Table 2).

Table 2: Summary of data collected and analytical techniques used.

Research question	Participants	Type of data collection	Instruments used	Data obtained	Data analysis technique
What are the factors influencing Emirati student Recruitment and Retention within the nursing programme(s)?	Pre-entry, undergraduate and bridging students	Quantitative	Questionnaire	Career choice and reasons to choose/not choose nursing	Means, chi square analysis
		Qualitative	Semi structured interviews	Reasons to choose/not choose nursing	Thematic analysis
		Qualitative	Document analysis	Policies related to Emirati recruitment and Retention	Content Analysis

The factors influencing Emirati student recruitment and retention were initially elicited quantitatively, while the qualitative dimension contributed to more insight regarding the reasons behind the commonly cited factors and the range of contextual motivators and constraints with which an Emirati student contemplates entering the nursing profession in the Abu Dhabi Emirate. This level of understanding was possible through the use of a mixed methods approach to research; the integrated results helped clarify the multiple perspectives. The quantitative findings obtained from the questionnaires generated a list of reasons for Emirati students in the Emirate of Abu Dhabi to 'choose' or 'not choose' nursing, and through the integration of both the quantitative and qualitative findings, an explanation for the results was also possible, thereby facilitating more culturally sensitive awareness and recruitment strategies, in the near future, aimed towards Emirati youth in the UAE.

Results

Questionnaire findings

Descriptive findings suggest that the majority of the students within this sample are 'traditional' students: female (100%), in the 15-24 year age group (88.6%), unmarried (91.4%), pre-entry students (57.1%), having taken science as a major in high school (75.7%), and living in the suburbs of Abu Dhabi (47.9%). 14% of the participants in my study had never seen a nurse in action before, and 79% had had no personal experience in the health care industry before coming to the College of Health Sciences. Only

15% of students had a parent working in the healthcare field while 55% had other relatives working in healthcare.

The College of Health Sciences in this study was formed in 2006 and since it is a relatively new college in the Emirate, it was intended to find out the sources through which students gained awareness of the college and the programs on offer at its campuses. Participants reported that the first source of information was their family, relatives and friends (34.3%). The college website was the second most widely used source of information about the college (Table 3).

Table 3: Sources of information pertaining to the College of Health Sciences.

Sources of Information	Frequency	Percentage
Friends/ relatives/ family	48	34.3
Current students in the college	35	25
Website	34	24.3
Career fairs in schools	20	14.3
College open house day	17	12.1
College in the neighborhood	17	12.1
Other nurses	16	11.4
Newspaper	14	10
Local hospitals	10	7.1
Participation in Health camps	5	3.6
Advertisements in malls	2	1.4

Participants completed a 7-point Likert scale to rate the 30 matched-pair bipolar items on the Porter Nursing Image Scale (1991). Data were analyzed using SPSS, version 22.0. For data input, responses were scaled based on '1' as very positive, '2' as quite positive, '3' as slightly positive, '4' as neutral, '5' as slightly negative, '6' as quite negative and '7' as very negative. Thus low scores (1 – 3) indicated high agreement and a positive public perception of nursing, and high scores (5 – 7) indicated low agreement and a negative public perception of nursing within the factors. Data indicated that overall participants perceived Emirati society as holding a positive image of nursing, with 24 (out of 30) of the mean scores being 2 and 3, signifying "quite positive" and "slightly positive" views regarding nurses (Table 4).

The third section of the questionnaire related to nursing as a career choice, and initially questioned whether participants would 'choose', or 'not choose' nursing as a career choice. This was followed by a suppositional question on whether nursing would be a first, second or third choice, if they had to choose nursing as a career; participants were also asked for reasons for this preference (See Appendix A, section C). Among the 140 participants who responded, the response "third choice" was most frequently selected (see Table 5).

Questionnaire respondents indicated several reasons to choose a career in nursing. The most frequently cited reason to choose a career in nursing was to help others, followed by the desire to give care and comfort for the sick. A third reason to choose nursing was to serve the community. More reasons included a desire to work as part of the team and an opportunity to meet new people. Some participants (27.9%) reported that a career in nursing would give them respect in community and a further 22.9% of participants suggested that other reasons affected their choice (Table 6).

Table 4: Participants' perceptions of the societal image of nursing.

Variable	Mean	Standard Deviation
Leader	4.82	1.72
Controlled	4.54	1.82
Bold	4.45	1.52
Warm	4.30	1.69
Competent	4.24	1.54
Dominant	4.13	1.60
Strong	3.80	1.74
Confident	3.79	1.64
Organized	3.70	1.72
Patient	3.67	1.85
Responsible	3.62	1.86
Caring	3.62	1.90
Logical	3.56	1.68
Outgoing	3.51	1.51
Compromising	3.40	1.20
Independent	3.38	1.57
Sympathetic	2.98	1.34
Rational	2.95	1.45
Compassionate	2.94	1.40
Influential	2.92	1.34
Neat	2.92	1.48
Cheerful	2.88	1.24
Logical	2.72	1.37
Active	2.67	1.64
Powerful	2.67	1.40
Professional	2.62	1.46
Intelligent	2.60	1.30
Respectable	2.58	1.49
Scientific	2.43	1.46
Friendly	2.26	1.30

Table 5: Nursing as a career preference among the participants.

		Frequency	Percent	Cumulative %
Valid	First choice	43	30.7	30.7
	Second choice	30	21.4	52.1
	Third choice	67	47.9	100.0
	Total	140	100.0	

Table 6: Participants' reasons to choose nursing as a career.

Reason	Frequency	Percentage
Help others	122	87.1
Give care and comfort to the sick	78	55.7
Serve the community	74	52.9
Respect from community	39	27.9
Work as part of a team	37	26.4
Get high salary	34	24.3
Meet new people	33	23.6
Others	32	22.9
Study science	29	20.7
Job security	21	15
Higher career pathway	18	12.9
Stepping stone to other professions	11	7.9

Participants also reported several reasons that were influential in their decision *not* to take up nursing as a career. 60% of the participants identified night duties as a common reason, followed by 47.8% of the participants who did not like working on holidays. 29% of the participants ticked off unpleasant tasks as being a major determinant, while 28.6% listed parental disapproval as an important factor, followed by 22.1% who identified program difficulty as an influencing factor as well (Table 7)

Table 7: Participants' reasons not to choose nursing as a career.

Reason	Frequency	Percentage
Night shifts	84	60
Working on holidays	67	47.8
Unpleasant task	41	29.3
Parental disapproval	40	28.6
Working with the opposite gender	33	23.6
Difficult program	31	22.1
Lack of leadership roles	27	19.3
Others	25	17.9
Poor media portrayal	25	17.8
Low status occupation	22	15.7
Lack of community role models	21	15
High cost of education	15	10.7

A chi square analysis was done to determine any significant association between reasons given for choosing/ not choosing a nursing career and expressed intention to choose/ not choose such a career. The two reasons most consistently associated with choosing a nursing career were that it is seen as *an opportunity to work as part of a team* (χ^2 (3, N = 140) = 8.284, p < .05), and/or *as a stepping stone to other professions* (χ^2 (3, N = 140) = 10.025, p < .05). For students who intended not to choose a nursing career, the key reasons seemed to be perceived *program difficulty level* (χ^2 (6, N = 140) = 13.203, p < .05), and perceived *unpleasant tasks* (χ^2 (3, N = 140) = 8.880, p < .05).

Interview findings

For this study, constant comparative data analysis was done in two phases. First the researcher examined the data and made notes, which were then cross compared across all the transcripts, and

categorized into the following six themes: 1) Personal interest; 2) Parental support; 3) Professional awareness; 4) Perceived barriers; 5) Potential benefits; 6) Policies at the local and national levels.

Personal interest

The first theme identified in the data was that participants entered the College with various reasons of personal interest. Pre-entry students, particularly, had an excited note in their experiences of being in the college; for example:

> This college is an amazing experience. We learn so much information.
>
> I feel happy to be in this College because I came here to help sick people

Parental support

The second theme identified was continuing support from parents and other family members. When enquiring whether their family supported their decision, and which family member was the most supportive, students irrespective of their levels in the programs, frequently reported their mothers to be the first and most supportive:

> My mother is proud of me. She motivate me to study nursing.
>
> My mother gave me her permission before she died, and now my sister said that nobody should trouble me.

Lack of awareness of the profession

Most of the participants interviewed admitted not having much of an idea regarding the nursing profession before joining the program, and having family members and relatives unaware of what they are doing. The examples below serve to illustrate the paucity of information that students faced when making a decision regarding their choice of career.

> Before I came into nursing I thought that nurses help patients and give medicinesI did not know that they can teach also.
>
> Actually, still... the idea about nursing... it is not clear among local families.

Perceived barriers

The fourth theme that emerged was the various barriers that participants felt negatively influenced their decision and their family's support to take up nursing as a career. Some participants revealed popular societal views that they felt are influential among the Emirati population. Representative examples are given below.

> A nurse is just a helper... You will not get good salary. As a nurse you will touch other men.
> Nurses go home late, and they don't have time to prepare food. They will be very tired.
>
> My father said that his brother, my uncle said that nurses work late outside during night shift and this is not our tradition and culture.

Potential benefits

A fifth theme to emerge from the data collected related to potential incentives that participants perceived they would receive as a result of their choice to choose nursing as a career in the UAE:

> After graduation – more salaries... than other nurses.
>
> When I joined they told me that I can choose morning shift duty only.
>
> We signed a contract with Tawteen and they will provide for us work after immediately graduating.

> When we study we will get monthly and yearly stipend, and when we graduate they will give us work.
>
> When I finish, I will go back to General Headquarters Military (GHQ).

Policies at local and national level

Related to the above, a final component evident from the data collected was the role that policies played at the local and national levels in directing students to choose a career in nursing.

> I am not very excited because, I didn't choose nursing... because of my low GPA I had to take it... if I can I would have choose Pharmacy.
>
> Here in the college they give monthly 4000 dirhams stipend, based on GPA.

Integrated results

The data obtained from the interviews helped expand the understanding of the information collected from the questionnaire as participants were asked to elaborate on their ideas. When examining both the quantitative and the qualitative data collected from all parts of the study, several findings can be extracted and meanings ascertained. Both the questionnaire and the interviews demonstrate that parents and siblings, especially the mother, were all influential people for the student considering a career in the nursing profession. The majority of the students reported that nursing would be a third or last choice of career for them, and both quantitative and qualitative data about reasons for this choice included indicated personal barriers such as dealing with unpleasant tasks in nursing and program difficulty, while barriers from the family included stereotyped factors such as working night shifts, working on weekends, working with the opposite gender, wearing pants in the workplace and the probability of not finding a husband. It was interesting to note that students in the program were more knowledgeable about current changing workplace practices but were still bound to the familial traditions of UAE society.

A chi square analysis participants more likely to choose nursing as a career did so for the opportunity to work as part of a team and as a stepping stone to other professions. On the other hand, those who rejected a career in nursing seemed to do so because of they perceived the program as difficult and nursing tasks as unpleasant. The interviews served to provide more detail regarding students' reasons. Participants understood that nursing was working in the hospital and working together with others, but they chose the nursing profession because of a desire to serve in the military, serve their country, partake of the generous benefits offered by the UAE government, and/or pursue their higher studies. The Porter Nursing Image Scale shows that students perceived the public image of nursing profession as being positive, and similar options were also voiced during the interviews. A qualitative analysis of data served to better understand the factors influencing recruitment and retention of Emiratis into the nursing program, and subsequently into the profession. The reasons behind the decision to choose or not choose nursing were categorized as: 1) Personal interest; 2) Parental support; 3) Professional awareness; 4) Perceived barriers; 5) Potential benefits, and 6) Policies at the local and national levels.

The document analysis served to support both the quantitative and qualitative findings of the study, although not many nursing specific documents were available at the local, Emirate and the National levels in the country. Institutional documents that were collected for analysis include the Student College Handbook, the College policy and Procedures Handbook and the college strategic plan document. Documents collected at the Emirate level in the public domain included the SEHA Annual Report and the Health authority (HAAD) Annual Report. At the national level, the UAE Nursing and Midwifery Council (UAE NMC) has published several documents, including the *UAE Nursing Education Strategy*, the *UAE Nursing Education Standards*, the *UAE nurses code of conduct* and the *UAE Nurses*

Scope of Practice (for clinically practicing nurses). The council has also published its annual report for the years 2011, 2012 and 2013.

Content analysis was used to glean and interpret data relating to the research problem in this study. According to Bowen (2009), document analysis "involves skimming (superficial examination), reading (thorough examination), and interpretation" (p. 32). In the process of content analysis, information was organized into categories related to the research questions of the study and reviewed to identify meaningful and relevant passages of text or other data.

A summary of the findings is shown in Table 8.

Table 8: Integrated results of the study

Questionnaire	Document analysis	Interviews
• Parent's Educational and occupational level • Mother is most influential person • Information regarding the college and programs is obtained mainly through family and friends, college website • Perception of nursing image – overall positive in the UAE • Nursing as a career choice – 3rd /Last • Reasons – to choose nursing – to be a part of the team, and as a stepping stone to higher education • Reasons – to not choose nursing– Program difficulty, and perceived unpleasant tasks • Lack of Prior exposure to health care	• Not many documents available • Higher education pathway offered. • No details of stipends mentioned • If GPA ≤ 2 - only career choice left - nursing	• Parent's educational and occupational level • Mother is 1st influential person • Information through family and friends • Perception of nursing changing- older generation: negative; younger generation: positive • Reasons to choose - Continue higher education, serve the country, more govt. benefits, low GPA • Reasons to not choose nursing – program rigor, family disapproval, lack of name like Dr.

Discussion

Jeffreys (2014) explains that students entering a College of Health Sciences come with a value system embedded in tradition that consciously and unconsciously guides their thinking, decision making processes, and actions within the college and in all aspects of professional and social life. In the current study, among Emirati students, significant reasons to choose nursing as a career related to an opportunity to work as part of the team, and as a stepping stone to other professions, while reasons to not choose nursing demonstrate that there is a perception that the program is difficult and a focus on unpleasant tasks involved in nursing. A comparison using a quantitative study conducted in the United States, by Grainger and Bolan (2005) among undergraduate nursing students found that first year students had a more idyllic view of nursing where kind and compassionate nurses in an exciting career felt good about what they were doing, while fourth year students related feeling less enamored with their choice of profession and shared a feeling of dissonance between what they learned, what they valued and what they were seeing. A similar result is also seen in the current study, where pre-entry students reveal that they feel happy to be in the college because they came to help sick people, while

students further into the program reveal more realistic views such as the fact that nurses go home late and work night shifts.

Jones (2011) found that Emirati youth were motivated more by external factors such as exams and qualifications than by personal interest, suggesting this could be a factor in their not choosing the nursing profession because of its "perceived program difficulty". These reasons are also contrary to a quantitative study conducted by Rodgers (2013) among high school students where most students felt that "making a difference is the main reason they wish to enter the nursing field". The reason for the difference could be attributed to the study being conducted among high school students who might have been displaying a "virtuous concept of nursing" as explained by Price (2011), or that the study was conducted in the United States where social, cultural and political factors are different from the UAE. Another quantitative study, chosen for cross comparison, was undertaken by Al-Kandari and Lew (2005) among high school students in Kuwait where participants reported that a probable reason to choose nursing as a career would be because it was a "nice profession". Yet many participants responded that they would not in reality choose nursing because "they do not like nursing", it was physically exhausting and "it required contact with men". The high school students in the present study might have been echoing traditional familial sentiments in their choice of career in nursing, having not entered the profession themselves.

In the current study relating to Emirati students' reasons for not choosing a nursing career, participants reported that perceived program difficulty was one factor. A quantitative study conducted by McDonough (2012) relating to promoting student retention within a nursing programme in the United States, similarly found that academic and non-academic factors contributed to poor retention, such as unexpected program rigor, active learning, conflicting obligations, and faulty student-faculty relationships. Related to program rigor, participants identified lack of study, time- management, and test-taking skills, along with poor medical terminology as four common reasons for failure in the program.

Jeffreys (2014) identifies environmental factors as those, external to the academic process that may influence students' academic performance and retention, and include financial status, family financial support, family emotional support, family responsibilities, childcare arrangements, family crisis, employment hours, employment responsibilities, encouragement by outside friends, living arrangements, and transportation. For the Emirati students in the present investigation, material environmental factors were not a pressing concern as their family socio economic status was sound, the majority of the students were unmarried and therefore did not have childcare responsibilities, and they lived closer to the college (the suburban parts of the Abu Dhabi mainland). Qualitative analysis of the interviews conducted among nursing students found that participants received stipends and benefits from the Government meant to serve as a source of encouragement to entice and retain them in the nursing program.

Conclusions and implications

The results of this investigation have addressed the paucity of research regarding recruitment and retention issues in nursing education in the UAE. Several factors significantly influenced the Emirati student in her decision to choose a career in nursing, including prior program major and fathers' and mother's educational and occupational level. The most influential people were the student's mother, followed by the father and then a sister, while friends also played an important role. The student's public image of nursing was overall positive, and did not negatively influence the choice of a nursing career, but students refrained from selecting a career in nursing based on perceived program difficulty

and perceived having to deal with unpleasant tasks. A qualitative exploration found that the various initiatives like the Abu Dhabi Tawteen Council and Muhakat program at the governmental level, and the career day, open house day and Emirate skills for life camp, at the college level, were also successful options for attracting Emirati students into the College.

While personal interest remained one important intrinsic motivating factor, an extrinsic motivation to derive meaning from a career in nursing – as serving one's country, working in the public sector/ military, and pursuing more higher studies – was a positive factor influencing the decision making process towards a career in the nursing profession. On the other hand, a lack of awareness relating to the varied roles and responsibilities of a nurse, and perceived barriers both from personal experiences and from family members' perceptions, were factors influencing Emirati students to disregard a career in nursing.

The findings of this study are relevant for Emirati student recruitment and retention practices in the nursing program in the Emirate of Abu Dhabi today. This was the first study to investigate, through a mixed methods approach, the factors influencing Emirati nursing student recruitment. First generation college students are an important subset of the Emirati nursing student population, and need more support, advising, mentoring, counselling and guidance in their career trajectory. Marketing and campaigning strategies in the colleges need to be disseminated to the community at large, to target whole families (i.e. parents, teachers, friends, guidance counsellors, and community leaders) to foster the important social support component, if possible including tours to a clinical facility for exposure.

Social media could be used to project Emirati nurses as serving the country, working in the public sector and recruited by government agencies and sectors like the military. A more positive image of nursing, including attractive traits like boldness, being influential and leadership need to be displayed in the public eye. Different strategies including shadowing a nurse, nursing career workshops, and more summer camp experiences need to be introduced to middle school students to join nursing as a career. Marketing campaigns like 'A day in the life of a nurse in the UAE' need to be invested in to further showcase the profession and entice more youth into a career in the healing/helping profession. Advanced speciality programs in nursing need to be developed to further promote the image of nursing, raise its status and better serve the health care needs of the UAE community.

Career choice often occurs within the realms of social networks and relationships. Students need this added opportunity to interact with and speak to nurses during the process of considering nursing as a career. Thus recruitment strategies may need to extend beyond mere marketing and explore ways to engage potential Emirati students to real nurses in a variety of health fairs and career exhibition settings. There is a need for community access to a variety of nursing roles that could assist with career guidance and choice for students interested in science and/or health professions. Career fairs/ health exhibitions with practicing nurses from a variety of health care settings and practice specializations would be yet another strategy to increase awareness among the Emirati youth.

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Appendix A

<u>NURSING CAREER QUESTIONNAIRE</u>

Please tick the choices that apply most to you...

- Section A – Demographic Data

1. Age
    a. 15 – 24
    b. 25 – 34
    c. 35– 44
    d. 45– 54
    e. 55- 64

2. Sex
    a. Male
    b. Female

3. Level in the program
    a. Pre-entry
    b. Undergraduate
    c. Postgraduate
    d. Those who have left the program

4. What was your major in high school?
    a. Science
    b. Arts
    c. Commerce

5. Where do you live in Abu Dhabi?
    a. Abu Dhabi Island
    b. Suburbs on the mainland (Khalifa City, Shahama, Musaffah etc.)
    c. Al Ain
    d. Western Region

6. Father's education level
    a. Not educated
    b. Primary school
    c. Secondary school

    d. Undergraduate degree

    e. Higher degrees

7. Mother's education level

    a. Not educated

    b. Primary school

    c. Secondary school

    d. Undergraduate degree

    e. Higher degrees

8. Father's occupation

    a. Nursing

    b. Other health care related professions

    c. Non – health care related professions

9. Mother's occupation

    a. Nursing

    b. Other health care related professions

    c. Non – health care related professions

10. Participant's Monthly Socio-economic status

    a. ≤ 10,000 AED

    b. 10,000 – 50,000 AED

    c. 50,000 – 100,000 AED

    d. ≥ 100,000 AED

11. Have you ever seen a nurse in action prior to entering the program

    a. Yes

    b. No

12. Any prior employment/ volunteer experiences in healthcare

    a. No experience

    b. Only Volunteered in healthcare

    c. Volunteered and Worked in healthcare

    d. Only worked in health care

13. Any family members in healthcare

    a. No one in the family in healthcare

    b. One or both parents is/are in health care

    c. One or both parents is/are a nurse

d.   Other relatives in healthcare

14. How did you hear about this College of Health Sciences (Tick all that apply)

a.   From the website

b.   From the newspaper

c.   From friends/ relatives/ family

d.   From the college open house day

e.   From the career fairs in the schools

f.   From advertisements in the malls

g.   From taking part in the "Skills for Life" camps

h.   From other students studying in the college

i.   From other nurses

j.   From the local hospitals

k.   I live nearby and know about this place

- Section B – Porter Nursing Image Scale

By Porter R. and Porter J. (1991)

Directions: Below you will see a series of matched items which may be used to describe a number of people engaged in different professions or careers. In this instance, we are aiming to discover your perception of the public image of nurses and the nursing profession. Please place an "X" on the line at the point which best describes your perception of how the society views nurses and the nursing profession.

		Very	Quite	Slightly	Neutral	Slightly	Quite	Very	
1	Active								Passive
2	Emotional								Controlled
3	Sympathetic								Insensitive
4	Indifferent								Warm
5	Logical								Illogical
6	Powerful								Weak
7	Influential								Ineffective
8	Professional								Technical

9	Inefficient								Competent
10	Respectful								Discourteous
11	Scientific								Nonscientific
12	Non-responsible								Responsible
13	Intelligent								Dumb
14	Compassionate								Cold
15	Non-Caring								Caring
16	Hasty								Patient
17	Not bold								Bold
18	Cheerful								Gloomy
19	Weak								Strong
20	Non-prepared								Organized
21	Uncertain								Confident
22	Friendly								Cold
23	Neat								Sloppy
24	Follower								Leader
25	Rational								Unreasonable
26	Independent								Dependent
27	Compromising								Rigid
28	Outgoing								Reserved
29	Not logical								Logical
30	Submissive								Dominant

- Section C :Personal Goal Instrument: Nursing as your Career Choice

A. Please use the following scale to let us know about your decision to take up nursing as a career

   1. I will definitely not pursue a career in nursing

   2. I may not pursue a career in nursing

   3. I may pursue a career in nursing

   4. I will definitely pursue a career in nursing

B. If you do decide to choose nursing, which choice would it be?

   1. First choice

2. Second choice

3. Third choice

C. <u>Who</u> would you say influenced your choice? (tick all choices that apply)

1. Father	8. Neighbor
2. Mother	9. Friend
3. Sister	10. Husband
4. Brother	11. In- laws
5. Aunt	12. Others _____
6. Uncle	
7. Cousin	

D. Reasons to choose nursing as a career would include: (in your opinion) (tick all choices that apply)

1. To help others

2. To give care and comfort to the sick

3. Job security

4. To get a high salary

5. To serve community and family

6. To meet new people

7. To work as part of a team

8. To study science

9. For higher career pathways

10. As a stepping stone to other professions

11. To get visas for my family members

12. To get respect from the community

Some other reasons on why I would like to be a nurse are:-

1._____

2._____

E. Reasons to <u>not</u> choose nursing as a career would include:(in your opinion) (tick all choices that apply)

1. Parental disapproval

2. Perceived difficult science program

3. Perceived high cost of baccalaureate education

4. Perceived low status occupation

5. Perceived unpleasant tasks

6. Working with patients of opposite gender

7. Working night shifts

8. Working holidays and weekends

9. Perceived poor media portrayal

10. Perceived lack of leadership roles

11. Perceived lack of roles models in the local community

Some other reasons on why I would not like to be a nurse are:-

1._____

2. _____

Appendix B

<p align="center">**INTERVIEW GUIDE FOR SEMI-STRUCTURED INTERVIEWS**</p>

Name of the Study: An Investigation of Emirati Student Recruitment and Retention in Nursing Education, and the Experience of Nursing Educational Leaders

Semi-structured Interview guide:

- How would you describe your experience of being a student in health care, in the UAE?
- Could you provide some examples to illustrate your statement?
- What in your opinion is the perception of society, regarding the nursing profession in Abu Dhabi, UAE?
- What are some of the challenges faced by Emirati nurses practicing the nursing profession in the UAE?
- What are some social/ cultural factors responsible for the perception of nursing in the country?
- Is there anything else that you would like to comment or add upon?

Thank you