

Career choices on graduation – a study of recent graduates from University College Cork

Précis

Increasing numbers of new graduates from University College Cork (UCC) are choosing to take part in vocational training. In addition, many graduates initially move away from Ireland.

Abstract

Introduction

Irish dental graduates are eligible to enter general dental practice immediately after qualification. Unlike their United Kingdom counterparts, there is no requirement to undertake vocational training (VT) or any pre-registration training. VT is a mandatory 12-month period for all UK dental graduates who wish to work within the National Health Service. It provides structured, supervised experience in training practices and through organised study days.

Aims

This study aimed to profile the career choices made by recent dental graduates from UCC. It aimed to record the uptake of VT and associate posts, and where the graduates gained employment.

Methodology

A self-completion questionnaire was developed and circulated electronically to recent graduates from UCC. An existing database of email addresses was used and responses were returned by post or by email. A copy of the questionnaire used is included as **Appendix 1**.

Results

Questionnaires were distributed over an eight-week period and 142 were returned, giving a response rate of 68.9%. Responses were gathered from those who graduated between 2001 and 2007; however, the majority came from more recent classes. Overall, the majority of graduates took up associate positions after qualification (71.8%) with smaller numbers undertaking VT (28.2%). Increasing numbers have entered VT in recent years, including 54.3% from the class of 2007. Overall, the majority of graduates initially took up positions in England (43%); however, in recent times more have been employed in Scotland. Subsequent work profiles of the graduates illustrate that the majority are now working as associates in general practice (51.4%) and in Ireland (54.2%).

Conclusions

- There has been an increase in the proportion of UCC graduates undertaking VT.
- Graduates tended to move away from Ireland initially to gain employment.
- There has been a shift away from employment in England towards Scotland where the majority of new UCC graduates are now initially employed.
- The majority of graduates returned to Ireland for employment after the initial move away.

Gerald McKenna BDS MFDS RCSEd
Clinical Fellow in Restorative Dentistry
School of Dentistry
University College Cork

Francis Burke BDentSc MSc PhD FDS RCSEd
FFDRCSI
Senior Lecturer/Consultant in
Restorative Dentistry
School of Dentistry
University College Cork

Corresponding author:
Dr Gerald McKenna
Clinical Fellow in Restorative Dentistry
School of Dentistry
University College Cork
Email: g.mckenna@ucc.ie
Tel: 021-490 1100 ext. 5033
Fax: 021-454 1193

Table 1: Respondents categorised according to year of graduation.

Graduation year	Respondents (N)	Respondents (%)
2001	6	4.2
2002	9	6.3
2003	18	12.7
2004	24	16.9
2005	24	16.9
2006	26	18.3
2007	35	24.6

Table 2: Positions immediately after graduation analysed according to year of graduation.

Graduation year	Position immediately after graduation (%)	
	Vocational training	Associate
2001	0	100
2002	0	100
2003	0	100
2004	12.5	87.5
2005	20.8	79.2
2006	50.0	50.0
2007	54.3	45.7
Total	28.2	71.8

Introduction

Irish dental graduates are eligible to enter associate positions within general dental practice in Ireland or the United Kingdom (UK) immediately after qualification. There is no requirement to undertake any formal pre-registration training or examinations as seen in other medical disciplines. Since 1993, vocational training (VT) has been a compulsory requirement for all UK dental graduates who wish to work independently as practitioners within the National Health Service (NHS).¹ It is a 12-month training period designed to provide an introduction into general practice, which allows for strengths and weakness to be identified and built upon.² Vocational dental practitioners (VDPs) work in approved practices with designated trainers who provide supervision, in-house training and help on demand throughout the training period.³ VDPs are paid a set annual salary irrespective of patient through-put in order to reduce financial pressures. The benefits of VT have been well documented; it can help to improve young dentists' confidence levels⁴ by providing exposure to patients and procedures that they felt uncomfortable with while undergraduates.⁵ It can also aid future career planning⁶ and engender a commitment to continued professional development.⁷

VT was introduced as a pilot project in the Republic of Ireland in 1999. The scheme is voluntary and is open to all new dental graduates. As part of the training period, VDPs spend two days per week in general dental practice, two days in the Health Services Executive (HSE) Dental Service and one day on day release attending lectures. The VDPs are paid an annual salary by the HSE⁸ and they can provide treatment for medical card, PRSI and private patients in general practice, as well as patients attending HSE dental clinics. Any fees earned by the VDP while working in the practice accrue to the practice, in addition to a training grant paid by the Postgraduate Medical and Dental Board towards practice expenses.

In recent years it has been reported that Irish dental graduates have begun to take up VT positions in the UK. This study aimed to detail the uptake of VT and associate positions by graduates of University College Cork (UCC) in Ireland and the UK. The geographic locations of these initial positions and subsequent work profiles of the graduates in their years after graduation were also determined.

Table 3: Location of employment analysed according to year of graduation.

Graduation year	Location of employment immediately after graduation (%)				
	Rep. of Ireland	England	Wales	Scotland	Other
2001	50.0	50.0	0	0	0
2002	0	100	0	0	0
2003	22.2	66.7	5.6	0	5.6
2004	16.7	70.8	0	8.3	4.2
2005	20.8	50.0	4.2	16.7	8.3
2006	26.9	15.2	0	46.2	11.5
2007	22.9	11.4	0	62.9	2.9
Total	21.8	43.0	1.4	28.2	5.6

Method

A self-completion questionnaire was developed to gather information from recent dental graduates of UCC. A copy of the questionnaire is included as **Appendix 1**. The questionnaires recorded demographic information from respondents, including gender and year of graduation. Participants were asked to record their choice of position after graduation, i.e., VT or associate position, where they were employed geographically and their current work profile.

A pilot study was conducted by providing 12 junior hospital staff in the University Dental School, Cork, with questionnaires and evaluating their feedback and comments. After some minor modifications to the layout, the questionnaire was widely distributed. The questionnaires were sent electronically to recent dental graduates from UCC using an existing database of email addresses. A total of 224 questionnaires were distributed over an eight-week period.

Completed questionnaires were returned and forwarded blind to an independent statistician, where they were analysed for response frequency and the results tabulated using SPSS®. Statistical significance was set at $p < 0.05$.

Results

Over the eight-week period, 224 questionnaires were distributed. Eighteen email addresses were inactive and, of the remainder, 142

PEER-REVIEWED

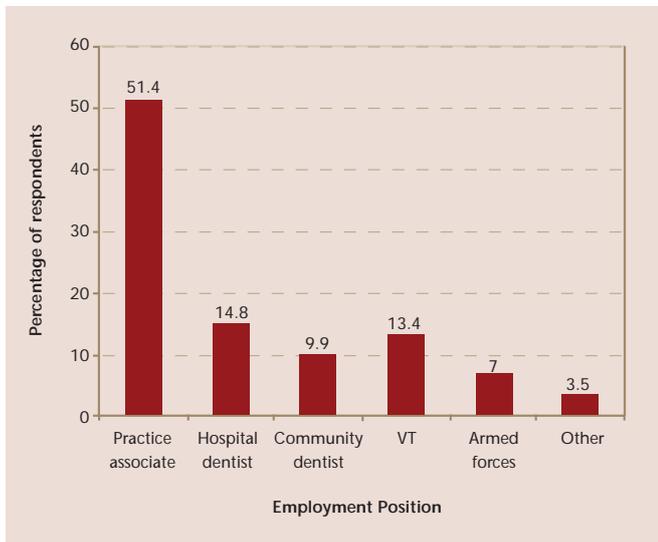


FIGURE 1: Employment positions of respondents in 2008.

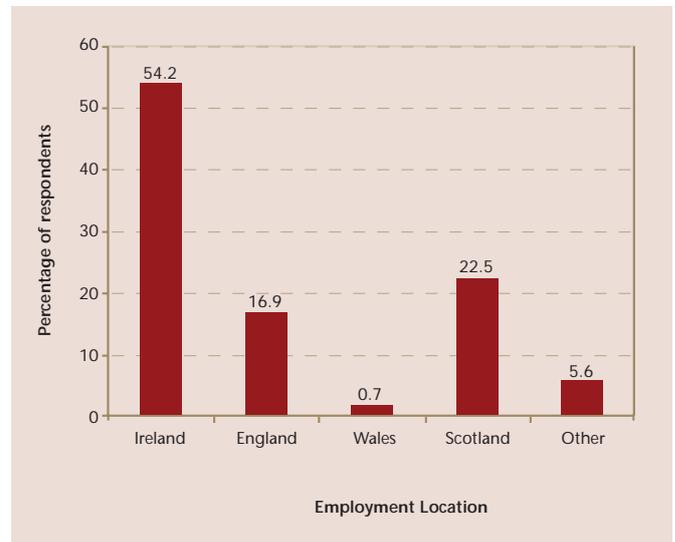


FIGURE 2: Employment locations of respondents in 2008.

successfully completed questionnaires were returned, giving a response rate of 68.9%. Eight questionnaires were spoiled, each due to sections left uncompleted. The respondents consisted of 94 females (66%) and 28 males (34%). Responses were received from those who graduated in the years 2001 to 2007 (Table 1).

Overall, the majority of graduates took up an associate position immediately after graduation (71.8%), with a smaller percentage undertaking VT (28.2%). Analysis of the responses according to year of graduation showed that a higher percentage of more recent graduates took part in VT (Table 2). Results indicate that the number of VDPs has increased year on year from 2004. Of the class of 2007, 54.3% (19 respondents) indicated that they had taken part in VT, with two undertaking VT in Ireland and 17 in the UK.

Respondents were also asked to record in which geographical location they took up employment immediately after graduation (Table 3). Overall, the majority of participants initially took up employment in England (43.0%), followed by Scotland (28.2%) and the Republic of Ireland (21.8%). Further analysis illustrated that these employment locations have changed over time. The greatest majority of graduates were employed in England for the period 2001/02 through to 2005, while in 2006 and 2007 the most popular location was Scotland. A Chi-Square test indicated that there was a statistically significant difference in employment location for those graduates from 2001-2003 compared to 2007 ($p < 0.05$).

Respondents were asked to detail their current work profile in terms of what position they held (Figure 1, Figure 2) and where they were now working. The majority of participants indicated that they were now working as associates in general practice (51.4%), followed by those working in hospital practice (14.8%), and those still completing VT (13.4%). Information was also gathered on where the respondents were now working. The majority were now practising in the Republic of Ireland (54.2%), followed by smaller numbers in Scotland (22.5%) and England (16.9%).

Discussion

The aim of this study was to record the career profiles of recent dental graduates from UCC. It aimed to measure the uptake of VT among a sample of Irish dental graduates and map their employment locations. Information was recorded after surveying graduates using a questionnaire distributed via email. An existing database of graduate email addresses, normally used for sending information on postgraduate courses and alumni events, was used.

The questionnaires returned a response rate of 68.9%. This was achieved by resending the questionnaire via group email on two occasions thanking those who had returned the questionnaire and reminding those who had not to complete it. A higher response rate was achieved among more recent graduates, which could be explained by the fact that the email database is more up to date for those participants and they may be more familiar with modern communications technology. Unfortunately, in using the email database the possibility for confidentiality was eliminated in the electronic responses received, but this was offset by reduced distribution costs and an expected higher response rate as compared to a postal survey.^{9,10} Anecdotally, some of the respondents struggled with completing the questionnaire online. This could have been overcome by using online survey software such as Survey Monkey® or Zoomerang®. This would also alleviate concerns about the lack of anonymity in the format used for this study. It was possible to print the questionnaire, complete it and return it by post; however, only 14 (9.8%) respondents chose to avail of this option.

The information recorded illustrated a shift in the numbers of new graduates choosing to undertake VT. There has been a steady increase in the numbers choosing VT year on year since 2004. The results recorded no graduates having undertaken VT between 2001 and 2003; however, personal communication would indicate that some of these graduates did undertake VT but were omitted due to the poor response rate among this group. Of the most recent graduates from

2007 the majority undertook VT as opposed to an associate position. A statistically significant difference was recorded in the uptake of VT for those graduates from 2001-2003 as compared to those from 2007. VT has been proven to be a successful structured introduction to general practice for UK graduates.¹¹ In fact, surveys of UK dental graduates would indicate that they would actually be unwilling to enter the general dental service without VT.¹² While associate positions do exist for newly qualified graduates, many practice owners in Ireland do prefer candidates with experience. In addition, with VT a mandatory requirement for UK graduates who want to work within the NHS, some employers in the UK may be unwilling to employ those who have not completed the scheme.

The majority of new graduates from UCC actually moved away from Ireland initially in order to secure employment. Many areas of the UK suffer from a lack of dentists to meet the needs of the population, especially in NHS practices.¹³ In addition to larger numbers of jobs available throughout the UK, certain areas, including Scotland, offer financial inducements to entice new graduates. Such "golden hellos" were introduced around 2004 for all of those taking up new positions throughout the country and more money was offered for those working in designated "rural" areas.¹⁴ In addition to the shift from associate positions to VT there has been a movement of new graduates in this survey travelling to Scotland instead of England. There was a statistically significant difference in employment location for those graduates from 2001-2003 compared to 2007 ($p < 0.05$). The results indicate that this shift first began to become apparent with graduates from 2004 onwards, after financial incentives for recruitment and retention of NHS dentists in Scotland became available.¹⁵ Since 2004 the numbers of new graduates travelling to Scotland has increased annually, with the result that over 60% of the most recent graduating year surveyed was employed there after graduation.

As expected, the majority of graduates were now working as associates in general practice with smaller numbers employed in the hospital and community settings.¹⁶ Some graduates were working as dentists within the armed forces and the majority of these were made up of overseas graduates who had returned home. A small percentage of graduates were no longer working as dentists, although this group also included those who have returned to undertake medical degrees. The majority of the respondents are now also employed in the Republic of Ireland. This is compared to initial results showing that the majority actually moved away from Ireland after graduation in order to take up employment.

This survey was carried out among graduates of UCC only and therefore collected a limited amount of data. Caution must be exercised in extrapolating these results to all Irish graduates, as those from Trinity College Dublin and Queens University Belfast were not included. However, the increased uptake of VT among more recent UCC graduates should be viewed as a positive development and must add weight to the case to make such a scheme more widely available throughout Ireland.

Conclusions

This study provides a profile of the professional careers of recent

dental graduates from UCC. It illustrates that there has been an increase in the number of graduates undertaking VT in recent years. It showed that UCC graduates tended to move away from Ireland to the UK initially to gain employment. Within the UK there has been a shift away from employment in England towards Scotland, where the majority of new UCC graduates are now initially employed. In addition, the study shows that the majority of graduates returned to Ireland for employment as general practitioners after their initial move away.

References

1. Allen, W.R. Mandatory vocational training for the general dental services. *British Dental Journal* 1993; 175: 188.
2. Baldwin, P.J., Dodd, M., Rennie, J.S. Postgraduate dental education and the 'new' graduate. *British Dental Journal* 1998; 185: 591-594.
3. Gibson, C.J. The assessment of dental vocational training: a personal view. *Dental Update* 2005; 32: 552-555.
4. Bartlett, D.W., Coward, P.Y., Wilson, R., Goodson, D., Darby, J. Experience and perceptions of vocational training reported by the 1999 cohort of vocational dental practitioners and their trainers in England and Wales. *British Dental Journal* 2001; 191: 265-270.
5. Brookman, D.J. Vocational trainees' views of their undergraduate endodontic training and their vocational training experience. *International Endodontic Journal* 1991; 24: 178-186.
6. Gallagher, J.E., Clarke, W., Eaton, K.A., Wilson, N.H.F. Dentistry – a professional contained career in healthcare. A qualitative study of VDPs' professional expectations. *BMC Oral Health* 2007; 7: 16-27.
7. Ralph, J.P., Mercer, P.E., Bailey, H. Does vocational training encourage continuing professional development? *British Dental Journal* 2001; 191: 91-96.
8. Devereux, L. Vocational training in Ireland: an overview. *Journal of the Irish Dental Association* 2006; 52 (3): 137-138.
9. Mavis, B.E., Brocato, J.J. Postal surveys versus electronic mail surveys. The tortoise and the hare revisited. *Evaluation and the Health Professions* 1998; 21: 395-408.
10. McMahon, S.R., Iwamoto, M., Massoudi, M.S., Yusuf, H.R., Stevenson, J.M., David, F., *et al.* Comparison of e-mail, fax, and postal surveys of paediatricians. *Pediatrics* 2003; 111: 299-303.
11. Cabot, L.B., Patel, M., Kinchin, I.M. Dental vocational training: identifying and developing trainer expertise. *British Dental Journal* 2007; 203: 339-345.
12. Cabot, L.B., Patel, H.M. Aspects of the dental vocational training experience in the South East of England. *British Dental Journal* 2007; 202: 1-6.
13. Scarrott, D.M. The structure of the dental workforce in the 21st century. *Primary Dental Care* 2000; 7: 15-17.
14. Newton, T., Williams, A., Bower, E. Health Committee Report: Access to Dental Health Services in Scotland, 2004.
15. The Scottish Government. "Golden Hello" package for NHS dentists. Press release 2002: April – <http://www.scotland.gov.uk/News/Releases/2002/04/1512>.
16. Ibbetson, R. Choosing a career in dentistry. *Dental Update* 2003; 30: 28-36.

PEER-REVIEWED

Appendix 1

Decision Making by Irish Dental Graduates After Leaving University

DEPARTMENT OF RESTORATIVE DENTISTRY, UNIVERSITY DENTAL SCHOOL AND HOSPITAL,
WILTON, CORK, IRELAND.

Information about this questionnaire

This questionnaire is part of a study which aims to explore the choices made by Irish dental graduates when seeking employment after university. We want to record your thoughts and experiences in order to try and improve the process for future years.

Your name and address do not appear anywhere on the questionnaire. If you have any further questions you can contact Dr Gerald McKenna on (+353) 021 490 1100 or email g.mckenna@ucc.ie.

We are well aware of the time and effort it takes to complete a questionnaire like this and we are very grateful for your participation, thank you. When you have completed the questionnaire please return it by email to g.mckenna@ucc.ie.

Please answer the questions below by ticking the boxes which apply. For certain questions you may be asked to give more detail regarding the answer you have given: please do so in the space provided.

1. When did you graduate from university?

- 2001 2005
 2002 2006
 2003 2007
 2004

2. Which gender are you?

- Male Female

3. Where did you gain employment immediately after graduation?

- Republic of Ireland Northern Ireland
 England Scotland
 Wales
 Other location (please state): _____

Please state the general area which best describes where you were employed, e.g., London, Cardiff, Cork: _____

4. Was this your first choice of employment location?

- Yes No

5. If the answer to Question 4 was NO:

Where was your first choice of employment location?

- Republic of Ireland Northern Ireland
 England Scotland
 Wales Other location (please state): _____

6. If the answer to Question 4 was NO: Why did you move away from your preferred employment location?

- Lack of employment opportunities
 Family reasons
 Desire to move with friends/colleagues
 Opportunity to undertake VT in the UK
 Other reason (please specify): _____

7. Which of the following best describes the position in which you were employed immediately after graduation?

- Associate in practice
 Vocational trainee
 Community/health board dentist
 Hospital dentist
 Armed forces dentist
 None of the above

If these options do not describe the position in which you were employed immediately after graduation please give details:

8. Which of the following best describes your current employment position?

- Associate in practice
 Vocational trainee
 Community/health board dentist
 Hospital dentist
 Practice partner/owner
 Armed forces dentist
 None of the above

If these options do not describe the position in which you are employed please give details: _____

9. Where are you currently employed?

- Republic of Ireland Northern Ireland
 England Scotland
 Wales Other location

Please state the general area which best describes where you are employed, e.g., London, Cardiff, Cork. _____