

The impact of postgraduate studies in wound healing on professional practice and personal development

KEY WORDS

- ▶ Higher Education
- ▶ Masters in Wound Healing and Tissue Repair
- ▶ Practice and professional development
- ▶ Postgraduate studies

There is some evidence to show that higher education can make a difference in nursing and midwifery programmes, however, there is a lack of evidence to demonstrate the effectiveness of postgraduate programmes with an inter-professional focus with regards to their impact on clinical practice. Between March and April 2017, a descriptive cross-sectional survey of graduates from a number of Master's programme within the School of Medicine at Cardiff University was undertaken in order to determine the impact of postgraduate study on an individual's professional practice and personal development. This article presents the results of the survey for the Masters in Wound Healing and Tissue Repair.

A previous government report on the future of higher education (HE) concluded that universities had the following four objectives:

- ▶ Instruction in skills
- ▶ Promotion of the general powers of the mind
- ▶ Advancement of learning
- ▶ Transmission of a common culture and common standards of citizenship.

This report also stated that the majority of students enter HE to secure a better job and have a successful career (Swain, 2011).

In the UK, HE includes undergraduate programmes, e.g. Bachelors Degrees, Foundation Degrees, and Higher National Diplomas and postgraduate programmes, e.g. Master of Science (MSc) and Masters in Business Administrations (MBAs) degrees, Doctors of Philosophy (PhD) and other doctorates. The Quality Assurance Agency (QAA) is responsible for setting the academic standards for HE awards and provides a framework of qualification descriptors for institutions to follow (QAA, 2014). Universities in the UK track the progress of graduates, known as 'Destinations of Leavers Survey' (<https://www.hesa.ac.uk/data-and-analysis/students/destinations>). However, the data generated are not always readily available and are difficult to trace back to specific programmes of study (Holloway, 2014).

There are a number of previous studies that have examined the impact of Masters preparation (Whyte et al, 2000), post-registration degrees (Hardwick and Jordan, 2002) and HE (Spencer, 2005) on professional practice. Whyte and colleagues (2000) undertook a 10-year follow-up study of graduates of a full-time Masters programme in nursing related subjects at a University in Scotland. A postal questionnaire was sent to 190 graduates with a subsequent response rate of 57.3% ($n=109$). The majority of the respondents were female (87%) with an almost even split of UK and international students ($n=44$ versus $n=41$ respectively). The results indicated that having a Masters degree was linked to job opportunities. The responses also showed that respondents felt their clinical practice and been enhanced. Themes also emerged in relation to 'personal satisfaction' and 'achievement', particularly related to academic skills attainment. A distinction was also 'personal growth' linked to the notion of 'intellectual sharing', 'broadening of perspectives' and possessing advanced 'powers of reasoning'. Whyte and colleagues recognised the limitations of using a self-reported questionnaire, however, this is the most feasible way to obtain data from a large group of individuals.

A subsequent study in 2002 by Hardwick and Jordan examined the impact of part-time post-

registration degrees in nursing and midwifery (Bachelors and Masters) on practice. Graduates ($n=58$) from a single institution in a University in South Wales, who had graduated between 1994 and 1998, were contacted by post and asked to provide feedback on topics such as motivational factors, perceptions of use of skills, changes in practice related to the programme and barriers to implementation of skills. The response rate was 74% ($n=43$) with the majority reporting that their graduate skills had been used in clinical practice ($n=33$, 77%), although the respondents did not provide any specific examples to support this. In contrast, respondents did provide examples of academic and research skills obtained. This could be related to the type of degree that was undertaken, as the response rate for the BSc to MSc was 68.6% versus 82.6% respectively. Whilst the authors questioned whether this implied degrees provide students with academic rather than clinical knowledge, it might be that graduates had not yet had an opportunity to apply the clinical knowledge gained as some may have only graduated relatively recently. Furthermore, thirteen of the respondents (eleven MSc and two BSc) were nurse lecturers, therefore, this may have impacted on the ability to easily judge the impact of knowledge on their own clinical practice.

A qualitative study by Spencer (2005) examined the perceptions of nurses, midwives and health visitors in relation to the impact of HE on their professional practice. Using a phenomenological approach, the author interviewed twelve individuals who had undertaken an MSc in Professional Practice at an HE institution in the East Midlands. Using content analysis, the author identified four themes:

- ▶▶ Personal and professional motivation
- ▶▶ Workplace constraints
- ▶▶ Valuing hands-on nursing and client contact
- ▶▶ Challenging/questioning practice.

The author concluded that HE has a positive effect in practice; however, factors such as time and support were inhibitors of benefit. Spencer suggested that further research was needed to identify the impact of HE on client care and service delivery.

Overall, there is some evidence to show that HE can make a difference in nursing and midwifery

related programmes, however, more studies are needed to demonstrate the effectiveness of postgraduate programmes with an inter-professional focus and a clear sense of the impact of education in clinical practice remains elusive. Furthermore, there is an absence of information on programmes specifically related to wound healing and tissue viability. Flanagan (2008) stated that despite a huge increase in tissue viability education, there is a lack of evidence to show this influences clinical practice in a positive way.

Discussing the Quality Agenda, Ousey (2010) proposed that providers of tissue viability education need to ensure that educational programmes include non-clinical skills related to business and marketing. Furthermore, cross boundary working is important to facilitate continuous and seamless care (Ousey, 2010). Her recommendations are that study programmes should be inter-professional and should include content related to healthcare service delivery, rather than just clinical skills.

Based on these gaps in the evidence, the School of Medicine at Cardiff University undertook a survey of graduates from postgraduate programmes to determine the impact of their studies on their professional practice and personal development.

THE SCHOOL OF MEDICINE AT CARDIFF UNIVERSITY

As part of the School of Medicine, the Centre for Medical Education (C4ME) at Cardiff University offers a wide range of master's level postgraduate programmes. The majority of programmes are delivered on a part-time basis, enabling students to work while they study. Each master's programme has a taught component and a research component. The taught component provides students with an opportunity to gain new knowledge and academic skills in their chosen discipline. The Centre currently offers 20 postgraduate programmes, one of which is the MSc in Wound Healing and Tissue Repair.

WOUND HEALING AND TISSUE REPAIR

The MSc in Wound Healing and Tissue Repair is a three-year, inter-disciplinary, part-time, distance-learning course. The course attracts healthcare professionals from fields such as nursing, medicine, pharmacy, podiatry and the pharmaceutical

industry, and offers the opportunity to study at a distance alongside an international group of professionals from countries around the world. The programme aims to enable students to explore and analyse existing and developing theories and concepts that underpin wound healing and tissue repair so facilitating professional and personal growth.

The MSc consists of three stages: the first taught stage lasts for one academic year, and consists of one five-day study block and five modules. The second taught stage extends for a further academic year and consists of a further five-day study block and three modules. Finally, the MSc research dissertation stage lasts for a further academic year and includes include a dissertation (*Figure 1*). The programme is delivered via blended learning, i.e. face-to-face contact for the study blocks and via Cardiff University's virtual learning environment (VLE).

Students have the opportunity to gain a wealth of skills and abilities, which they are required to apply to their practice setting. In addition to greater conceptual understanding of current knowledge, issues and methods, they have the opportunity to practise and develop abilities in critical analysis, the application of evidence-

based medicine and in dealing with complex issues systematically and creatively. The programme is also designed to help them develop their problem-solving and decision-making abilities by enabling them to utilise evidence effectively and communicate important concepts to colleagues and others. The expected learning outcomes for the programme are shown in *Box 1*.

METHOD

Between March and April 2017, the C4ME undertook a descriptive cross-sectional survey of graduates from a range of the master's programme in order to determine the impact of postgraduate study on their professional practice and personal development. In total, 10 programmes took part in the survey and 962 graduates were invited to take part. This article presents the results of the survey for the Masters in Wound Healing and Tissue Repair.

Twenty-six students who had graduated from the MSc programme in the last three years were contacted by email with a link to take part, 19 responded (73% response rate). The majority of the respondents were nurses ($n=8$, 42%) female ($n=14$, 73.7%) based within the UK ($n=9$, 47.3%) and had completed their programme in 2015 ($n=9$, 47.4%). Other countries represented included USA, Barbados, the Netherlands, Germany, Singapore and Australia.

Most of the respondents received financial support from their employer ($n=14$, 60.9%) and reported that whilst they felt the qualification was not a formal requirement for the role they were undertaking it did give them an advantage ($n=13$, 68.4%). All respondents indicated that they would recommend the programme of study to someone else and 16 (84.2%) indicated that the programme either met (36.8%) or exceeded (47.4%) their expectations.

Participants were asked to provide an example of something they had achieved in their professional practice as a direct result of studying. Thematic analysis of the free-text responses to these questions is summarised in *Figure 2*. More specifically, and in relation to impact on their clinical practice, respondents were asked to provide examples that demonstrate impact (*Figure 2*). In relation to the Masters Dissertation, participants were asked to think about the impact of this on their professional practice. A number of themes emerged that are also summarised in *Figure 2*. Just over half of the

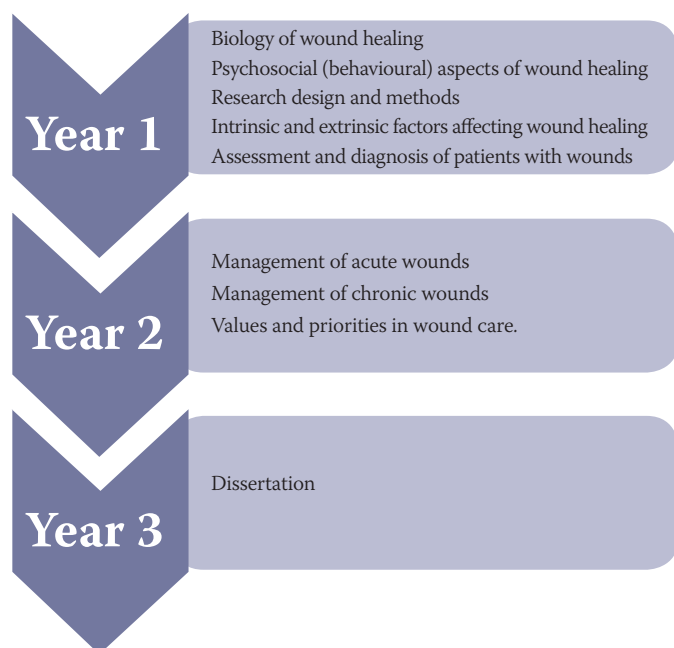


Figure 1. Structure of the MSc in Wound Healing and Tissue Repair Programme

Box 1. Intended learning outcomes for the MSc in Wound Healing and Tissue Repair

- Critically examine current practices and evaluate traditional methods of management of wounds
- Demonstrate a knowledge of controversial and contentious issues related to wound healing and tissue repair
- Illustrate an understanding of modern key concepts of wound healing by applying them to challenges within their own environment
- Display mastery of a complex and specialist area of practice
- Appreciate the benefit of inter-professional teamwork through learning alongside others from different professions
- Demonstrate independence of thought and contribute via your own research to the development of knowledge and evidence base of their profession.

respondents ($n=10$, 52.6%) reported that they had successfully published a paper, all of which related to an assignment for one of the modules.

A range of questions asked the graduates to report their level of agreement with skills and knowledge acquisition, employability, adaptability, leadership and management, research or audit and life-long learning. *Figures 3a–3g* show the responses to the statement ‘*as a result of completing my programme of study I feel much better prepared in this area*’. The results show that the majority ($n=17$) reported improved skills (*Figure 3a*).

The majority also reported improved knowledge and employability ($n=18$), adaptability and leadership and management ($n=16$).

All respondents also felt much better prepared in the domains relating to research/audit and lifelong learning (*Figure 3f and 3g*).

A further set of statements asked the respondents to provide responses related to how worthwhile they felt the programme was with regards to: intellectual stimulation, relevance to work, application of learning, ability to make changes and impact on the workplace. The responses provide a very positive insight into relevance of the programme to the respondents’ workplace, application of learning, ability to make changes and impact in the workplace (*Figures 4a–4e*).

The final question required participants to think about what they would say to a colleague in relation to the most important thing they had learned from, enjoyed about or applied as a result of undertaking the programme (*Figure 5*).

DISCUSSION

Previous studies from nursing, midwifery and health visiting programmes were able to provide some insight into the positive impact of undertaking HE on academic skills, although the impact on clinical practice required further evaluation (Whyte et al, 2000; Hardwick and Jordan, 2002; Spencer, 2005). The aim of this study was to determine the impact of

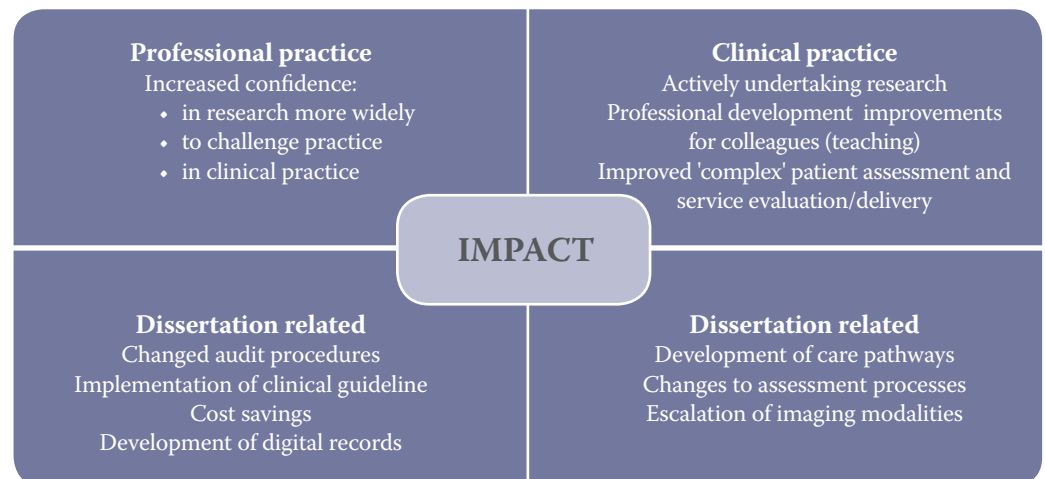


Figure 2. Thematic analysis for achievements and impact on professional and clinical practice

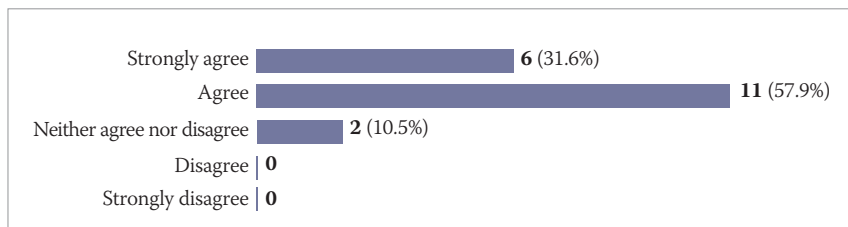


Figure 3a. Skills

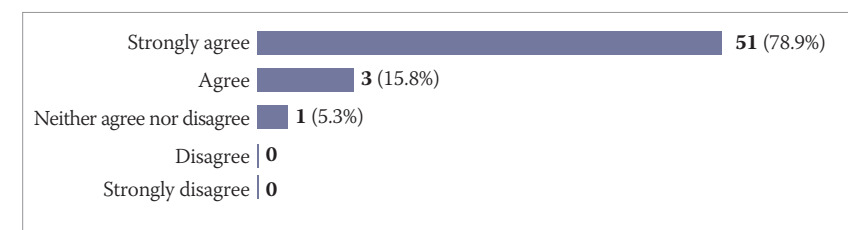


Figure 3b. Knowledge

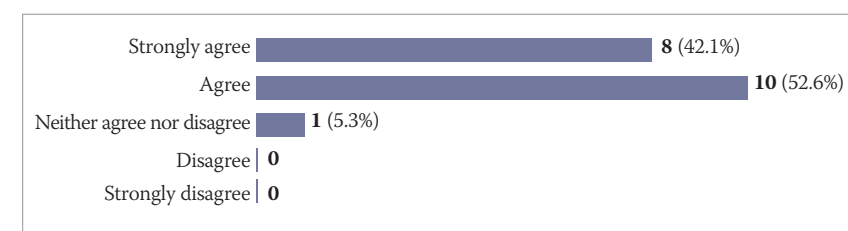


Figure 3c. Employability

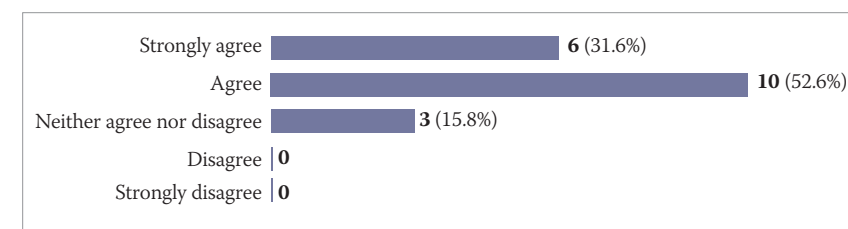


Figure 3d. Adaptability

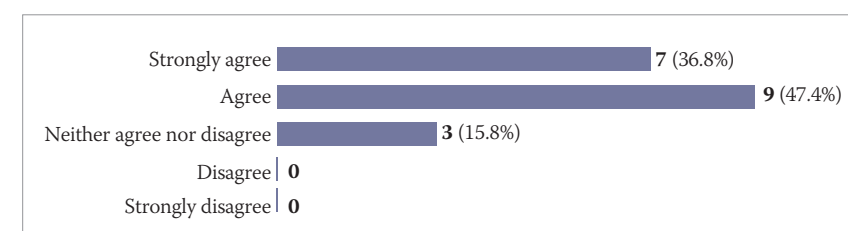


Figure 3e. Leadership and management

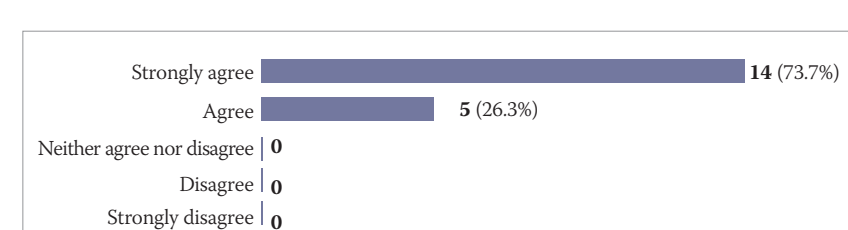


Figure 3f. Research or audit

postgraduate study on professional practice and personal development on graduates of the MSc in Wound Healing and Tissue Repair.

Overall the results showed that the majority of graduates reported a positive impact on knowledge acquisition, employability, adaptability, leadership and management, research or audit and life-long learning as well as intellectual stimulation, relevance to work, application of learning, ability to make changes and impact on the workplace. It is these latter four areas that are of most interest, as these provide some indication of the influence of the programme on clinical practice. These findings are supported by evidence from the open-ended questions which suggest improvements related to a professional context. These findings help to fill the previous gaps in evidence.

LIMITATIONS

It is acknowledged that the findings are from a small sample of self-selected respondents. It would have been useful to follow-up the non-respondents to see if their experiences differed, however, as the survey was anonymous it was not possible to do this. The sample consisted of graduates within the last four years. It may have been preferable to extend participation to those who had graduated up to 10 years previously to examine the more longer-term impact of the programme.

CONCLUSION

Higher education has a number of key purposes including: acquisition of skills, development and advancement of independent learning and higher-level thinking. For healthcare-related programmes there is also an expectation that graduates will demonstrate application of knowledge in clinical practice. Existing evidence suggests that these aims are being met, however, there are some indications that graduates tend to recall and be able to provide examples of acquisition of academic skills rather than application of theory to clinical practice and, therefore, better patient outcomes. However, the current survey from a relatively limited sample size does provide some indications of the positive impact of a postgraduate programme in wound healing and tissue repair on professional and clinical practice.



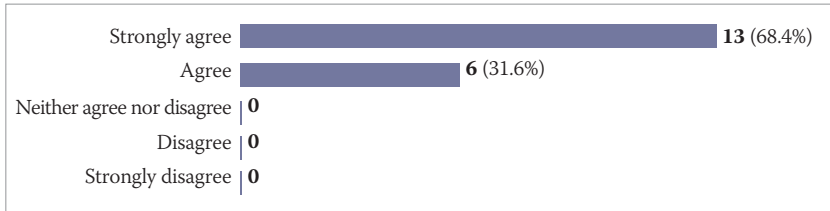


Figure 3g. Life-long learning

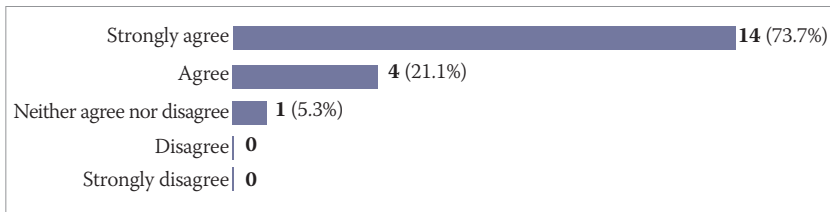


Figure 4a. Intellectual stimulation

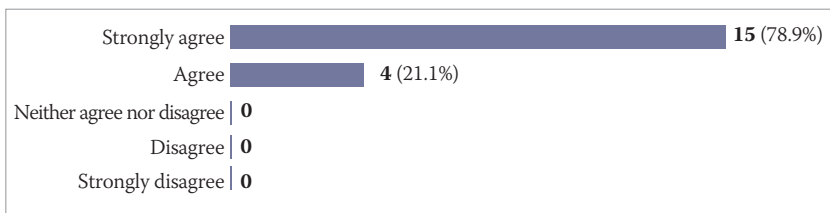


Figure 4b: Relevance to my work context or personal/professional development

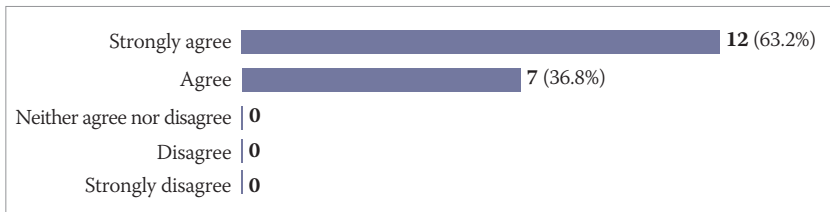


Figure 4c. Learning I was able to apply in my professional context

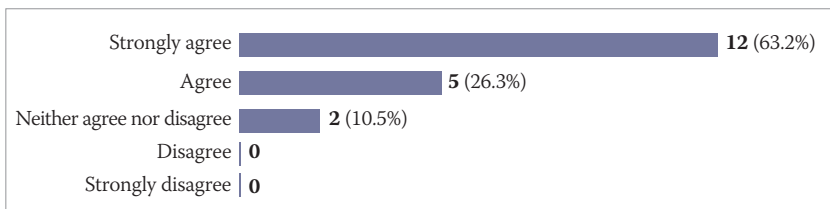


Figure 4d. Changes I was able to make to my practice or professional approach

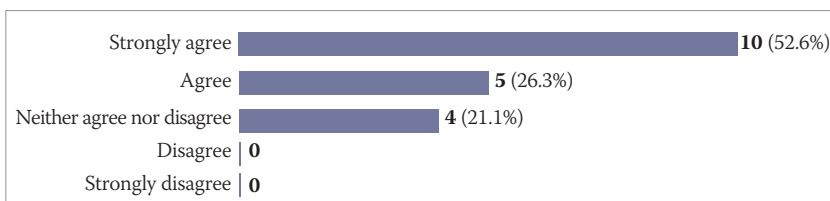


Figure 4e. The impact I have subsequently seen in my workplace

Learned/applied

- Reading/critiquing skills
- Research skills.

Enjoyed

- Meeting other healthcare professionals
- Learning from others' experience.

Figure 5. Most important thing the students learned/applied or enjoyed

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