

Title page:

Title of the article: An exploratory study to explore why Trust Grade doctors choose to undertake a Master of Surgery (MCh) programme.

Authors:

Lai K Chan, Associate Head in Postgraduate, Professional & Education team, Edge Hill University,

Dr Carol Kelly, Senior Lecturer in Postgraduate, Professional & Education team, Postgraduate Medical Institute, Edge Hill University.

Professor Jeremy Brown, Professor of Clinical Education, Evidence-based Practice Research Centre, Postgraduate Medical Institute, Edge Hill University.

Corresponding author:

Lai Chan – chanl@edgehill.ac.uk

Faculty of Health and Social Care

Postgraduate Centre

Longmoor Lane,

Liverpool

L9 7AL

0151 529 6241/6242

Short Introduction:

This paper outlines the findings from a qualitative study exploring what motivates Trust Grade doctors to undertake postgraduate study alongside an already busy work schedule. They are surgical specialists who have completed a Master of Surgery Programme (MCh) at Edge Hill University.

Title: An exploratory study to explore why Trust Grade doctors undertake an MCh programme.

Key words: postgraduate, careers, research, trust grade and associate specialist (SAS) doctors

Introduction:

There is a growing appreciation of the need for an evidence based practice approach to surgery (Kwaan & Melton, 2012); the need for the advancement of research skills has therefore been recognised and highlighted in the medical training curriculum and within the medical profession (Tooke, 2008). In addition, a key requirement for anyone involved in the conduct of clinical research is the completion of Good Clinical Practice (GCP) training. Radical changes have been made to postgraduate medical education over recent years, and with the introduction of re-validation for all doctors registered with the General Medical Council (GMC), the emphasis on continuing professional development has never been greater (GMC, 2013). This qualitative study explored what motivated a group of surgical Trust Grade doctors (Ears, Nose & Throat and Orthopaedics) to undertake further study alongside full time employment.

The Master of Surgery (MCh) is a two to three year postgraduate programme of study. The programme has been designed and delivered in collaboration with senior surgeons and clinical educationalists at a local NHS Trust. During their period of study, MCh students at Edge Hill University are usually employed as Trust Grade and associate specialist (SAS) doctors, and are not currently on the national training programme for surgery.

The curriculum consists of specialist clinical modules, clinical research training, and the completion of a dissertation - normally a small-scale research study. An academic training programme of this kind is designed to provide doctors with an integrated set of clinical and research skill competencies which helps them to meet the GMC (2013) remit of good clinical practice guidelines. The MCh programme has been delivered at EHU since 2008 and at the time of this study there were 63 graduates who had completed the programme. The programme has been accredited by Royal College of Surgeons (England).

Tsimtsiou et al (2010) argued that a Master's programme can provide individual benefits, such as increased confidence, and may stimulate interest in new career pathways. This in turn can then lead to increased job satisfaction. Splig et al (2012) criticised the change in UK doctors' training within National Health Service (NHS), from an apprenticeship model approach to a competence based approach, as part of the implementation of Modernising Medical Careers (MMC). Splig et al's qualitative findings suggest that the increasingly individualised nature of the training of doctors has a detrimental effect on their learning. There is clearly a need for continuing postgraduate training for doctors, yet there is little literature which has explored the motivating factors for SAS doctors who undertake such additional study.

Aim of the project:

To explore the elements which motivate doctors to self-fund additional postgraduate study alongside a full time Trust Grade post.

Objectives:

- To investigate which elements motivate the individual to undertake a Master's programme.
- To explore individual perceptions of the benefits, barriers, and challenges Trust Grade doctors faced during and after completion of their programme of study.

Ethical Approval:

Ethical approval was granted by the Faculty of Health and Social Care's Research Ethics Committee. Feedback on the interview schedule was also sought from three current student representatives.

Method:

The nature of this study was descriptive and exploratory and therefore a qualitative interpretive approach was undertaken, this enabled an in-depth description of a complex situation not previously explored in the literature (Marshall and Rossman, 2010). An audit trail from interviewing, transcribing, to member checking was used to establish dependability and confirmability simultaneously (Lincoln & Guba, 1985; Padgett, 1998).

Recruitment and selection of sample group:

This was a purposeful sample group. The participants were all past MCh programme students who have all successfully completed their award. The university Alumni department was consulted at the start of this study and shared their database with the researchers. It is this data information that researchers used to contact these individuals. MCh Alumni representatives and the programme team gave verbal consent for this project to go ahead. Under the Data Protection Act (1998) Edge Hill University were the Data Controllers of the information that students provided. A standardised email with an information sheet attached was sent out by the researchers to 63 graduates inviting them to take part. The email and information letter had contact details of the researchers. Those who wanted to participate were asked to reply to the email. The email also encouraged those who had questions to contact the research team for clarification before they decided to take part, or not, in the study.

Data Collection

One to one semi structured interviews, to capture the individual's thoughts and experiences, were conducted with the ten MCh graduates who volunteered to take part. These interviews were either face to face, or via Skype or telephone, depending on the participant's choice. All interviews were audio-recorded to ensure participants' words were recorded accurately. Verbal consent was gained at the beginning of each interview. The semi-structured interview schedule is outlined in Table 1 below.

Table 1 Semi-structured interview schedule

<p>What made you decide to undertake the MCh programme initially?</p> <p>What were your initial personal goals when you embarked on the MCh?</p> <p>How were these personal goals achieved during or after your study?</p> <p>What were your expectations of the Master's programme?</p> <p>What were the challenges and barriers for you during your study of the MCh?</p> <p>How did you overcome them?</p> <p>Did you have any concerns before or during your study of the MCh? If yes, what were they?</p> <p>Has completing the MCh made a difference to you? If so, how?</p> <p>Has the MCh programme assisted you or contributed in your career progression? If so, how?</p> <p>Has the MCh programme enhanced<u>d</u> or influenced<u>d</u> your practice? If so, how?</p> <p>Did the MCh programme enrich your academic and professional abilities? If so, how?</p>
--

Data Analysis:

This research was underpinned by phenomenological ideas. The data analysis strategy was therefore influenced by phenomenological data analysis, as described by Crotty (1996). The aim was to derive themes or categories from the data, which came together to form a comprehensive description of the lived experiences of the ten interview participants.

The data was analysed using thematic framework analysis (Ritchie et al., 2013). This method has been used frequently in qualitative research and allows the researcher to describe and interpret what is happening in a particular setting. The data was analysed using the 5 stages of this approach: familiarisation with the data; developing a thematic framework; using codes to “index” the data into this framework; creating charts of data, according to the themes; and mapping and interpretation – using the charts to search for patterns, explanations and concepts.

LC led the analysis of the data. To ensure trustworthiness (Lincoln & Guba, 1985) was achieved, the data was analysed by CK independently to validate the coding and themes. Peer debriefing followed relating to the analysis to ensure both parties agreed to the themes found.

Findings:

Ten MCh graduates were interviewed, 8 male and 2 females, aged between 33 to 45 years old. All were Trust Grade doctors when they commenced the programme and have progressed to various senior posts since completion. Nine of the ten of the Trust Grade doctors had gained their first degree from overseas and English was not their first language (see Table 2). These demographic data is a fair representation of the nationalities of this cohort of MCh students. The majority were non Europeans.

Table 2: Profiles of Interview Participants

Gender	Age	English as first language	Country of first degree	Time taken to complete MCH	Current post
F	43	No	Europe	2	Specialist doctor ENT
M		No	Europe	2	Foot and ankle Fellow
F	33	Yes	UK	3	Orthopaedic Registrar
M	35	No	Non Europe	3	Orthopaedic Registrar
M	38	No	Europe	3	ENT Registrar
M	39	No	Non Europe	2	ENT Registrar
M	42	No	Non Europe	5	Clinical Orthopaedic Fellow
M	36	No	Non Europe		Orthopaedic Registrar
M	45	No	Non Europe	4	Orthopaedic Associate specialist
M	41	No	Europe	3	ENT Specialist Registrar

Three key themes were identified after data analysis: **career investment, impact and development of transferable skills, and resilience and reward.**

Career investment

Several doctors believed that embarking on a postgraduate programme of study would enhance opportunities for jobs, or enable them to gain a national training post through advancement of their recordable achievements and qualifications. For many their current roles provide evidence that they have achieved career enhancement since completing their MCh, including competing for places on both research fellowship and national training schemes.

'...the reality was it was very competitive to get into the training posts in the UK, particularly in orthopaedics.' (Interviewee (I) 7)

'Yes, I have got a training number now.' (I 6)

Motivators to study also included doctors recognising a deficit in their own research knowledge and skills, and linking this to career progression:

'I don't have much experience in research...I wanted to use some knowledge of research because that was my weakest point, because I've done audits before but never done research (I 8).

'My personal goal at the time was to publish because it's an important part of the selection process and to progress in my field and in most medical jobs anyway. So I knew that I had to do it. (I 5)

Others reported that they chose this particular programme because they liked the course structure - in particular that it was aligned to a job, and it offered the opportunity to develop both clinical and research skills together; the international recognition of the MCh programme; and the programme being recommended by their peers.

One participant found the learning experience had motivated him to seek out further study for a postgraduate teaching qualification. Another spoke of a desire to continue to study and undertake a doctoral programme.

Impact and development of transferable skills

Although a perceived gap in research knowledge and skills was highlighted as a key motivator, for many the achievement of increasing specific skills of critical appraisal, together with enhanced writing skills enabled them to be better prepared for pursuing their own academic interests and publishing their own work. For many the impact of learning during the MCh programme has helped them to design their own research study, write for publication, present at conferences, and generally gain more confidence in their academic and research skills, and the personal satisfaction of

accomplishment. All participants reported that their perceived increase of research knowledge was invaluable and that the MCh had acted as a facilitator in that respect:

'I think this was a starting point for me.....I have had a lot of, you know, publication following, especially in systematic review. So it was quite a, you know, good starting point to improve my research skills.' (I 6)

'And because we have to read articles all the time ... I had something to reflect on, every time I would read something I would say "Oh! This is what we learned in our studies"' (I 5)

Other reported research skills development included conducting data analysis, interpreting statistics, and being able to undertake systematic reviews independently.

Participants also reported other areas of learning, these included an ability to not only appraise published research but also to decide how it may be incorporated into and impact upon clinical practice:

'It's opened my eyes. Before I would read it and say "yes, yes, I agree concretely". Now I am like: "why did they do this, why didn't they do that, what does it actually mean", so to apply it to my patients.' (I 5)

In addition to enhanced knowledge and understanding of research, other collateral learning was reported, including an increase in confidence, becoming an independent learner, and time management skills. The experience of studying has helped several individuals report an improvement in their interactions with patients, staff and enhance leadership skills (Interviewees 1, 2 and 5). This discovery was realised through work colleagues and patients verbal feedback, whilst for some this was the result of becoming more self-aware of the learning experience. Some recognised that they were more self-assured with their peers: *I'm probably a bit more assertive* (I3).

Resilience and Reward:

To set this theme into context it is important to define how the researchers define resilience. Using Reich et al's (2010) interpretation of resilience it generally refers to a pattern of functioning indicative of positive adaptation or outcomes in the context of significant risk or adversity.

The recognition of the learning journey and the challenges of balancing work, study and home life was a major consideration for all individuals. Several doctors acknowledged coping strategies, especially when working under pressure. They admitted that they had perhaps underestimated how much academic study time was needed and the high level of commitment required. Some had to adjust to a different education system and learning styles, especially using technology to enhance learning - some reported that this was a steep learning curve. Several of the participants applied a problem solving approach and demonstrated resilience throughout:

'I was on call in the hospital, at night time I used to do my assignments and whatever time I could get I use to do it, which was a really difficult job, working on the weekend as well and compromising family life as well' (I 4)

'It wasn't easy. But, you know, everything is possible if you try.' (I 6)

Several participants expressed beliefs of not wanting to ask for help because they thought this may be seen as cheating, or no point asking peers for help believing they are *"all in the same boat"*. This opinion was sometimes changed when they found support from tutors and their programme lead.

The sacrifice however was regarded by all participants to have been worthwhile and rewards were acknowledged and appreciated, a feeling of pride was expressed by many:

'Yeah, it was hard at times but I'm glad that I did it, so, I'm proud.' (I 1)

'Yes, it's been quite a good experience, and now I've got the degree it's such a relief [laughs], I've climbed such a big mountain...so I feel quite proud that I've done that.' (I 4)

Summary:

These Trust Grade doctors embarked on a postgraduate study with a purpose, however their evaluation of the experience has provided further in-depth insight into the educational journey. It appears that they have gained more than just a qualification. As well as the development of critical analysis and research skills, there were also elements of self-discovery and self-reflection during the interview process. The development of resilience and the ability to cope was important. Completing the programme enhanced confidence and this was regarded as confirmation of their own capability.

Trust Grade doctors' needs could be very different to trainees who are progressing through Foundation and Specialist training programmes. These findings demonstrate that those who wish to enhance their portfolios for employability are motivated and willing to sacrifice financially, physically, and emotionally to study.

The limitation of this qualitative study is that the sample was taken from one higher education institution and the findings only represent the perceptions of those MCh graduates who participated. Further research with other institutions delivering similar postgraduate programmes would be beneficial to further ratify these findings. Similarly, a larger scale survey regarding postgraduate clinical education for Trust Grade doctors is warranted.

In this sample, the majority had qualified overseas and their motivations might be different from UK graduates or those deciding to "step-out" of a training programme

(i.e. out of programme experience) compared to those in non-training "Trust" or "Staff" grade posts. Nevertheless, this study has provided some insight into why Trust Grade doctors embark on postgraduate education, and an appreciation of the rewards gained from the experience.

Key phrases:

- There is an increasing emphasis on the need for postgraduate medical education.
- Research skills and knowledge are increasingly important for practising clinicians.
- Trust grade doctors appear to undertake structured Master's programmes to enhance their career prospects and address identified gaps in knowledge.
- Learning can be achieved through such a programme with potential impact on both careers and clinical practice.
- Collateral learning is evident including time management, study skills, academic writing and increased confidence.
- Resilience is needed but rewards are evident.

References:

Crotty M (1996) *Phenomenology and Nursing Research Melbourne*: Churchill Livingstone.

Data Protection Act (1998) <http://www.legislation.gov.uk/ukpga/1998/29/contents> (accessed 28/7/2015).

General Medical Council (2013) *Good Medical Practice*. General Medical Council. London.

Kwaan M R, & Melton G B (2012) Evidence-Based Medicine in Surgical Education. *Clinics in Colon & Rectal Surgery*, 25(3), 151-155.

Lincoln Y S, & Guba E G (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Marshall C, Rossman G B (2010) *Designing Qualitative Research* 5th Edition, CA: Sage.

Padgett D K (1998). *Qualitative methods in social work research: Challenges and rewards*. Thousand Oaks, CA: Sage.

Reich J, Zandra A J, Hall (2010) [eds] *Handbook for Adult Resilience*. London, The Guildford Press.

Ritchie J, Lewis J, McNaughton-Nicholls C, Ormston R (2013) *Qualitative Research Practice*. London, Sage Publication Ltd.

Spilg E, Siebert S, Martin G (2012) A social learning perspective on the development of doctors in the UK National Health Service. *Social Science & Medicine*, November 2012, vol./is. 75/9, 1617-24.

Tooke J (2008) *Aspiring to excellence: final report of the independent inquiry into Modernising Medical Careers*. London: MMC Inquiry. www.mmcinquiry.org.uk (accessed 04/7/2015)

Tsimtsiou Z, Sidhu K, Jones R (2010) The benefits and costs of a master's programme in primary health care: a cross-sectional postal survey. *British Journal of General Practice*. Vol./is. 60/580, 803-807.