

Assessing the impact of a neonatal management course

A small follow-up study of participants' perceptions of the impact of a residential management course on their subsequent practice is described. Participants found the course to be beneficial with respect to immediate learning, improving confidence and having a positive influence on their working practices. Opportunities to learn about the topics covered on the course would be beneficial for all senior neonatal trainees prior to them becoming consultants.

Ben N.J. Shaw^{1,2}

MBChB, MRCP, MD, FRCPC, MA (Clin Ed)
Consultant Neonatologist, Professor of Clinical Education
ben.shaw@lwh.nhs.uk

Andrew Kirkcaldy²

MSc, BA
Research Assistant

Jeremy Brown²

PhD, PGCE, BA
Professor of Clinical Education

¹Neonatal Unit, Liverpool Women's Hospital

²Evidence-based Practice Research Centre, Edge Hill University, Ormskirk, Lancashire

Transition from the role of a trainee to a new consultant can be stressful, particularly if the new consultant feels ill-prepared for the role. Neonatal trainees acquire clinical knowledge, skills and attitudes in the workplace to enable them to become safe practitioners. Skills in the areas of management and leadership are also important (and required by the Royal College of Paediatrics and Child Health, RCPCH)¹ to allow them to improve and sustain the delivery of high quality health care.² However, it has been shown that few trainees in paediatrics and other specialties are confident in these areas when they become consultants.³⁻¹⁰

Management courses are available locally to support trainees in these areas, however, it is often difficult on returning to the workplace to utilise knowledge and skills obtained on these courses on a regular basis, and there is no information available as to the extent of how trainees manage to do this. An industry-supported neonatal management course ('Peak Performance') has taken place in Hathersage, Derbyshire for the past nine years. The course is funded by an unrestricted educational grant and adheres to the Association of the British Pharmaceutical Industry (ABPI) guidelines. There is no involvement of the sponsor in delivery of the course, which aims to provide an opportunity for learning about, reflecting on, and discussing with peers, areas of consultants' responsibilities that are not generally taught elsewhere. Places are offered to senior neonatal trainees (generally specialist trainee 8, ST8) and feedback from them regarding the quality of the education sessions has been very good.

The aim of this study was to formally

evaluate the Peak Performance course and to assess the reported impact of the course on participants' clinical practice over the few months after the course.

Methods

Attendees at the Peak Performance management courses taking place in September 2013 and 2014 were asked to participate in the study. Each delegate was given an evaluation pack consisting of a pre- and post-course questionnaire and an expression of interest form to be completed if they were happy to be contacted to be interviewed at a later date. The pre-course questionnaire contained questions asking about candidates' perceived effectiveness in relation to management issues covered in the course using a 150mm visual analogue scale, as well as a section asking about the participant's stage of training and their previous management experience. The post-course questionnaire contained the same questions about the candidates' effectiveness and also a section for participants to rate and comment on the course content and delivery (FIGURE 1).

The documents in each pack were marked with a unique number and letter combination to enable the questionnaires to be completed anonymously but be matched for each participant (eg 1a and 1b = Participant 1). Participants were pre-warned by email that they would be asked to complete questionnaires at the beginning and end of the course together with the expression of interest form and they had the opportunity to ask questions about the study during the course. The responses on the pre- and post-course questionnaires were compared for each

Keywords

neonatal; trainee; management

Key points

Shaw B.N.J., Kirkcaldy A., Brown J.
Assessing the impact of a neonatal management course. *Infant* 2016; 12(2): 67-70.

A residential neonatal management course can:

1. Improve participants' confidence in many areas of practice.
2. Help participants gauge their own progress in postgraduate training by listening to their peers.
3. Have a positive influence on the participant's practice later on in the workplace.

question relating to the candidate's perceived effectiveness.

The interview phase of the study used a collective case study approach in order to elicit understanding of a complex experience over the few months following the course or after starting a consultant position (whichever was the sooner) using a number of case studies occurring on multiple sites. Yin¹¹ has described these as analytical generalisations as opposed to statistical generalisations. Multiple case studies are preferred because they can be more robust than a single case study and, depending on the results, can strengthen the external validity.¹²

Initially it was hoped to ask participants to take part in a telephone interview at four, eight and 12 months after the course or until six months after starting a consultant job (whichever was the sooner). However, owing to changes in contact details of participants and a lag time between contacting them and organising interviews, it was decided to concentrate on obtaining one interview each within the first year following the course. Participants were contacted by letter/email by the research team to invite them to take part in the interview by telephone at a convenient time and a consent form was completed prior to the interviews taking place. Each interview was recorded with a digital audio recorder and took less than an hour. Interviews were conversational in style and semi-structured to allow the interviewer to address themes relevant to the research questions while allowing them to follow relevant avenues of enquiry opened by the participants. The interviews focussed upon the participants' experiences of neonatal management and use of the experiences on the course (giving examples if possible) in this or other areas of work. When 'saturation of themes' was reached (that is, in the interviewer's opinion no new information or insights were being obtained) recruitment for interviews ceased.

Interviews were transcribed verbatim and entered into NVivo 9 for analysis to identify the main themes. The interviews were subject to content analysis independently by two researchers to enhance the rigour of the findings. When multiple cases were used a detailed description of each case was performed exploring the themes within the case (within case analysis) followed by thematic analysis across all cases (cross-case analysis). In the final interpretative phase,

1. Taking on the leadership role expected of a new consultant
2. Being a good communicator as a consultant
3. Being the responsible consultant for withdrawing intensive care
4. Having an understanding of neonatal services nationally
5. Agreeing your job plan
6. Preparing a business case
7. Chairing a meeting
8. Dealing with a litigation claim
9. Preparing your curriculum vitae (CV)
10. Being interviewed
11. Dealing with the police
12. Dealing with the coroner

FIGURE 1 Items related to management activities asked about the on pre- and post-course questionnaires. Participants were asked to score how they felt about each item on a visual analogue scale with the lowest point on the scale being 'very anxious' and the highest being 'very confident'.

the lessons learned from the analysis were presented.^{11,13} The final analysis was reported within a case study grid with a supporting narrative and anonymised quotes.

The study received ethics approval from the Faculty of Health and Social Care, Edge Hill University, Research Ethics Committee.

Results

Twenty-one higher specialist training neonatal trainees took part in the study. Sixteen were at ST8 level (three of whom were in locum consultant posts), four at ST7 and one at ST6 level. Fourteen reported 'on-the-job' management experience, eight had attended a management course before, one had a management qualification and three reported no management training whatsoever. Ten of the trainees reported that they perceived that they had taken no active management role in their training prior to the course. Comparing the responses between the pre- and post-course questionnaires revealed that the confidence of the participants had significantly increased in all areas enquired about ($p < 0.001$).

Eight participants were interviewed between nine and 15 months after the course. Two of these were also interviewed later when they had become consultants. In

general, interviews revealed trainees' satisfaction with the course's content and structure along with some suggestions for its future development. The study's findings focus on the varying ways in which the course was able to impact upon those attending, as well as other notable comments made during interviews.

Team building and team communication

One frequently recurring theme centred upon the effectiveness of the course in promoting effective team building and team communication; indeed for some, the development of skills in these areas was described as the main learning outcome of attending the course. Trainees reported that activities designed to enhance these aspects of management had helped them view things from a new perspective:

"Teambuilding... we'd gone out and we'd done activities together and we'd identified who was the leader, who was the team player, and how we worked as a team and it just made me think differently." (ID5)

Crucially, the exercises utilised by those delivering the course were directly applicable to the working lives of those attending:

"The first day there was an exercise on team building and talking to new people who you have never met and working with them. That scenario to me is pretty much like a few weeks ago, because it was a totally new team here." (ID3)

"Certain things do stay in my mind, one was a team-building exercise and I do think about it so many times during my day-to-day job. You meet people for the first time and you are expected to work with them and do a team task. In my consultant job now I always try and think about what I used to do on that course, and how I dealt with people and how I communicated with people. There are a few things which I try to reflect on, and change the way I practise when I communicate to people here." (I1C1P2)

Writing a CV and preparing for interviews

Another aspect of the course that was viewed as useful related to the preparation of CVs and preparing for interviews. Trainees reported that the course had provided a new perspective on the way they presented both themselves and their career path to others:

"Interview practice on that course

really helped me because it gave me a reality check of where I was lacking and how people look at my CV or look at the way I present myself.” (I1C1P2)

“CV preparation, interview preparation stood out quite a lot. I think I’ve realised that I needed to develop areas in my own work and in my CV that showed that I was not only interested in clinical work at the hospital but that I was interested in the overall performance of the unit.” (ID2)

Course handouts provided during sessions had proved particularly useful in advance of upcoming interviews, providing a resource that trainees could refer back to to inform their preparation:

“I got out my folder again when I was doing interview preparation, because there were a few of those [handouts] that were actually quite useful in helping me prepare different aspects of the interview. There were also sections on preparing your CV and sort of interview questions, and obviously that was quite useful, just in terms of those areas, to start reading around.” (I2C1P2)

And interview preparation had also been aided by support from peers on the course:

“I’d kept in touch with one of the other trainees, she had done an interview last November then started in post a few months after that, so in the run up to her interview I had helped her with preparation and done a Skype mock interview and she had done the same for me before my interview. We’d exchanged interview notes. That was for me quite a useful contact; it came out of that course.” (I2C1P2)

Networking

Networking within a group that had similar or overlapping goals was seen as extremely helpful, especially if contact was maintained post-attendance of the course. Meeting at meal-times provided the opportunity for those at similar stages in their career to share experiences, opinions and advice. For example, trainees described how, as well as providing tips on interview preparation, peers had also been able to give advice on managing the day-to-day working role of a consultant:

“Having met them and knowing them it’s hopefully given me a bit of a heads-up as to what’s coming for me. We’ll wait and see what happens, but it’s certainly been useful so far.” (ID2)

Additionally, interaction with others on the course offered trainees the opportunity to ascertain their relative merits in comparison with their peers:

“At the courses [we] were meeting people thinking this is the group that I will potentially be interviewing against and this is the standard of trainees at the minute, who are out there, who will be finishing at the same stage as me. What do they have that I don’t or what are they doing that I should be doing or that would be good for me to think about doing? Not only to look better on my CV but just to develop your own career and interests.” (ID2)

Preparing a business case and chairing a meeting

Other areas of the course that had proved useful were guidelines on how to submit a business case (one trainee felt that this information had enabled them to represent their unit’s interest more satisfactorily than previously, eg in securing trialling equipment) and how to conduct a meeting. Regarding the latter, a trainee noted that the course had enabled them to look at the way effective meetings are run differently:

“There was one kind of lecture about how does one conduct a meeting and I had been to a few meetings before that and I’d never observed people, it was more about understanding the issues. Now I step back and see how the meeting is being conducted and how each person is having his own say and how the leader of the team is putting it all together. So, it just made me think differently and understand it differently and not just concentrate on the issues of the agenda.” (ID5)

Legal and ethical aspects

A focus upon the legal and ethical aspects had also proved invaluable to trainees; a speaker with a background in medico-legal work was highlighted as especially informative. Furthermore, trainees reported that examples provided on the course were useful and relevant to their day-to-day role:

“There was one lecture on how to withdraw intensive care and issues were covered about the people you can ask for help. You can ask for the legal team; you can ask for opinions from other professionals outside your own [set]. That was interesting because I have

[had] a few cases where I’ve been able to put that information in perspective. So yes, even in the clinical aspects, it was very helpful.” (ID5)

In one instance, in particular, where a consultant was faced with the tragic case of a baby dying, the specific information provided on this part of the course directly informed decision making:

“One of the things in [the] talk concerned the timing of diagnosing really severe jaundice in a newborn baby and starting the exchange transfusion. Medico-legally there shouldn’t be more than a four hour window so I used [the] teaching and discussed: ‘Guys this is one of those cases that is as critical as a 24-week baby that’s just about to be delivered because this is time-critical. Really the reason is we don’t want the baby to come to harm, but also the baby might come to harm if there was a delay of more than four hours and medico-legally that would put you in a vulnerable position as a doctor.’ So I used it as a reflective thing with the juniors to say: ‘This was a close call, we only just got within that time.’ These are the learning points and this is why it’s so important.” (ID1)

Other points raised

Trainees regarded the presentation of neonatology and paediatrics in the context of future development within the NHS as informative and relevant. For one interviewee, attendance on the course had also prompted further exploration and the beginnings of addressing identified areas for personal development:

“I think it made me focus more on being a neonatologist with a special interest in something and then that led me to look. I found a course at [university] that was a neonatal palliative care course, which I got myself on. If the course hadn’t made me do the talk, then I wouldn’t have looked as to what kind of things that I think I’d be good at and would enjoy. So it helped me focus, on what I need to strengthen myself on, like a lot of management-speak and areas and backgrounds, and also what kind of consultant I’d like to be.” (ID1)

Although not the main aim of the interviews, suggestions for improving the course were also given including:

■ exploring any stress and coping mechanisms that may be of use when working in neonatology

- reviewing examples of previously made mistakes by consultants
- tips for dealing with working in a 'dysfunctional' department
- strategies for dealing with extremely difficult patients.

Summary

In this small study the authors have tried to gain an understanding of the impact of a management course on senior paediatric trainees' confidence in management skills and their future practice. The results of the comparison between pre- and post-course questionnaires showed a clear increase in confidence in all areas of practice – in some individuals in some areas showing a large increase from a very low score pre-course. The course also prompted reflection on teamwork and proactive personal development as well as providing practical tips. Although gratifying that the course appears to have had such a positive effect, this is perhaps not surprising given that its aim is to improve trainees' awareness of management issues.

Participants viewed this course as being particularly important to them as they approached the transition from senior trainee to consultant. Course content was perceived to be highly relevant and useful as they prepared for consultant interviews and taking on new senior roles. There was a tangible appreciation that the sessions were delivered by experienced experts in neonatology. This added a powerful dynamic to the learning experience. Participants also reported that they were able to gauge their own progress in postgraduate training by listening to their peers and comparing their own

development against the experiences of others. This was a hidden aspect of the course that was of great value as they approached the consultant job application process. It was a relatively rare opportunity to share a prolonged length of time with colleagues from the neonatology subspecialty and this was cherished.

This study followed participants for several months after the course. Two of the interviewees had become consultants during this time and were able to reflect on what they had learnt in relation to their new role. Although the number of interviewees was small, there was tangible evidence as described above, that the course had an influence on specific issues such as the trainee's personal development and legal and ethical aspects of practice and, more generally, on team working and person management skills later on.

Previous studies have reported the difficulties associated with preparing for the managerial aspects of the consultant role.^{3,4} This study suggests that a bespoke course attended by a small number of senior neonatal trainees as they approach the end of their specialist training, can have a long-term impact on their practice and might complement aspects covered in the training curriculum. As part of the latter, trainees should endeavour to gain more prolonged management exposure over time back in the workplace, in order to try and consolidate the experiences gained on the course.

The results of this study suggest it would be beneficial for all senior neonatal trainees to attend a course prior to them becoming consultants, however, owing to accommodation and funding restraints this is not

possible. Perhaps one way forward could be for other bodies (eg the British Association of Perinatal Medicine and/or the RCPCH Specialist Advisory Committee) to promote the need for such management courses, thus enabling the educational opportunities provided to be more widely available.

References

1. **Royal College of Paediatrics and Child Health.** *A Framework of Competences for Higher Specialist Training in Paediatrics.* London: RCPCH; 2005.
2. **General Medical Council.** *Management for Doctors.* London: GMC; 2006.
3. **Shaw B.N.J., Stenson B., Fenton A. et al.** Subspecialty neonatal trainees views on being prepared for the consultant role. *Arch Dis Child Educ Pract Ed* 2012;97:68-71.
4. **Brown J.M., Ryland I., Shaw N.J. et al.** Working as a newly appointed consultant: a study into the transition from specialist registrar. *Br J Hosp Med (Lond)* 2009;70:410-14.
5. **Beckett M., Hulbert D., Brown R.** The new consultant survey 2005. *Emerg Med J* 2006;23:461-63.
6. **Houghton A., Peters T., Bolton J.** What do new consultants have to say? *Br Med J* 2002;325:S145.
7. **Morrow G., Illing J., Redfern N. et al.** Are specialist registrars fully prepared for the role of consultant? *Clin Teach* 2009;6:87-90.
8. **Kite S., Salt S.** Transition from SpR to consultant: a survey of training needs in palliative medicine. *Palliat Med* 2006;20:53.
9. **Westermann M., Teunissen P.W., van der Vleuten C.P. et al.** Understanding the transition from resident to attending physician: a transdisciplinary, qualitative study. *Acad Med* 2010;85:1914-19.
10. **Bindal T., Wall D., Goodyear H.M.** Senior paediatric specialist registrars' experience in management. *Postgrad Med J* 2010;86:328-33.
11. **Yin R.** *Case Study Research: Design and Methods.* 2nd Edition. Newbury Park, CA: Sage Publications; 1994.
12. **Yin R.K.** *Case Study Research: Design and Methods.* 3rd Edition. Newbury Park, CA: Sage Publications; 2003.
13. **Miles M.B., Huberman A.M.** *Qualitative Data Analysis.* 2nd Edition. Thousand Oaks, CA: Sage; 1994.

N3- The Neonatal Nutrition Network

University College London Hospitals **NHS**
NHS Foundation Trust

Neonatal Nutrition Network Third National Study Day 2016



Venue: Kennedy Lecture Theatre, Institute of Child Health,
University of London, WC1N 1EH

Date: Thursday 16th June, 2016

To register visit: <http://www.uclhcharitycourses.com/courses/neonatology>

uclh