Junior doctors' perspective on oncology placement

Fei Sun[1], Finbar Slevin[2], Alison Young[3]

Corresponding author: Dr Fei Sun f.sun@nhs.net
Institution: 1. Leeds Cancer Centre, 2. Leeds Cancer Centre, 3. Leeds Cancer Centre
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Abstract

Introduction

The incidence of cancer is increasing and cancer care is rapidly changing. Junior doctors have reported lack of confidence in managing patients with cancer. We sought feedback from junior doctors on placement within our centre to quantify the educational impact on their training.

Methods

Junior doctors who undertook a placement between February 2015 and August 2016 were asked to complete an online survey covering quality of training, clinical support and future career aspirations prior to and following the rotation.

Results

47 of 81 (58%) responses were received.

Median score for quality of clinical experience was 6/10 (interquartile range 5-8). 40(85%) preferred working on the assessment unit compared to inpatient wards.

42(90%) trainees felt confident managing neutropenic sepsis and malignant spinal cord compression. 14(30%) felt confident managing acute radiotherapy toxicities and 19(40%) felt confident managing systemic anti-cancer agent toxicities. 35(75%) felt confident managing end of life care patients.

29(61%) felt senior support to be good during regular hours and 24(52%) felt the same for out-of-hours working.

24(51%) found oncology-specific departmental teaching useful.

Prior to the rotation 10(21%) wished to train in oncology and this was maintained following the attachment.
Conclusion

Junior trainees were confident managing acute oncological emergencies and end of life care patients but were less certain managing radiotherapy/chemotherapy toxicities. There remains scope for development of oncology-specific teaching and improving clinical support.

Keywords: Oncology, Palliative care, Postgraduate oncology

Introduction

The landscape of oncology has changed in recent decades and in the United Kingdom (UK) cancer survival rates have significantly improved[1]. In non-surgical oncology there have been advances in both radiotherapy and systemic anti-cancer therapies. The era of personalised medicine based on biomarkers, genomic analysis and more targeted treatments has become more of a reality[2]. At the same time the incidence of cancer is increasing for many tumour types partly due to a combination of an aging population, changes in lifestyle and environmental factors[3][4][5]. One in every two people will be diagnosed with a cancer at some point in their lifetime[6]. Clinicians should have an understanding of the principles of oncology and the management of acute oncology emergencies and complications of anticancer therapies.

In the UK prior to specialist training in medical or clinical oncology experience in oncology is obtained by rotation within an oncology department or clinical experience managing patients with cancer within other medical specialties. There is evidence that medical students lack understanding about the management of cancer patients and junior doctors have reported lack of confidence managing patients at the end of life[7][8]. This situation presents a challenge since an increasing number of patients are living longer with a cancer diagnosis and receiving anticancer therapies and subsequently require greater access to healthcare[9].

Leeds Cancer Centre (LCC) is one of the largest cancer centres in the UK and has an acute assessment unit, admissions ward and three inpatient wards. 11 junior doctors at a time are on rotation from Foundation Programme year 2 (FY2), General Practise Voluntary Training Scheme and Core Medical Training (CMT) programme for between four and six months. They work within a rota covering the acute admissions and assessment units, inpatient wards with disease-site specific teams and take part in resident out of hours on call. We sought feedback from junior doctors following placement to quantify the training benefits of a rotation within our oncology centre.

Methods

An online survey was sent to junior trainees who worked at LCC from February 2015 and August 2016. The survey comprised 37 multiple-choice questions and was divided into four sections. Section one covered pre-oncology attachment experience and general perception of oncology. Section two questions focused on the clinical aspect of the attachment, including job satisfaction, support at work and confidence dealing with acute oncological emergencies and complications of radiotherapy and systemic anticancer therapies. Section three covered teaching, audit and research opportunities of the attachment and future career aspirations.
Results

81 surveys were sent. 47(58%) responses were received. 10(21%) of trainees planned to apply for clinical or medical oncology specialty training prior to the placement. This proportion (21%) was maintained following completion of the rotation.

The median rating of the placement for clinical experience was 6 out of 10 (interquartile range 5-8). 40(85%) trainees preferred working on the acute admissions and assessment unit than inpatient wards.

42(90%) trainees felt confident or very confident managing neutropenic sepsis and malignant spinal cord compression following completion of the attachment. 14(30%) felt confident managing acute radiotherapy toxicities such as oral and pharyngeal mucositis, radiation dermatitis and use of enteral feeding. 19(40%) felt confident managing systemic anti-cancer agent toxicities including chemotherapy-induced nausea and vomiting and acute diarrhoeal illness. 35(75%) felt confident with end of life care including use of symptom-control medications and decisions about the appropriateness of interventions for acute medical illness in the end of life setting. 25(53%) had experience discussing resuscitation and escalation of care decisions with patients and their relatives. 29 of 47 (61%) felt senior support was good during regular hours and 24 (52%) felt the same for out-of-hours working. 72% of trainees felt the worst part of the rotation was a perceived heavy clinical workload.

34(66%) trainees attended at least one outpatient clinic in clinical or medical oncology during the placement and 10(22%) attended more than five outpatient clinics.

24(51%) found the weekly departmental teaching sessions covering oncology and palliative care topics useful. Two thirds of trainees attended more than 50% of the mandatory local and regional teaching that formed part of their training programme. 18(39%) participated in audit, quality improvement and service improvement projects during the oncology attachment.

Discussion

A reasonable response rate of 58% to the survey was obtained. Trainees rated the placement overall as 6 out of 10 on average but the interquartile range of (5-8) demonstrated the varying opinion for the quality of the attachment.

A major learning outcome for the trainees was experience of managing acute oncological emergencies and the survey found that 90% of trainees did feel confident in the assessment and management of patients with suspected neutropenic infection and malignant spinal cord compression. This may be a corollary of the fact that trainees reported that they preferred working on the acute admissions and assessment unit where patients presenting with these conditions would be seen and the initial investigations and management carried out. Despite frequent contact with patients presenting with complications of their anti-cancer therapies only 30% and 40% of trainees felt confident managing complications of radiotherapy and chemotherapy respectively. This may be because these therapies were perceived by junior doctors as specialist treatments and may have been encountered infrequently outside of an oncology unit.

Recognition of and management of patients requiring end of life care was another important potential learning experience achievable during an oncology rotation and the majority of trainees (75%) felt they were confident in this aspects of the care of such patients. Only over half of trainees (53%) had experience of the potentially challenging end of life care discussions with patients and relatives, reflecting the fact that oncology specialist trainees or
consultants would perhaps more frequently undertake these discussions.

Senior support by oncology specialist trainees or consultants was perceived to be good by 61% of trainees for daytime working hours and this dropped to only around half for out of hours work. The majority (72%) perceived that heavy clinical workload was the worst aspect of the rotation. There was a spectrum of grades of junior trainees within the department from relatively inexperienced FY2 doctors to CMT year 2 doctors who may have applied for specialist medical training and may have completed Membership of The Royal College of Physicians (MRCP) examinations. This range of experience may partly explain the differing opinion on the degree of clinical support by senior colleagues. Junior trainees working out of hours in our oncology unit have the support of an advanced nurse practitioner who can advise on oncology-related clinical problems and who takes inpatient referrals from the emergency department and telephone calls from patients on treatment in the community. Senior medical support is available from an oncology specialist trainee and a medical and clinical oncology consultant who are part of a non-resident on-call rota for out of hours work. While attempts have been made by the department to address clinical support, especially out of hours, there appears to be scope for further work in this area to help improve trainee experience.

The department responded to previous feedback by introducing time for outpatient clinic attendance for junior trainees and the majority were able to attend at least one clinic with a fifth of them attending five clinics within a four or six month attachment. There remains work to be done in this area since oncology is predominantly an outpatient-based specialty and there is the potential for junior trainees to leave the placement with a skewed view of cancer care. The recent introduction of clinic weeks on the rota should help to address these issues.

Opinion of the weekly departmental teaching was mixed with half of trainees finding it useful. There is the opportunity to develop the teaching programme to provide education on oncology or palliative care. This could improve trainee confidence in managing complications of radiotherapy and chemotherapy as well as the end of life care. There is significant scope for trainees to undertake projects during their rotation and this is an area that needs development with only 39% completing audit or research during their attachment. Clearly this would be important for the 21% of trainees interested in applying for oncology specialist training but completion of a project during the placement could help improve trainee perception of the benefits of a rotation within oncology.

**Conclusion**

Junior trainees developed confidence managing acute oncological emergencies and end of life care patients but were less certain managing radiotherapy and systemic anticancer therapy toxicities. There remains scope for improving clinical support for out of hours work. Further development of oncology-specific teaching and encouraging participation in audit and research opportunities is required.

**Take Home Messages**

**Notes On Contributors**

Dr Fei Sun - Specialty registrar in Clinical Oncology

Dr Finbar Slevin - Specialty registrar in Clinical Oncology
Dr Alison Young - Consultant in Medical Oncology

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Appendices

Declaration of Interest

The author has declared that there are no conflicts of interest.