

# An investigation into breast imaging as part of the undergraduate education of diagnostic radiography students in the UK



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## Introduction

Anecdotal evidence suggests variation in content of undergraduate (UG) radiography courses relating to mammography/breast imaging across the UK. In addition the duration of clinical placements in breast units ranges from 0-2 weeks throughout the three year course. This is at odds with other specialisms which are perhaps viewed more favourably by students as a result. Approximately half the consultant radiographers practicing in the UK work in breast imaging with several avenues for advanced practice available<sup>1</sup>. Newly qualified radiographers emerge with little knowledge about opportunities associated with this specialist area and this may result in a negative perception of mammography as a career option. Implications for recruitment and succession planning may be cause for concern<sup>2</sup>.

## Background Literature

There is very little research about breast imaging (BI) education in undergraduate radiography training.

The opportunities for career progression that existed in breast imaging were discussed in 2001 along with the shortage in the workforce at this time and the increase in workload<sup>3</sup>. With the current pilot study increasing the age range for breast screening this is still relevant<sup>4</sup>.

Ferris<sup>5</sup> found that specialist areas of practice are seen as separate and have exclusive and restrictive practice. However, the radiographers surveyed also saw the potential future opportunities in specialist areas of practice.

Succession planning is key in specialist roles, it is important to up-skill other staff to take on advanced roles in the future. This is an important issue in breast imaging<sup>6</sup>.

Radiography educators need to be responsive to service needs, and practitioners need to be both fit for practice and also fit to take practice forward. This includes BI<sup>7</sup>

There appears to be a gap in knowledge about how undergraduate radiography education effects recruitment into BI.

The National Breast Screening programme is currently undergoing a pilot age extension and it is thought that this will result in an additional 3,000,000 women eligible for breast screening. This will result in additional workforce pressures within BI<sup>8</sup>.

## Aim

To determine any variations in the breast imaging component of the UG education of diagnostic radiography students in the UK.

## Methods

A self-designed questionnaire containing open and closed questions was sent via online 'Survey monkey' to course leaders of all Higher Education Institutions (HEIs) offering BSc (Hons) Diagnostic Radiography courses in the UK. Responses were analysed for trends which were further explored by semi structured telephone interviews<sup>9, 10</sup>. These were transcribed and evaluated using a thematic analysis, the themes being categorised and coded<sup>11</sup>.

### Questions used in the follow-up interviews

- BI input varies between 3 hours and 25 hours in different Higher education institutions (HEIs), what do you think about this?
- From the survey the time spend on BI is similar to that spent on MRI and RNI, do you think this is about right? Why?
- What sort of relationship do you have with BI departments in your region? And does this influence the BI input into the course?
- Do you have mammographers teaching on your programme? If so, has that been easy to arrange?
- What about placements in BI departments, is it a routine placement or an option? Do students have competencies to complete? How well is the placement received? Do male students go on placement to BI departments?
- What sort of relationship do you have with clinical supervisors in your region? How much do they impact on whether students have placements in their BI department?
- How many of your graduates have gone into BI in the last five years?

## Results

19 of 24(79%) HEIs responded to the questionnaire.

Follow up telephone interviews were conducted with five course leaders to further explore themes.

Academic teaching in BI ranged from 3-25 hours over the three year course.

Compared to other specialties 10(53%) HEIs spent less time on mammography with 12(63%) citing the HCPC standards of proficiency as the reason.

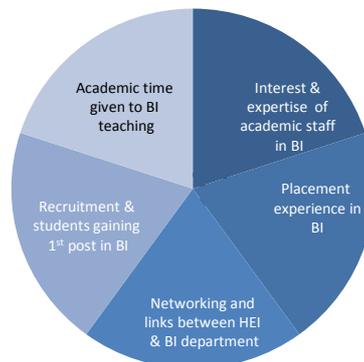
11(65%) HEIs sent students on mammography placements, 2(12%) sent females only, and so male students in these institutions did not experience BI. The range of length of such placements was between two days and two weeks. Influences for this included availability of expert teaching and relationship with clinical departments. The relationships with clinical departments appeared to be key to the students experience of BI as a specialism.

"It is about a personal link...because interestingly enough breast screening itself it tends to be a fairly closed environment and it is about having that link." Interview with HEI 1

"We have a breast imaging department locally which we have strong links with and that agreement has been in place for years." Interview with HEI 3

Positive engagement appeared to encourage students into mammography posts

### Themes from the interviews



## Discussion

This data will be of use for future research into BI education. Students should also be asked about their knowledge of the subject. The BI workforce could also be asked about what attracted them to the specialism.

## Conclusion

- This study provides a good overview of BI education within UG radiography provision in the UK
- A variation in undergraduate exposure to mammography appears to influence student perception of the specialty
- Students views should be sought to add validity to these findings

## References

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