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Title: Addressing the UK's sonographer shortage through new initiatives higher education:
Evaluating the perspectives of ultrasound unit managers

Authorship

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Abstract

Background: Over the last decade, progressively fewer available posts in UK sonography have been filled.^{5,6} As such, interventions in higher education (HE) to attract new blood have become a matter of increasing interest for medical imaging research.^{2,3} While this corpus of literature has produced a range of actionable findings to date, the views of employers in clinical ultrasound around how the issue might be addressed in HE have remained largely unresearched.

Methods: Three models of ultrasound education were proposed to N=20 ultrasound department leads in public (n=17) and private (n=3) units: (1) The direct entry undergraduate model (DEUM); (2) the direct entry postgraduate model (DEPM); and (3) the 3+1 postgraduate model (31PM). Participants were encouraged to express a preference, reasons for their preference, and which components of each model were desirable/undesirable. Using a Straussian model of Grounded Theory,^{1,4} the extended accounts provided were analysed.

Results: Of the participants, n=9 indicated a sole preference for the DEPM, while n=3 indicated a sole preference for the 31PM. However, n=8 found variable strengths/weaknesses in each. Qualitative concerns thematised as: (1) The feed of undergraduate entry programmes into extant pay banding. (2) A lack of life, communication and time management skills synonymous with younger graduates. (3) Sustaining the current quality of sonographers without a prior background in plain radiography. (4) Condensing ultrasound learning into too brief a period.

Conclusions: There is no simple solution in HE to the sonographer shortage. Unit managers' perspectives add depth to our understanding of what might be required.

References.

1. Society and College of Radiographers. Sonographer workforce survey analysis. SCoR; 2014.
2. Society and College of Radiographers. Developing and growing the sonographer workforce: Education and training needs. SCoR; 2009.
3. Parker PC, Harrison G. Educating the future sonographic workforce: Membership survey report from the british medical ultrasound society. *Ultrasound* 2015;23:231-241.
4. Gibbs V. The long and winding road to achieving professional registration for sonographers. *Radiography* 2012;19:164-167.
5. Sloane C, Miller PK. Informing radiography curriculum development: The views of UK radiology service managers concerning the 'fitness for purpose' of recent diagnostic radiography graduates. *Radiography* 2017;23:S16-S22.
6. Charmaz, K., Grounded Theory, in: Smith, J.A., ed., Qualitative Psychology: A Practical Guide to Methods, Sage, London, 2008, 81-110.