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Research Paper

The state of specialty training in young adult and adolescent health in medical specialties in the UK: Resident doctors' and trainers' perspectives

Linford Fernandes[a], Mia Rodziewicz[b], Sindhu Bhaarrati Naidu[c], Md Nazmus Sakib[d], Mohammed Rashwan[e], Souha El Abd[f], Laura Knox[g], Phoebe Naa Okailey Owen[h], Nwanneka N. Sargant[i], Anupama Krishnamoorthi[j], Debajit Sen[k], Nina Newbery[l], Rohana J. Wright[m], Emma J. Howard[n], Aicha Bouraoui[k,*]

[a] *Leeds Teaching Hospitals NHS Trust, United Kingdom*
[b] *Centre for Musculoskeletal Research, Faculty of Biology, Medicine and Health, The University of Manchester, United Kingdom*
[c] *Lungs for Living Research Centre, UCL Respiratory, University College London, United Kingdom*
[d] *Lewisham and Greenwich NHS Trust, United Kingdom*
[e] *Barking, Havering and Redbridge University Hospitals NHS Trust, United Kingdom*
[f] *Portsmouth Hospitals University NHS Trust, United Kingdom*
[g] *NHS Greater Glasgow & Clyde, United Kingdom*
[h] *University Hospitals of Derby and Burton NHS Foundation Trust, United Kingdom*
[i] *University Hospitals Bristol and Weston, United Kingdom*
[j] *Oxford University Hospitals NHS Foundation trust, United Kingdom*
[k] *Department of Rheumatology, University College London Hospitals NHS Foundation, United Kingdom*
[l] *Royal College of Physicians, United Kingdom*
[m] *NHS Lothian, United Kingdom*
[n] *St John's Institute of Dermatology, Guy's and St Thomas' Hospital, United Kingdom*

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ABSTRACT

Study objective: To assess current perceptions of training in adolescent and young adult healthcare among UK resident doctors and educational supervisors (ES), and to identify barriers and opportunities for improvement.
Design: Cross-sectional national survey of resident doctors and ES, followed by qualitative focus group discussions.
Setting: UK-wide, involving medical specialties participating in internal medicine training (IMT) and higher specialty training programmes.
Participants: 670 resident doctors and 64 ES across 29 specialties. A subset of nine participants (four ES, five resident doctors) took part in focus groups.
Main outcome measure(s): Exposure to training, confidence in managing adolescent medicine, awareness of transition care tools and policies, perceived barriers and suggestions for improvement.
Results: 18% of resident doctors had attended transition clinics and 38% reported no formal training in adolescent medicine. 5% of respondents were aware of national training guidance. Confidence and preparedness were low, with significant variation across specialties. ES confirmed the importance of adolescent medicine training but noted systemic limitations. Key barriers included limited clinical opportunities, lack of curricular emphasis and poor interdepartmental coordination.
Conclusions: Training in adolescent medicine remains inconsistent across UK specialties. System-wide reforms are needed to improve preparedness and care quality. This may include mandating adolescent care competencies, structured clinic access and integration into curricula.

* Correspondence to: Adolescent Rheumatology, University College London Hospitals NHS Foundation Trust, London NW1 2PG, United Kingdom.
E-mail address: aicha.bouraoui@nhs.net (A. Bouraoui).

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Background

Physicians in the UK in almost all specialties need to diagnose and treat adolescents and young adults between the ages of 16 and 24 years. The NHS Long Term Plan published in 2019 had stipulated a move towards a more invidualised transition from paediatric to adult services for both mental and physical health.[1] This has not been realised for the majority of secondary care settings. There is significant variation between specialties in how adolescent patients are being seen, with some seen in general adult clinics and others seen in specialist transition and or young adult clinics.[2] Transition clinics are usually run by adult clinicians alongside paediatricians, but the frequency and availability of these clinics depend on the availability of clinical staff. It is well recognised that there are inconsistencies in the capability and capacity of our health system to deliver excellent developmentally appropriate care, essential to improving long-term health and psychosocial outcomes for this age group. This was evidenced in the NCEPOD report published in June 2023, which focused on the barriers and facilitators in transition of children and young people into adult health services.[3] One of the key findings in this report is that developmentally appropriate care and transition services remain fragmented and inadequate for many young people. For young people themselves, their experience as heath service users is affected by a number of factors, most importantly the trust and partnership in decision making that they place in healthcare staff.[4]

In working towards better adolescent care, the Joint Royal Colleges of Physicians Training Board (JRCPTB) produced guidance in 2018 for trainers and resident doctors on adolescent medicine competencies that should be achieved in all specialties, for example spending time in transition clinics.[5] This guidance followed on from the results of a survey of resident doctors carried out by the Royal College of Physicians (RCP) in 2013–14, which found that 70% of resident doctors felt that their training in adolescent medicine was insufficient or non-existent.[6] In addition, 52% of the respondents in this survey had received no formal training and 61% had never attended a dedicated young person's or transition clinic.

The 2018 guidance set out a curriculum outlining the requirements for a minimum competency level in adolescent medicine, evidenced in resident doctors' portfolios via supervised learning events and online healthcare modules. The internal medicine training (IMT) Stages 1 and 2 curriculums in 2019 briefly mentioned including young people in shared decision making as part of generic capabilities in practice.[7,8]

In 2025, 10 years since the original survey of resident doctors on adolescent medicine, the RCP carried out another survey of resident doctors to reassess their experiences and perception of the quality of adolescent medicine training. A concurrent survey focused on trainers was also carried out. These surveys were followed up by a focus group session.

The primary aim of these surveys and focus group was to describe current resident doctors' and trainers' perception of the quality of their training in adolescent health. Secondary objectives were to identify barriers to training as described by respondents and to develop a set of recommendations for enhancing adolescent healthcare training in the UK.

Methods

An anonymous online survey was developed by members from the Young Adult and Adolescent Steering Group (YAASG) using the RCP platform and sent to resident doctors in medical specialties in all four regions of the UK via training programme directors, regional advisers and RCP college tutors. The survey development was an iterative process, where drafts of the survey questions were circulated amongst members of YAASG until the final survey questions were agreed upon and members signed off on the survey. Links to the survey were also distributed on trainee electronic portfolios. The survey was open between 3 November 2023 and 1 February 2024.

The survey's remit was to collect information on respondent grade, specialty and training deanery. Furthermore, respondents were asked to rate the training that they had received in adolescent health, transition and their exposure to transition clinics. Respondents were also asked about training opportunities available in their centres and specialties and their awareness of training resources. Questions on level of confidence, perceived barriers and opportunities for improvement were also included in the survey.

A separate online survey designed to capture the views of educational supervisors (ES) was developed by members of YAASG and resident doctors and reviewed by the RCP Medical Workforce Unit and JRCPTB before dissemination to ES between 31 January 2025 and 14 March 2025.

In both surveys, interested participants were invited for a focus group including ES and resident doctors to explore the themes raised by the survey and seek recommendations. Four ES and five resident doctors were selected to ensure representation across different specialties. All resident doctors took part in the acute take too.

The resident and ES surveys were anonymous, without collection of sensitive information, and therefore prior research ethics approval was not required. Quantitative data analysis and qualitative analysis of the free text comments was undertaken in RStudio 2024 version 12.

Focus groups

The online focus group was held on 2 April 2025, for 2.5 h to explore the themes and needs of trainers and resident doctors in adolescent medicine. The participants included four consultants and five resident doctors. The discussions included breakout rooms, where participants explored various themes and questions. Each breakout room included a mix of consultants and resident doctors to ensure diverse perspectives. Afterward, the key points from each group were shared with the main group, facilitating a broader discussion. Both focus groups were then combined to identify common themes expressed by the attendees and key recommendations to improve training and teaching in adolescent health.

Results

Demographics

There were 670 respondents from more than 29 specialties across all four regions of the UK as demonstrated in Fig. 1. General internal medicine had the most respondents (172 respondents), followed by acute internal medicine (70 respondents). The deanery where respondents were based is outlined in Fig. 2, with all deaneries within the UK represented, although the numbers varied between regions. The stage of training of the respondents in outlined in Fig. 3, with responses received across all training years, and the largest group of respondents was IMT year 1 (187 respondents). 108 respondents were not in a training programme. 357 respondents (53%) were female, 301 male (45%) and 12 respondents (2 %) chose other or didn't disclose their gender.

Exposure to adolescent medicine training

442 respondents (66%) took part in acute medical take as part of their training. The number of young adults or adolescents (YAA) seen in acute and outpatient settings per month varied from none to more than 20; 267 respondents (40%) reviewed 1–5 YAA on the acute take per month, 92 respondents (14%) 5–10, 28 respondents (4%) 10–15, 7 respondents (1%) 15–20 and 21 respondents (3%) more than 20 YAA per month. 228 respondents did not specify a number.

119 respondents (18%) reported that they had attended dedicated transition clinics during their training. 92 respondents (14%) attended

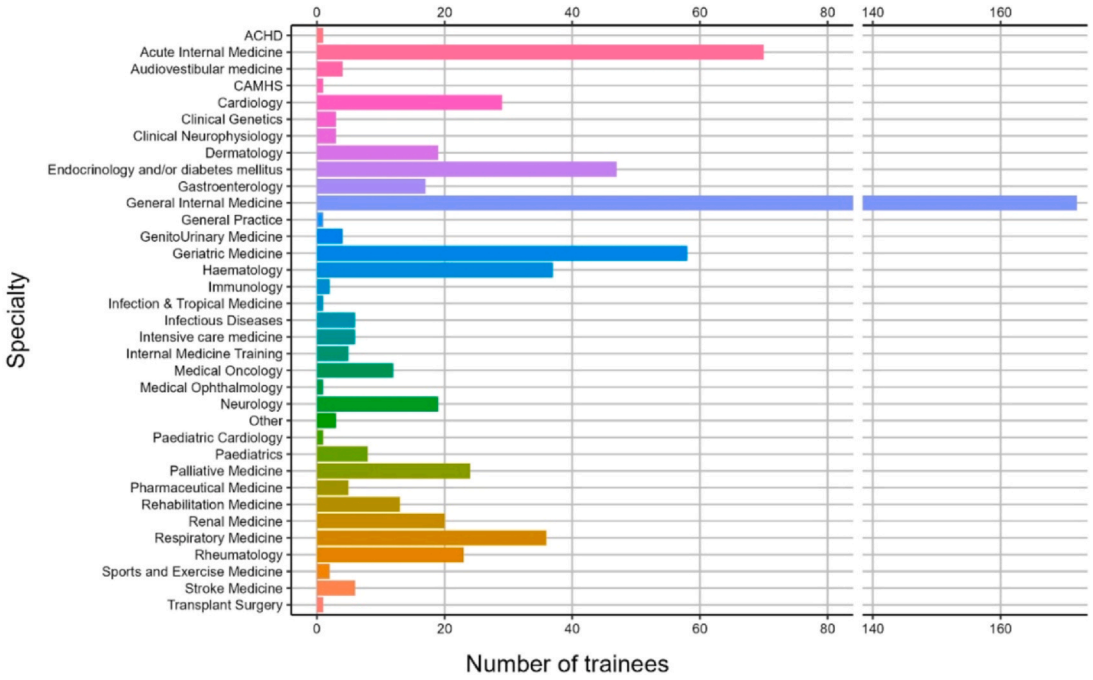

Fig. 1. Number of resident doctors who responded to the survey based on specialty.

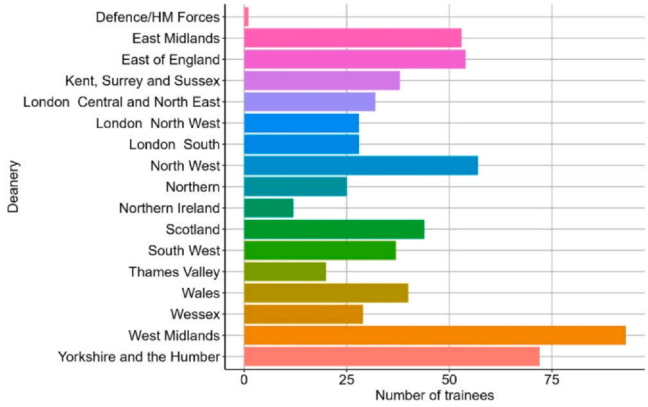

Fig. 2. Trainee deaneries at the time of survey response.

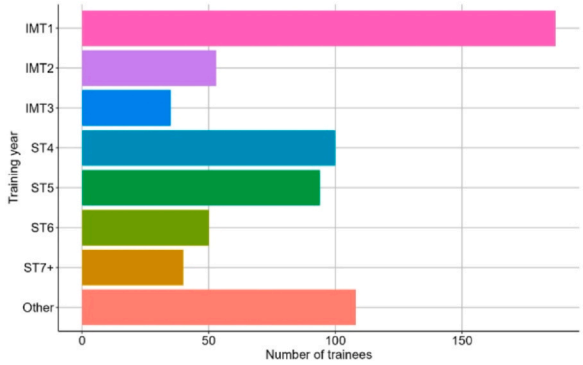

Fig. 3. Level of training of survey respondents.

1–10 clinics per month, 12 (2%) 10–20 clinics per month and 15 (2%) more than 20 clinics per month. 186 respondents (28%) had worked with clinicians with a special interest in adolescent or transition healthcare during their training. Only 89 respondents (13%) reported any awareness of specific tools useful in the assessment of YAA and the majority (42 respondents) mentioned the HEEADSSS assessment, an internationally recognised tool used to structure the assessment of an adolescent patient, encompassing Home, Education/Employment, Activities, Drugs, Sex and relationships, Self-harm and depression, Safety and abuse.[9]

Respondents gave feedback on formal training received in adolescent medicine and the modes of training. 253 respondents (38%) did not receive any formal training, 153 (23%) received formal undergraduate training, 99 (15%) reported attending postgraduate training days where adolescent medicine was covered, 81 respondents (12%) had attended online training and 71 respondents (11%) had received training in clinics or other non-specified types of training. Of those who received some form of formal training, 78% of respondents rated the training as a 3 (average) or better on a scale of 1 (poor) to 5 (excellent). 33 respondents (5%) were aware of the JRCPTB guidance on training in adolescent and young adult healthcare published in 2018.

Fig. 4 outlines the respondents' overall rating on training in adolescent medicine and their training and exposure to transition care. 375 respondents (56%) rated training in adolescent health as non-existent or minimal in these key areas. When asked to rate their confidence in assessing and managing adolescents in the acute or outpatient setting, 68% of respondents rated their confidence as a 3 or higher on a scale of 1–5. 230 respondents (34%) felt that they could not answer this question on confidence and responded 'not applicable'.

Training in aspects of adolescent medicine and barriers to training

Respondents were asked to rate their level of training in the assessment and management of different aspects of health and care related to adolescent medicine and these self-reported rating scales are outlined in Fig. 5. The scales range from 1 (non-existent) to 5 (excellent). Respondents reported better training in certain areas like confidentiality, sexual health, health eating and exercise, but a poor standard of training in care like benefit entitlement, vocational issues and working with interagency services. 152 respondents (23%) were confident at signposting adolescents and young adults to age-appropriate mental health resources.

320 respondents (48%) reported that they had unmet training needs in the care and management of YAA. These needs ranged from a better understanding of adolescent care needs, social care, interagency

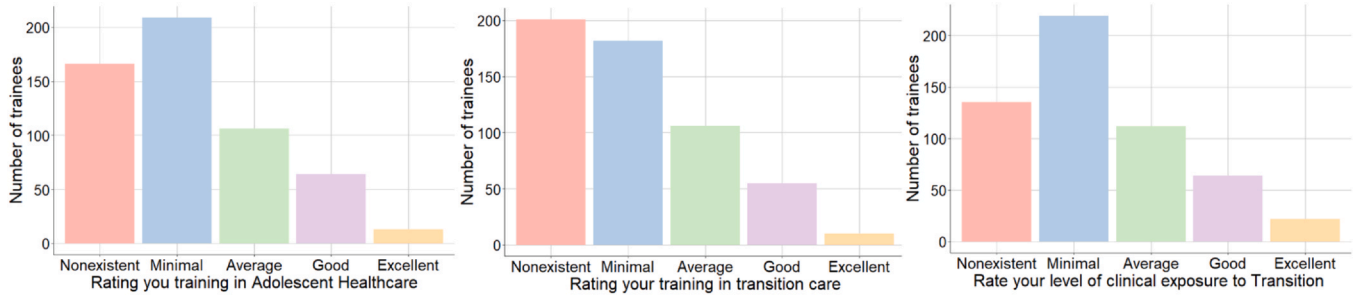

Fig. 4. Rating of training in Adolescent medicine, transition care and clinical exposure to transition.

working, communication skills training, ability to attend transition care clinics and more formal training.

The barriers to training in adolescent medicine are outlined in Fig. 6. Lack of training opportunities to deal with adolescent issues was cited as the main barrier perceived to prevent effective management of YAA in 247 respondents (37%). Other barriers listed included limited clinic time, lack of teaching materials and community resources.

Respondents were asked what training or opportunities would help them develop their knowledge and skills in adolescent medicine. 194 respondents (29%) cited regional training days as the most effective training tool. 120 respondents (18%) wanted opportunities to access more transition clinics and 109 (16%) wanted better online resources on adolescent medicine to supplement their clinical learning. 197 respondents (29%) would welcome the opportunity to be involved in improving teaching and training in adolescent medicine.

Themes in the standard of training in adolescent medicine

In the free text comments, resident doctors provided a range of views on their current training standard in adolescent medicine and barriers to gaining more exposure to this patient group. Resident doctors across most medical specialties reported minimal formal training in adolescent and transition care beyond medical school, with most learning occurring opportunistically during acute admissions or ward work. One resident doctor wrote that the 'majority of my adolescent health learning has been self-taught from having to manage such patients frequently on the wards/out of hours'. Another resident doctor wrote that YAA had 'complex medical needs and their families are let down'. Clinical exposure to adolescent patients varied widely by specialty, being high in paediatrics, endocrinology, haematology/oncology and palliative care, but low or absent in areas like geriatrics and neurology. One trainee commented that '… I am also dual training with general internal medicine and I have not been taught about adolescents/young adults specifically at all since becoming a doctor'. Many resident doctors highlighted that 16 18-year-olds are frequently managed on adult wards without tailored protocols, contributing to inconsistent care. A resident doctor commented that '…. if an adolescent comes in on the acute take, they are either treated as a paediatric patient with that in mind or as an adult…'. Structured transition clinics are often consultant led, poorly integrated and inaccessible to resident doctors, who express a strong desire to attend but face logistical barriers like busy clinical rotas. System flaws such as unclear admission pathways for adolescents and poor interdepartmental communication further complicate the transition process. Despite recognising the importance of adolescent health training, especially in chronic disease specialties, many resident doctors reported a lack of access to structured opportunities and rely on self-directed learning, including informal clinic attendance or related research. There is a clear call for curriculum reform to include adolescent and transition care, greater access to clinics with protected time, supervisor support, age-based admission policies, and targeted teaching throughout training 164 respondents (24%) expressed interest in being part of this reform.

Educational supervisor survey results

64 ES responded to the survey. There were a wide variety of medical specialties represented, with 16 specialties having at least one respondent. Acute internal medicine and care of older people accounted for the most respondents, with nine and eight respondents respectively.

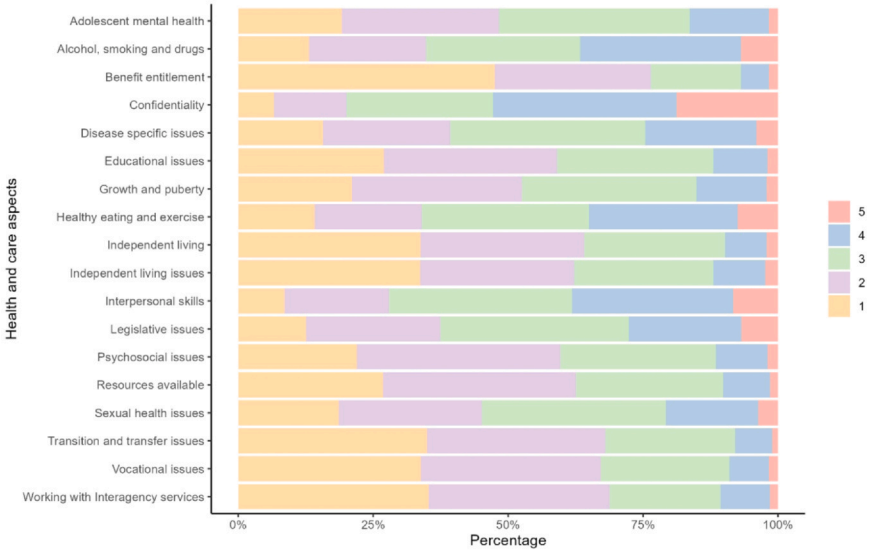

Fig. 5. Proportion of resident doctors based on their self-reported level of training in specific aspects of adolescent medicine. 1 (poor) to 5 (excellent).

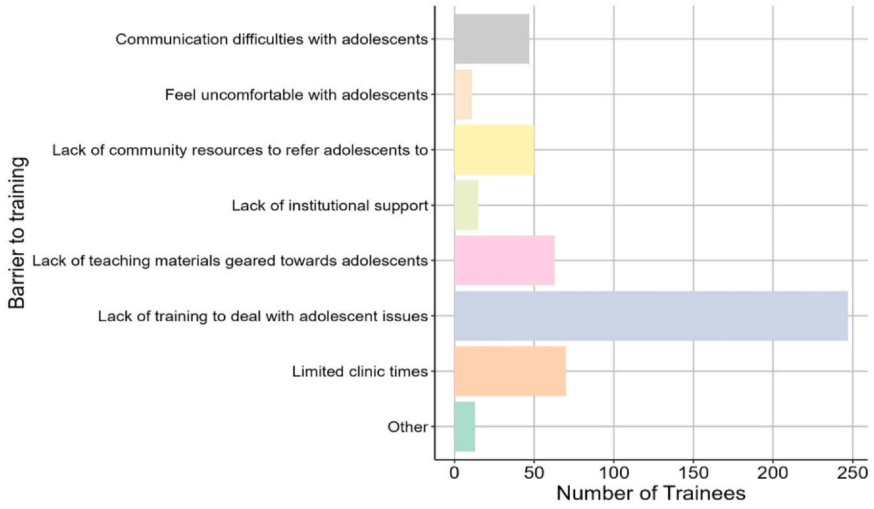

Fig. 6. Perceived barriers to training in adolescent medicine.

35 respondents (55%) took part in the acute medical take. Some respondents never encountered YAA in their practice, while others encountered patients in this age group more than twice a week. 39 respondents (61%) encountered YAA in their practice twice a week or twice a month. 47 respondents (73%) thought that training in adolescent and young adult health for resident doctors in their specialty was important or very important.

When asked how training in adolescent medicine could be delivered better, 42 respondents (66%) suggested generic teaching during general medical training days and the same number of respondents also advised that specialty-specific teaching would be an appropriate forum. 25 respondents (39%) suggested that training was best delivered via ad hoc attendance by resident doctors in transition or adolescent clinics and 21 respondents (33%) suggested small group teaching. Other less popular suggestions included on-the-job training or specific adolescent medicine attachments. Four respondents (6%) did not think that training in adolescent medicine was necessary. 18 respondents (28%) volunteered for any further opportunity to be part of the focus group.

Focus group outcomes

There were varied views expressed during the two focus groups. There were strong feelings about terminology; attendees said that 'transition' should happen between services, and 'developmentally appropriate care' is a better term. The 16-to-18-year patient demographic was highlighted as particularly challenging to manage. This was because of the transitional period of these patients in terms of their academic life, for example, moving regions to attend universities, leading to lack of attendance at outpatient clinics, causing a delay in first review with adult services. Furthermore, the psychological issues of this patient group were not addressed appropriately, causing poor engagement with services. The curriculum followed by most of the respondents to the survey was the general internal medicine (GIM) curriculum. Attendees highlighted that there is no emphasis in the GIM curriculum regarding medicine for YAA and there is variable exposure to it as part of specialty-specific curriculums. Attendees felt that resident doctors were not well equipped to deal with challenging aspects of patient encounters, including prehabilitation, fertility preservation, behavioural issues and engagement with the patient's parents.

Barriers to better training in adolescent medicine included the reluctance of some clinicians to be involved in care of adolescents in their practice. Clinics are difficult to organise because it requires subspecialist coordination between the paediatric and adult teams. This is made more difficult due to the lack of clinical exposure of adult physicians to paediatric practice and vice versa, which stems from the early divergence of paediatric training from adult medicine training in the UK. Attendees also reported that trainers in general internal medicine in particular are not made aware of existing resources to help support their resident doctors regarding adolescent medicine.

Discussion

This most recent survey of resident doctors explored perceptions towards adolescent medicine training and identified potential barriers to training. Compared to the original 2013–14 survey carried out by YAASG, our survey had a similar demographic make-up.[6] We had surveyed 670 resident doctors across 29 specialties, compared to 613 resident doctors across 23 specialties in the original survey. The spread of resident doctors across the medical specialties was broadly similar, except that the resident doctors in our survey were primarily in general internal medicine training. This is reflected in the training year breakdown, with the largest category of respondents being in internal medicine training in our survey.

Compared to the 2013–14 survey, where 52% of respondents reported no formal training in adolescent medicine, 38% in our survey had no formal training. In the 2013–14 survey 70% of respondents classed training in adolescent medicine as minimal or non-existent, compared to 56% of respondents in our survey. This would suggest that, on the whole, our survey demonstrates that adolescent health training had improved compared to 2013–14, but there is still a significant proportion of respondents who find that their training is lacking. The main barriers cited by resident doctors are also similar to the 2013–14 survey, but the emphasis in our survey seems to be predominantly on the lack of training to deal with adolescent issues as illustrated in Fig. 6.

The findings from our survey show that the guidance on training in adolescent medicine published by the JRCPTB in 2018 have not been implemented universally across the regions represented, although the metrics of confidence reported by survey respondents are generally improved.[10] There remains limited access to transition clinics and opportunities to completed workplace-based assessments when YAA are reviewed by resident doctors on the inpatient unit. This might be contributed to by the variation in provision of inpatient services for YAA in England, where adolescents are cared for on paediatric wards or adult wards without clear guidance on transition policies.[11]

Although our focus this survey was on postgraduate education and training the UK, healthcare systems across Europe have reported variable provision of education and training in adolescent medicine, with resident doctors reporting minimal or non-existent education opportunities.[12] This is reflected more broadly by the WHO survey of adolescent health provision in European countries, which found that, despite

having strategies to improve adolescent healthcare provision, implementation of such strategies was incomplete in most countries.[13]

In regards to UK-based postgraduate medical training, the 2018 JRCPTB guidance remains comprehensive and should be developed to provide measurable standards that can be applied across a number of healthcare settings and systems. These standards should address training in the areas highlighted in Fig. 5 and provide a framework that can be piloted in specialty-specific and trust-based settings.

While our study was the most comprehensive survey of resident doctors since the first survey in 2013–14, it had a number of limitations that might impact on the generalisability of the findings. 670 respondents is a minority of the total number of resident doctors in the UK and a higher response rate might have provided more representative views from specialties with small numbers of resident doctors overall. We did not categorise non-training roles further to identify the equivalent stage of training for those resident doctors. Given the small but significant number of resident doctor posts that are occupied by non-training grade doctors, a future survey might focus on the differences in perception between training and non-training resident doctor groups. The two focus groups that we conducted expanded on some of the responses in the survey, and the lack of emphasis in the GIM curriculum for adolescent health was remarked upon. We recognise that our focus group only included nine respondents and therefore the generalisability of the findings is limited.

Conclusion

The findings of this national survey and focus group analysis highlight a persistent and significant gap in the training of UK resident doctors in adolescent medicine, despite longstanding policy recognition and formal guidance. While most resident doctors regularly encounter adolescent patients, particularly on the acute take, their training in managing the specific developmental, psychosocial and transitional needs of this age group is largely insufficient. Exposure to transition clinics is limited, awareness of key national guidance is low and formal teaching remains inconsistent across specialties and regions. Educational supervisors acknowledge the importance of adolescent medicine, but face systemic barriers in delivering meaningful training opportunities. The qualitative insights from focus groups further underscore the need for integrated, developmentally appropriate care and call attention to challenges such as poor interdepartmental coordination, lack of protected time for clinic attendance and reluctance among clinicians to engage with adolescent care. To address these deficiencies, a coordinated and system-wide approach is essential, one that mandates adolescent health competencies in training curricula, improves access to structured clinical experiences, enhances supervisor support and fosters collaboration between paediatric and adult services. Without such reforms, the current variability in training will continue to compromise care quality and outcomes for this vulnerable patient population.

CRediT authorship contribution statement

Rohana J Wright: Writing – review & editing, Methodology. **Mia Rodziewicz:** Writing – original draft, Visualization, Formal analysis. **Emma J Howard:** Writing – review & editing, Methodology. **Sindhu Bhaarrati Naidu:** Writing – review & editing, Project administration, Investigation. **Aicha Bouraoui:** Writing – review & editing, Supervision, Project administration, Methodology, Investigation. **Md Nazmus Sakib:** Project administration, Investigation. **Mohammed Rashwan:** Writing – review & editing. **Souha El Abd:** Writing – review & editing. **Laura Knox:** Writing – review & editing. **Phoebe Naa Okailey Owen:** Writing – review & editing. **Nwanneka N Sargant:** Writing – review & editing. **Anupama Krishnamoorthi:** Writing – review & editing. **Debajit Sen:** Writing – review & editing. **Nina Newbery:** Writing – review & editing, Methodology. **Linford Fernandes:** Writing – original draft, Visualization, Formal analysis.

Ethical approval and consent to participate

The findings from this project are based on a voluntary survey of healthcare professionals in the UK and ethical approval was not required. By completing the survey, participants provided their consent. Consent to participate in a focus group was provided in the survey as an additional option. Consent for transcribing the focus groups were obtained directly from participants in the focus group. All comments, feedback and survey results have been anonymised.

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Data availability

Anonymised data can be made available upon reasonable request by a suitably qualified researcher after agreement on the use for the data.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Linford Fernandes is on the editorial board for *Future Healthcare Journal*. Sindhu Bhaarrati Naidu is a clinical research fellow funded by an NIHR doctoral fellowship (NIHR303686) and Ruth Strauss Foundation. Emma J Howard is on the executive board of the British Society for Paediatric and Adolescent Dermatology.

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