The Association of Paediatric Anaesthetists (APA) and the Royal College of Anaesthetists (RCoA) have been collaborating on a major review of the paediatric section of the syllabus for the Certificate of Completion of Training (CCT) in anaesthetics. The introduction of the European Working time Directive (EWTD) rota changes in 2004 has led to a perceived reduction in the minimum achievable paediatric caseload during training, and thus a lack of confidence among trainees and newly-appointed consultants in dealing with children.

A joint initiative between the APA and GAT was set up in an attempt to quantify the caseload achieved under current training conditions, and to assess the level of confidence among trainees in managing younger children. This information will be used to develop specific age-group and caseload criteria to incorporate into the revised CCT in anaesthetics syllabus. Investigating and exploring training issues such as this is one of the major reasons the GAT Committee exists.

The Current Syllabus: Gold Standard

Trainees who aspire to a full-time career in paediatric anaesthetics should complete a minimum of 12 months training in the specialty, some of which could be overseas. Trainees who aspire to a consultant post with an interest in paediatric anaesthetics should complete a minimum of six months training in the specialty, and trainees intending to work in a District General Hospital should acquire the competencies listed for higher training: this does not necessarily have to be undertaken as a single dedicated block [1].

Methods

The GAT e-mail database was used to send a link to a web-based survey to all Specialist Registrar (SpR) members of the Association of Anaesthetists of Great Britain and Ireland (AAGBI). Two requests to participate were sent and the survey was open for three months from November 2008 to February 2009.

The Survey

1. What is the anticipated date of your CCT?
2. What are your future career aims?
   - General anaesthetist
   - Paediatric anaesthetist in a specialist centre
   - Anaesthetist with a special interest in paediatrics
   - Anaesthetist with a special interest other than paediatrics
   - Intensive Care Medicine
   - Other:
3. Have you or will you complete higher or advanced training in paediatric anaesthesia by completion of your CCT? If not, why not?

4. How many paediatric cases have you done?
   Total
   <1 year
   1-5 years
   5-16 years

5. What percentage of these cases were
   Solo
   Supervised by a consultant anaesthetist
   Supervised by a non-consultant anaesthetist

6. What would be the age of the youngest patient you would be happy to anaesthetise solo when on-call?

7. What would be the age of the youngest patient you would be happy to stabilise solo prior to transfer to definitive care?

Results

182 trainees completed the survey following 2698 e-mail requests, a disappointing response rate of 6.7%.

86.9% of these will obtain their CCT within the next 5 years. 33.2% are planning a general career in either a DGH or a teaching hospital; 22.6% are developing a different specialist interest (obstetrics/cardiothoracic/pain/regional) and 21.2% are training in Intensive Care Medicine (ICM). This leaves 23% working towards a career in paediatric anaesthesia, with 28% of these aiming to work in a specialist centre.

63.6% of trainees will have completed higher or advanced training in paediatric anaesthesia by their CCT date, the converse of which means that 36.4% of trainees will not. Of these, 3.4% will have a dual CCT in ICM and state that they will not have the time to complete paediatric anaesthesia training as well.
The question relating to solo/supervised cases proved difficult to answer in a meaningful fashion as most trainees’ logbook data does not differentiate the grade of supervisor. However, it would appear that around two thirds of cases completed are supervised and one third are done solo.

The questions relating to confidence in anaesthetising children solo when on-call and stabilising critically ill children prior to transfer generated interesting debate. 22% of trainees are only happy to anaesthetise children over 5 years of age when on-call; 16% are happy to anaesthetise under-1 year olds in the same context. Hence the majority are happy to anaesthetise children over 5 years of age when on-call but many qualified this with statements pertaining to the ASA grade and general condition of the child at presentation. There was a 50:50 split among trainees regarding stabilising critically ill children prior to transfer, 50% being happy to stabilise children under 5 years of age. Again, there were many qualifying statements regarding the condition of the child, and many respondents pointed out that all anaesthetists are qualified in resuscitation and are therefore obliged to assist in any situation.

Discussion

Paediatric anaesthesia is still a popular sub-specialty among trainees and competition for consultant posts continues to be strong. It is clear that the minimum achievable caseload has reduced considerably over the last few years, primarily due to the implementation of the EWTD regulations [2], although a wide variation in these numbers has been demonstrated by this survey. A lack of confidence in dealing with children on-call may be inferred by the fact that 22% of respondents are unhappy to anaesthetise a child of less than 5 years, and nearly 50% would be unhappy to stabilise a child of less than 5 years prior to transfer to definitive care.

This survey has a number of limitations, not least the difficulty in interpreting data received from such a small percentage of respondents (6.7%) and attempting to apply it to the wider context of training. The GAT e-mail database does not easily allow targeting of specific trainee sub-groups as it records year of membership, not year of training. We place strict limitations on the use of this database as we understand that people do not wish to be bombarded by constant e-mail traffic; equally GAT exists to represent our membership and we cannot do this without accurate and up-to-date data. It would appear from some free text responses to our questions that logbook data is perceived as particularly tiresome to fill in. There were also a number of technical difficulties encountered with the survey link which may have prevented further responses. The data analysis relies on the accurate recording and reporting of data by respondents, some of which was incomplete.

Conclusions

The information gained from this survey suggests that previously accepted minimum achievable caseload criteria may be impractical under current training conditions. Using this data, the APA and the RCoA can try to move forward and develop new, more achievable age-group and caseload criteria for the paediatric section of the CCT in Anaesthetics syllabus. It is hoped that, with revision of the syllabus, focused and effective training in paediatric anaesthesia will improve the confidence of trainees and new consultants when managing children. Improved confidence in managing children is vital by the time trainees acquire their CCT as the majority of consultants are required to provide emergency cover for paediatric patients when on call.

References

1) CCT in Anaesthetics IV: Competency Based Higher and Advanced Level (Years 5, 6 and 7) Training and Assessment. A manual for trainees and trainers (August 2008)