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Teaching medical students

Teaching medical students to examine children

J Craze, T Hope

In most medical schools in the UK, 7 or 8 weeks of the clinical course are devoted to the study of paediatrics and child health. The syllabus to be covered during this relatively short time is vast. Students quickly realise that the (by now well-practised) skills of adult history taking and physical examination are not entirely applicable to children; so perhaps it is not surprising that many students look forward to paediatrics, but approach it with some trepidation.¹ For students, the idea of examining children is daunting. Most recognise that they cannot necessarily follow the familiar sequence of examination and that adaptability is needed. Many lack confidence in their ability to win over a shy or unwilling child. Others fear causing pain or distress—as one student recently explained to me “I’m afraid I might break one”. Paediatricians acknowledge that children do not always wish to be examined, but sometimes clinical need prevails. Students, however, are usually acutely aware of their non-essential role. At worst, this combination of anxieties may lead them to shy away from situations in which opportunities for patient contact may arise—for example, in the emergency department²—and hence to miss out on vital learning experiences. At best, they may graduate without really developing a confident approach to children.

Whatever specialty a student may ultimately choose, there are few in which he or she will never come across child patients. The need for a broad base has been acknowledged by Modernising Medical Careers (<http://www.mmc.nhs.uk>), and many Foundation schemes include a paediatric placement. To get

the most out of these posts, a new graduate must be competent at basic skills, including child examination, from the outset. Furthermore, if we do not grasp the opportunity to capture the enthusiasm of medical students and introduce them to the breadth and rewards of paediatrics, we may miss our best chance to inspire possible future paediatricians. How then can we build up students’ confidence in examining and interacting with children?

The answer, of course, is practice. Innovative methods may help students develop other skills such as paediatric history taking or assessment of child development without one-to-one patient contact,^{3,4} but when it comes to examination there is no substitute for experience. Some students learn adult examination skills by practising on each other.⁵ Is there a case for students to learn paediatric examination skills on healthy “volunteer” children, who may be more cooperative than the sick? Healthy children are often used for assessment of student performance, and there is evidence that they enjoy doing so.⁶ However, they seem to be less commonly used in teaching itself. This may relate to the difficulty of securing reliably sufficient volunteers at regular intervals. In any case, sooner or later, the student must see sick children to learn to recognise signs. As teachers, we have a duty to help students gain exposure to sick children,⁷ and such is the speed of children’s recovery that this may mean acting promptly. However, this engenders a tension between our responsibility to the student and our desire not to cause unnecessary disturbance to our patients.

This tension is, of course, felt even more acutely by the child’s parents and carers. In the past, when there was less recognition of patients’ rights than today, there was little perceived need to gain consent for this sort of interaction. However, times, and public expectations, have changed.⁸ Over the past 20 years or so, there has been an increasing awareness of the issues of consent and battery with respect to patients. For any person to touch another without consent, irrespective of whether or not physical harm ensues, is battery. The fact that one person is a patient and the other a doctor or medical student would probably be deemed irrelevant by the law.⁹ Consent for physical examination is normally verbal, and may be implicit rather than explicit, but is now routinely sought by medical professionals. Indeed, for a conscious and competent patient it would be impossible to proceed without consent. In the early 1980s, the issues surrounding consent for medical students to carry out vaginal examination on anaesthetised patients were widely publicised and debated.⁸⁻¹¹ This helped raise awareness of the need for consent for examination by students in all settings, and as a result many medical schools introduced guidelines on the topic (<http://www.medicibris.ac.uk/student#rules>, <http://www.qub.ac.uk/cm/undergrad/intimate-examination.pdf>).^{10,12} Although guidelines cannot, of course, be enforced, their existence does at least serve to inform students of the issues involved and, importantly, empower them to refuse to undertake an examination if they believe that guidelines and proper practice are not being followed.^{10,11}

Most child patients are too young to give valid consent; so it is the parent (or, more accurately, a person with parental responsibility) who is asked for consent. For the parent of a sick child it is arguable that the issue of battery is less important than the natural parental desire to avoid causing unnecessary distress to a child who may already be in pain, irritable, or has just fallen asleep for the first time in several hours. Parents and doctors generally accept

Table 1 Issues to consider regarding consent for examination of a child by a medical student

Who gave consent?	Consent must be obtained from someone with parental responsibility or a competent child patient	If a student is taking consent, does he understand the notion of parental responsibility? Who can deem a child to be competent to give consent?
Is the consent valid?	Discussion about consent must be honest and open	Was the educational nature of the exercise explained?
When was consent taken?	Circumstances change and parents may change their minds	Has the child's condition changed? Has he/she seen too many students already?
Do child and parent agree?	In addition to parental consent, the child must also assent	How much refusal is tolerated?
Are there any particular limitations?	Parent/child may wish to limit examination—for example, maximum number of students, or only looking at one part of the body	Do the parent and child understand exactly what will be happening?
Who needs to be present?	Consider whether a chaperone is needed if a teacher is not present	If so, who?
Is there agreement on when to stop?	Examination may need to be stopped if the child becomes distressed	Have parent/child been advised that they can stop at any stage? Will chaperone (if any) do this?

such disturbance for an examination or intervention, which is perceived to be possibly of benefit to the child. However, the primary purpose of the examination for students is to improve their skills for the benefit of other (future) children. With experience, students will learn to make some parts of the interaction a fun and perhaps a welcome distraction from boredom for the child, but parents will often feel the tension between the needs of their own child and the needs of future generations.

How can parental and child reluctance be overcome? It is self-evident that an honest, courteous explanation must be given about the role of the medical student and the nature of the request. The request must be made in such a way that it is clear that refusal can be given and will be accepted with good grace. Families may be concerned that refusal may influence treatment, indeed they may feel they do not have the right to refuse (<http://www.qub.ac.uk/cm/undergrad/intimate-examination.pdf>), so reassurance on this point is required. However, there is more to gaining consent than simply asking in a nice manner. Although the process and timing of gaining consent might vary depending on the clinical context (acutely unwell child or formal ward round) and number of students involved, the issues to be considered are the same and have been summarised in table 1.

The first problem is who should ask for consent? Mostly this would be the teacher; the simplest example would be a doctor seeing a child in the emergency department or outpatient clinic asking

the parent whether the student might also listen to the child's chest. Sometimes it might seem appropriate for the student to take consent himself—for example, if clerking a child to discuss on a teaching ward round. In this case, it is important that the student understands the concepts of parental responsibility and competence of older children. These are difficult issues and written guidance needs to be included in guidelines about examination of children.¹² It is particularly important that students (and teachers) understand that although a grandparent or other relative with the child might well know the parents' views on the matter and be happy to consent on their behalf, this is not acceptable as consent must be from someone with parental responsibility. Competence is a more difficult issue to understand than "parental responsibility", and it is probably not reasonable to expect a student to judge a child's competence to give consent. One solution is to allow students to take consent from parents, but preclude them from taking consent from an unaccompanied child, asking a nurse or doctor to do so instead.¹²

Is it feasible for some form of blanket consent to be obtained? When drawing up our local guidelines,¹² we considered whether consent could be sought routinely from a parent as part of the admission process by the admitting nurse. In theory, this might minimise missed opportunities to examine if the parent were not present to give consent at a later date. We rejected this, however, for three reasons: firstly, some

nurses might not be comfortable seeking such consent at a time when parents might be anxious or distressed; secondly, we thought that a child should generally be examined for educational purposes only with a parent present in any case; and thirdly, parents' views on this matter might change during the admission.

Teachers and students must also be sensitive to the fact that the views of parent and child may differ. Parental consent alone is not sufficient and the child (if old enough to express an opinion) must also assent before the examination goes ahead. Children with chronic conditions who perceive that they have little control over what happens to them may have particularly strong views about examination by students. Respect for the child is the key,^{13 14} and it may help to allow the child some say about the circumstances of the examination. The child may be happy for one student to examine him, but not several. He may wish to limit the examination to only one area of the body. The issue of who should be present during the examination may also be particularly important to some children. Is it appropriate for the child to be examined by a student in the presence of the parent, but no supervising teacher? What about an older child who gives consent but whose parent is absent at the time—can the student go ahead alone? These are difficult issues. One set of guidelines suggests that a child <16 years should not normally be examined without either a parent or qualified health professional present,^{15 16} but it should be noted that the child who offered a commentary stipulated that he would want both a doctor and a parent present.¹⁵ In practice, a teacher will generally be present, but if not, the child (and the parent) may well feel more comfortable with a chaperone, such as a nurse, present. A chaperone can be particularly helpful in ensuring that the student does not persist for too long if the child becomes unduly distressed or embarrassed.

Finally, it is important to remember that consent on one occasion does not imply consent on all occasions. The parents' and child's views may change over time—for example, if the child becomes more ill or tired, or simply because of overexposure to students. Nurses are excellent advocates for patients. They can act as gatekeepers for the child with an "interesting" sign, and guide students about the appropriateness of seeing a child. Nurses may also help the student to check whether consent given on a previous occasion is still valid.

For adolescents, the situation is generally more complex. Although many will be considered competent,¹⁷ competency cannot be assumed and may be diminished by illness. Adolescents are often very sensitive about their bodies, and the fact that the student may not be much older than the patient can add to the sense of embarrassment—especially in cases where there is a sex difference. The presence of a parent may, of course, not be desired by the adolescent. For these reasons, it may be more difficult to obtain consent to examine an adolescent rather than a younger child.¹⁸ In addition, a chaperone may be needed to protect the student from allegations of improper behaviour.¹⁵ It is therefore sensible to consider whether what will be learnt from any particular examination could be learnt equally well from adult patients at a different period in training.¹⁵

Although there are many issues to be considered, the process of taking consent need not be unduly onerous. How many parents agree? There is little published information about parents' views on their child's participation in teaching. Studies of patients' views on contributing to medical student education refer mainly to adult patients seen in general practice. Studies typically show that most people accept that students need to learn, and some express satisfaction that they are able to help.^{19–20} One study looked at rates of consent by age and sex for the presence of medical students in general practice consultations and found the highest rate of refusal among women aged 15–44 years. Rates of consent were very high for children <5 years and for those aged 5–15 years.¹⁸ In the hospital setting, it seems that families are similarly helpful. Parents often comment that they know students have to learn, and consent is given more often than not (personal observation).

In addition to good practice with regard to consent for examination, it is helpful to foster an environment in which students and families feel comfortable with each other. Students should be encouraged to spend time on the wards outside formal teaching sessions. Other professional groups can contribute here. In many medical schools, students are expected to spend some time working with the paediatric nursing staff. This is beneficial to students in increasing their knowledge of how to approach children of different ages, in teaching them the value of observation and in helping them to become familiar with the norms of child development and behaviour. Most

medical students will have no knowledge of the role of play specialists, but which experienced paediatrician has not been helped with an examination or procedure by a play specialist at some point? Introducing students to the play specialist at the beginning of their attachment and describing how the play specialist can help gain a child's cooperation might go a long way to help both the student and the patient. Observing these other professionals at work will help students become more confident about interacting with children. This will help the student to gain more from an examination, and increase the chance that the interaction will be, in some way, fun for the child and hence not totally without benefit to the patient. In addition, those of us who are teaching should of course show students ways of gaining a child's cooperation and making the experience positive, and encourage students to see the family again to chat and play as the child recovers. By fostering this sort of environment where families accept students as part of the team, we can help students learn much more about children and develop a better sense of what paediatrics is all about.

If students are to learn about childhood illness, childhood norms and how to approach children, there is no alternative to students examining child patients. Morally and legally consent must be obtained from a parent, or the child, or both, as appropriate. As professionals, we have a responsibility to be sensitive both to the needs of our patients and to the need for students to learn. We must also recognise that students may be anxious about interacting with children. We must encourage students to meet children in situations other than for formal examination: to play with them and learn how to interact with them, and instil in students the importance of observation.⁷ By guiding students in this way, we can not only help them become confident and competent doctors but also help to safeguard the flow of trainees into paediatrics in future.

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