

COMMUNITY/COMPUTER AND INFORMATION MEDICAL EDUCATION

G131 AN ASSESSMENT OF ETHICS TEACHING IN GENERAL PROFESSIONAL TRAININGSinha M, Bradbury MG *Manchester Children's Hospitals NHS Trust*

Information was sought from 45 paediatric SpR's in the Northwest region to assess the teaching of ethical issues experienced as SHO's. Ethical issues relating to child protection, confidentiality, consent, withholding or withdrawal of treatment, research and teaching were questioned.

There was a 100% response rate to a structured questionnaire. All of the respondents had been involved in clinical work involving child protection. However 19 of 45 (42%) had not taken or been given an opportunity to discuss ethical issues relating to child protection with a senior colleague. 19 of 45 had not discussed confidentiality in child protection investigations, 27 had discussed confidentiality affecting other aspects of patient care.

All 45 had been involved in obtaining consent from parents. But 19 had not discussed with a senior colleague and 22 had not read about ethical issues relating to consent. 19 respondents had not experienced consent being refused. Only 3 of the 26 who had experienced consent being refused had not discussed this further, 22 had not discussed refusal of consent at all.

38 had been involved as part of the team in withholding or withdrawal of treatment, all had discussed these ethical issues with a senior, and 7 had not discussed these issues. 30 had not been involved with organ donation and only 9 had discussed the ethics of organ donation.

35 had worked in units where clinical research involving children occurred, only 19 had discussed related ethical issues. 19 had discussed the ethics of involving children in clinical teaching.

This study suggests that there are significant deficiencies in the provision and use of ethics teaching in general professional training for paediatric SHO's. Common clinical situations are currently not used as teaching opportunities to discuss important ethical issues. This data was collected from paediatric SpR's who have successfully completed at least 2 years as an SHO. The training received by doctors spending less time in paediatrics such as GP trainees may be worse. This study suggests that a more structured approach is required to improve education of important ethical issues.

G132 NEONATAL EVIDENCE BASED MEDICINE JOURNAL CLUB: IMPLICATIONS FOR EDUCATION, TRAINING AND PRACTICENicholl RM *Neonatal Unit, Northwick Park Hospital, North West London NHS Trust*

Introduction: There a need for teaching that is effective, with a trend to problem based learning techniques¹. Reduction of juniors' hours has decreased opportunities for teaching. To address this problem we have run an evidence based journal club, as described by Sackett et al².

Methods: problems discussed during routine clinical work are formed into "answerable questions" and an "Evidence Based Prescription" produced (week 1). This is circulated, and members of the team search for the relevant primary papers (Cochrane, Medline etc). in the 2nd week. The Journal Club meets on week 3 after which a summary (critically appraised topic: CaT) is produced, circulated and entered on the unit computer.

Results: over 22 months 22 problems searched / appraised; 13 CaTs produced (table):

problem	"bottom line"	comment
ranitidine+ulcers	helps,NNT=2.5	change of practice
heroin: Rx of baby	studies poor	no change
surfactant+ MAS	it helps	change of practice
epo and anaemia	equivocal	no change
inhaled steroids	helps (a bit)	no change
cisapride+ harm	evidence weak	change of practice
cisapride+ benefit	evidence weak	change of practice
MgSO4+ Pulm H/T	evidence weak	no change
CRP+ sepsis	evidence weak	change of practice
G-CSF+ neutropenia	evidence weak	no change
adrenaline+resus.<26w	evidence weak	no change
RSV a/body+RSV	some evidence	no change
apnoea after DTP	good evidence	change of practice

Conclusions: this format is enjoyable, has CME approval, can inform/change practice and allows feedback to staff who are unavailable to attend in person.

¹Changes in health care and continuing medical education for the 21st century. BMJ;316:301-304.

²Evidence based medicine: how to practice and teach. Sackett DL et al. Churchill Livingstone 1997.

G133 VARIATIONS IN LEARNING STYLES IN PAEDIATRICIANSMelville C, Lenney W *Department of Academic Paediatrics, City General, Stoke-on-Trent*

Background: The measurement of individual learning styles offers the opportunity to tailor educational experiences to maximise the effectiveness of learning.

Objective: to explore whether learning styles varied with seniority in a Paediatric Department.

Subjects and methods: Cross-sectional questionnaire study of Honey and Mumford learning styles administered to 46 members of a Paediatric Department. Heteroscedastic t-tests to compare differences between consultants, middle grades and juniors; between hospital and community staff, and between sexes.

Results: Consultants had significantly greater scores on activity ($p < 0.03$) and significantly lower scores on reflectiveness ($p < 0.035$) than middle grades, with similar pattern compared with SHOs ($p < 0.07$ and $p < 0.002$). No sex differences were found. There was a trend towards higher scores on the pragmatic axis in hospital staff compared with community ($p < 0.02$).

Conclusions: consultants generally have balanced, more active and less reflective learning styles than middle grades or juniors. Non-consultants may prefer non-participatory events with more thinking time and less deadlines. Consultants may be able to learn from a wider range of activities.

G134 USE OF INTERNET IN CHILD HEALTH: CAN IT BE TAUGHT?Nathwani A, Blagden P *Portsmouth*

A survey of doctors working in Community Child Health in Portsmouth was carried out in October 1998 to gauge their IT skills and training needs. One of the major deficit highlighted, was in the use of the internet in clinical practice. The authors set up three workshops through 1999 to plug this deficit. The Trust funded this educational project.

Each workshop consisted of a three -hour session and was jointly run by the authors using two laptop computers with internet access connected to LCD projectors. The first half of the session was in form of interactive presentations done by the authors. The rest of the afternoon was used for "hands on surfing" and where possible using questions generated by the members for demonstration. There were forty-seven participants in all. A post session evaluation was completed by 80%. A follow up evaluation, four months later, for the first two workshops, was also done. All respondents rated the session very highly. Suggestions included: limiting the number of participants to offer a greater chance of "hands on" experience and make the session more interactive, need to develop a CD based tutorial, greater access to computers across the Trust etc. The use of internet to support professional practice has increased after the workshops.

We conclude that this kind of educational package does work and professional confidence in using the internet to support clinical practice increases. A CD ROM based tutorial has now been developed.

G135 A WORLD WIDE WEB ENHANCEMENT OF A REGIONAL SPECIALIST REGISTRAR COURSETurner MA *Academic Unit of Child Health, University of Manchester, St. Mary's Hospital, Hathersage Road, Manchester M13 0JH*

Background: The North West Region (Manchester Deanery) Specialist Registrar (SpR) course uses clinical problems "opened" in small groups to prompt individual learning over a fortnight after which the groups feedback among themselves and share findings in a plenary session. A web site was designed to facilitate continuing group work during the fortnight and help those unable to attend one or other meeting.

Methods: A graphics-free, rapidly loading web site was designed using Microsoft Front Page 2000. The program was user-friendly and no knowledge of web languages was required.

Results: Material was submitted to the web master in electronic form only and included a summary of the group's discussion and learning objectives with links to relevant web resources. Supplemental postings could also be made. Uptake was slow but incremental. The initial design and implementation of the site took one evening; subsequent updates took between 30 and 60 minutes once a fortnight.

Discussion: The site allows absent SpRs to catch up with the content of missed meetings. In addition it has taught web skills and given the course an existence beyond the formal meetings. This site (www.paeds.org/) has demonstrated that with simple, graphics-free & moderated pages this medium can enhance postgraduate medical education.

G136 HOW SUCCESSFUL IS A ROUTINE SURVEILLANCE SYSTEM AT NOTIFYING AND MONITORING CHILDREN WITH CONGENITAL ANOMALIES? AN EXPLORATORY STUDY OF TWO COMPUTERISED INFORMATION SYSTEMSDr Patricia Thomson *Greater Glasgow Health Board*

Aims: To examine the interface between a routine information system, Child Health Surveillance Programme (CHSP), and a register of congenital anomalies, Glasgow Register of Congenital Anomalies (GRCA).

Methods: This was a retrospective exploratory study comparing data held on a 6 month cohort of children on both systems. It involved 78 children, born to residents between 1st July 1997 and 31st December 1997 ascertained as having congenital anomalies by GRCA. The proportion of children identified to GRCA by CHSP; the proportions on GRCA having had the first three CHSP surveillance reviews, and the proportions attending specialists were calculated. Name, DOB, sex, main and additional diagnoses were examined for level of agreement.

Results: CHSP notified no cases to GRCA. 2 children died at 1 day and 7 months respectively. First Review reports (>11 days of age) were received for 72/77 surviving children, second Review reports (6-8 weeks) for 63/77 and third Review reports (8-9 months) for 62/76 survivors. Of these reports 42/72, 51/63 and 54/62 showed specialist attendance. The level of agreement was high for name, DOB, and sex, but low for coding of main diagnosis (29% overall) and lower for additional diagnoses (15% overall). 12 congenital anomalies on CHSP were not on GRCA.

Conclusions: Children on GRCA, though not being notified by CHSP, were all known to CHSP. Most were well monitored and attending specialists in their early months. A problem was found in recording diagnostic information. Utilisation of electronic linkage could be beneficial to both systems.

G137 HEALTH PROCESS AND OUTCOME MEASURES FOR LOOKED AFTER CHILDREN—DEVELOPING A MINIMUM DATA SET

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Aims: To develop a minimum data set on demography and health for Looked After Children.

Methods: We gathered data relating to age, sex, type and area of placement, immunisation and child health surveillance, for children Looked After (LA) by a single Local Authority (42,400 children) at snapshots on 31.3.98 and 99, and over 6 months 1.2.99 to 31.7.99, from Social Services, and NHS Child Health Computers.

Results: There were 235 children LA on 31.3.98 and 292 on 31.3.99 by the Authority, giving point prevalence of 55 and 69 per 10,000 children respectively. This varies from published official figures. Cumulative incidence was 35 per 10,000 children per year. Social services data sets contained major discrepancies. There was no significant difference between numbers of boys and girls, but considerable variation between age groups of children becoming LA. In 1999, 30% children were accommodated, 64% subject to care orders. Type of placement: 6% residential, 59% foster family, 26% own family. 18% lived in a different health authority area, creating implications for service delivery and quality monitoring. Uptake of immunisations and child health surveillance among LA children under age 5 was poorer than the general population. (Dip tet and polio 88% v 98%; Pertussis 58% v 96%; Hib 83% v 97%; MMR 83% v 92%; Distraction hearing test uptake 54% v 74%).

Conclusion: Social Services data on LA Children was poor quality, and will require cooperative work for Quality Protects/ Children First monitoring. A minimum set of demographic and health measures for LA children, routinely measured in a standard and comparable way, and benchmarked against the average population, provides a tool for measuring health improvement.

G138 A COMPARATIVE STUDY OF PEER-LED AND ADULT-LED SECONDARY SCHOOL SEX EDUCATION

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Conceptions to young teenagers are again increasing, and teenagers, particularly girls, have a high incidence of sexually transmitted disease. Sex education delivered to students by teenagers of a similar age (peer-led) has gained support, although there is little information about its effects.

This study compared the effects of sex education delivered by peers or adults to 13/14 year olds in normal school time, in four one hour sessions based on a social influences model. Delivering such a programme has logistic and other difficulties, not the least taking up school time for those delivering the sessions.

Questionnaires were administered pre- and post-intervention. The data were analysed to account for intra-class correlation. The peer-led programme was delivered to two schools previously involved in the project (N=859) and the adult-led programme to two schools new to the project (N=461).

The results indicated little difference between the peer-led and adult-led sessions for increases in knowledge (sexually transmitted disease knowledge score differences 0.35 (0.65 to 1.35) p=0.5). Students receiving the peer-led sessions were more likely to change their opinions away from perceiving benefits of sexual activity (mean attitude score difference 0.25 [0.07 to 0.43] p=0.005), were less likely to consider that sex was appropriate at their age (Difference 6.9% [0.5 to 13.2] p=0.02), and more likely to consider that sex was not a majority activity for teenagers under 16 (difference 21.4% [12.0 to 30.7] p<0.001).

These results suggest that peer-led education may be less effective in transmitting factual health information but more successful in dealing with teenage relationships and setting conservative norms. If sex education is to address medical problems related to teenage sexual behaviour there is a need for further information regarding the effectiveness of different methodologies.

G139 HEALTH IMPROVEMENT MEASURES MAINTAINED IN A SERVICE VERSION OF AN EFFECTIVE SEX EDUCATION PROGRAMME (A PAUSE).

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A sex education programme which was effective in reducing sexual activity was reported for the first time in Europe in 1995.[1] Few such programmes have been reported to transfer effectively to a service provision.

The programme, previously delivered by experts external to the schools is now delivered by trained school nurses and the school's teachers. It is thus now a service provision and considerably cheaper. Care was taken to maintain the theoretical basis in Social Learning during the service model development. In 10 new schools compared to 22 matched control schools this model has been shown to have very similar effects to the research model with: increased values (intervention versus control) in: approval by pupils of their sex education (49% to 71%); recall of discussion of morality (62% to 82%) and assertiveness skills (56% to 94%); knowledge in relation to STI's (43% to 55%); a correct appreciation of the norm that sexual intercourse is a minority activity under 16 (23% to 37%). Using Anovas with school as the unit of analysis and pre-values as covariates all differences were significant at p<0.001. There was a 10% reduction in number of students who had had sexual intercourse versus 5% in controls P=ns. Use of contraception at last intercourse was over 80% in both populations. These data confirm that a behaviourally effective sex education programme can be delivered by appropriate trained school medical and teaching staff with the support of trained peer leaders.

1. Mellanby AR, Phelps FA, Crichton NJ and Tripp JH. School sex education: an experimental programme with educational and medical benefit. *British Medical Journal* 1995; 311: 414-417.