

493

**WHAT DOES THE "PRE-TEST" TEST?** Fredric A. Hoffer and Frank A. Oski. Department of Pediatrics, SUNY, Upstate Medical Center, Syracuse, New York.

The American Board of Pediatrics In-Training Examination or "Pre-Test" is now in widespread use as a means of evaluating the cognitive knowledge of house officers. The examination is modeled after the certifying examination of the American Board of Pediatrics. The 1977 Pre-Test was analyzed in an attempt to determine the currency of the knowledge required to pass this examination. The 7th through 10th editions of the Textbook of Pediatrics (Nelson) was used as a reference source. These editions represent information that is from 5 to at least 20 years of age. Analysis of the 190 items revealed that the correct answer was known for 148 or 78% of the questions at least 20 years ago. A total of 129 questions (68%) could have been written 20 years ago. The difference between the conclusion that 78% of the correct answers were known 20 years ago and that only 68% of the questions could have been written 20 years ago lies in the fact that portions of the question or distractors in the answer contained new facts (31), new drugs (14), new tests (12), or new attitudes (4). In only 10 instances (5.3%) was the answer not present in any edition of the textbook. These results suggest that the Pre-Test, and presumably the American Board of Pediatrics certifying exam, measure the candidates' knowledge of long-standing core information and are not suitable instruments for gauging if the candidate is keeping abreast of more recent medical advances.

494

**ATTITUDES TOWARD PERINATAL CARE IN COMMUNITY HOSPITALS.** John Kattwinkel, Lynn J. Cook, George A. Nowacek, Jerry G. Short, and Hallam H. Ivey, Dept. of Pediatrics, Univ. of Virginia, Charlottesville, Va. (Spon. by Robert M. Blizzard).

At the time of on-site observations of the perinatal services of 9 community hospitals, interviews and discussions were held with nursing personnel. Unexpectedly, these interviews suggested that hospital personnel held fatalistic attitudes that could potentially interfere with optimal perinatal care.

From these interviews, 51 statements regarding perinatal attitudes were written. The items were condensed to 32 statements through a pilot study and the resulting attitude survey was administered to 435 perinatal physicians, nurses, and support personnel from community hospitals. The data from the survey were subjected to a principle components factor analysis with squared multiple correlations in the diagonal and a Varimax rotation. The factors to be rotated were selected by Kaiser's criterion and the following were identified as general attitudes: (1) it does little good to anticipate perinatal problems; (2) some babies are predestined to be unhealthy; (3) some sick babies survive only because they have a "will to live". These respective attitudes were expressed by 12.1%, 9.4% and 38.2% of the individuals. The survey was readministered after a 4 month educational program. Preliminary results show a statistically significant shift toward less fatalistic attitudes following the program.

We conclude that (1) non-facilitating attitudes toward perinatal care exist in community hospitals and (2) these attitudes can be favorably influenced by an educational program.

495

**SELF-INSTRUCTIONAL PROGRAM FOR PERINATAL EDUCATION** John Kattwinkel, Hallam H. Ivey, Lynn J. Cook, George A. Nowacek, and Jerry G. Short, Dept. of Pediatrics, Univ. of Virginia, Charlottesville (Spon. by Robert Blizzard).

Perinatal regionalization encourages regional centers (RC) to provide educational programs for community hospitals (CH). We have developed a program with the following novel approaches: (1) Each hospital defines its own equipment and personnel needs by completing an inventory; (2) The same self-instructional program is completed by all perinatal nurses and physicians, thus facilitating uniformity of care and improving nurse-physician communication; (3) The RC trains 2 nurses from the CH who subsequently direct an intensive 4 month program entirely in their hospital and with minimum intervention by the RC. The program consists of 5 self-instructional books (575 pages) covering 17 perinatal subjects and 17 skills. The program was revised through 3 field trials and critiqued by 7 national experts. 55 physicians, 173 nurses and 107 supporting personnel representing 81% of the perinatal professionals from 9 CH participated in the program.

For the units completed by all hospitals to date, pre vs. post test scores increased from a mean of 70% to 87% respectively ( $p < .001$ ). Critical incident data suggested that the program resulted in improved patient care and staff morale. Pre-transport conditions of referral babies showed a 34% increase in quantity of stabilizing activities. Chart reviews are now underway to evaluate care practice changes.

We conclude that a self-instructional, locally-based and coordinated program of this type is an effective, well accepted, and efficient means of training personnel in the CH.

496

**CYSTIC FIBROSIS CAMP: AN EDUCATIONAL MODEL FOR A HEALTH CARE TEAM.** Bernice J. Lubin, A. Harold Lubin, Judy L. Bonner (Spon. by Milo D. Hilty) Ohio State

University, College of Medicine, Children's Hospital, Department of Pediatrics, Columbus, Ohio

We believe that a camping experience is an ideal instructional model for the team concept of health care delivery. During our two week stay at a regular children's camp with 17 children with cystic fibrosis (CF), the team consisted of physicians, nurses, dietitians, pharmacists, pediatric residents and interns, physical therapists, and CF parents. The first benefit was the opportunity to live with chronically ill children and to understand the ramifications of providing all aspects of their care twenty-four hours each day. Each professional gained an enriched understanding of the demands placed on patient and parent in terms of time and of the emotional and physical stresses of complying with prescribed and extensive regimens of home treatment. The second benefit was that information and expertise were exchanged over a long period, allowing for a depth of interchange between disciplines not usually possible in a hospital setting. This was a particularly valued dividend for the pediatric interns and residents as well as for the pharmacy and dietetic residents included. All members of the team realized the value of expanding the groups dimensions to include child psychologists and play therapists. Finally, since the group included a number of CF parents, the health team had the experience of seeing their directions and advice applied by nonprofessionals. As a consequence all members of the team realized anew the importance of communication between the team, the parents, and the CF children.

497

**CARE OF LOW BIRTHWEIGHT AND SICK NEWBORN INFANTS IN COMMUNITY HOSPITALS - EFFECT OF AN EDUCATION PROGRAM.** M. Jeffrey Maisels, Doreen Morrow, Sarah Fernsler,

Richard J. Hildebrandt. Penn State Univ Coll Med, M.S. Hershey Med Ctr, Dept Ped, Ob/Gyn, Hershey, PA.

A review of charts of all infants with birthweights <2500g and all neonatal deaths during 1972-3 and 1976-7 was performed in 11 community hospitals in Central Pennsylvania. In 1974-5 visits were made to 9 of the hospitals and a detailed report submitted containing recommendations for improving facilities and methods of care. Courses for physicians and nurses were conducted at the regional center. Practices which showed significant improvement in the hospitals visited:

	1972-3	1976-7	P
Classification by weight & gest.	11%	44%	$\leq 0.0001$
Incubator temp specified	23%	50%	$\leq 0.001$
Incubator temp recorded	32%	75%	$\leq 0.001$
First feed <6 hrs (non-distressed)	10%	34%	$\leq 0.0001$
Gastric aspirates recorded	3%	37%	$\leq 0.0001$
O <sub>2</sub> ordered as %	44%	58%	$\leq 0.001$
Cultures before antibiotics	26%	63%	$\leq 0.0001$
Investigation of apnea			
Cultures	10%	38%	$\leq 0.002$
Blood sugar	27%	60%	$\leq 0.001$
Electrolytes and calcium	27%	57%	$\leq 0.001$

Although current practice is not ideal, there has been a significant improvement in physician and nurse care practices to which the educational program appears to have contributed.

498

**DEALING WITH ETHICAL ISSUES IN A CHILDRENS HOSPITAL.** Thomas K. Oliver, Jr., University of Pittsburgh

School of Medicine, Children's Hospital of Pittsburgh, Department of Pediatrics, Pittsburgh, Pennsylvania.

Four years ago we changed the composition of the institutional research review committee and broadened its mission to include consultation and discussion of ethical issues in clinical care. The committees' name was changed to the Human Rights Committee. Its membership consists of 7 physicians including a geneticist and a behavioral scientist, representatives from the hospital administration, nursing service and housestaff and 3 laymen without an institutional allegiance (currently these are a housewife, an Episcopal minister and a lawyer from Neighborhood Legal Services).

The committee continues to review all clinical research proposals to assure that the rights of the children are protected. In addition it is available on 24-hour call to consult on and advise with ethical issues. Examples include discontinuation of life support, limitation of therapy in profoundly brain-damaged children, and withholding surgery in children with associated conditions where similar surgery would be performed in normal children. The committees activities have been enthusiastically accepted by the hospital staff. Furthermore, in-house publication of these activities has brought increasing awareness of these important issues at all levels from medical students to the Board of Trustees.