

25 THE ANNUAL MEETING: A FOUR YEAR STUDY. George D. Comerci, Michael W. Cohen and Elizabeth W. Preece. University of Arizona College of Medicine, Department of Pediatrics and Office of Continuing Medical Education, Tucson, Arizona. (Spon. by Vincent A. Fulginiti)

Professional organizations have a responsibility for program evaluation. This paper describes a method and reports evaluative data from 4 annual pediatric meetings. Three components were assessed: a general plenary session, special topic sessions, and workshops. Data from 2,008 evaluations were analyzed. General and special topic presentations were assessed for the following factors: method, appropriateness, organization, quality of visual aides, and adequacy of data base. Special topic sessions were also evaluated for: over-all quality, performance of the moderator, and opportunity for discussion. Workshop content was evaluated using 3 factors: quality, currentness, and relevance. Assessment of participant satisfaction was based on the following 9 descriptors: rewarding, encouraging, educational, should be repeated, organized, helpful, at participant's level, met participant's needs, and group orientation. Content evaluation was also accomplished by evaluator identification of major points made by the presenter or workshop leader.

General and special topic presentations were judged "good" with an average score of 3.0 based on a scale of 1 (poor) to 4 (excellent). Workshop satisfaction and content were both judged "good" with respective average scores of 3.9 and 4.0 on a scale of 1 (poor) to 5 (excellent). Results are being used to effect changes in abstract selection, performance of participants, planning future conventions, and improvements in evaluation method.

26 A FOUR YEAR LONGITUDINAL STUDY OF A PEDIATRIC CLERKSHIP. George D. Comerci, Vincent A. Fulginiti and Pamela S. Brown. Univ. of Arizona Col. of Med., Dept. of Ped. and Office of Continuing Medical Education, Tucson, Az.

Clerkship performance should be evaluated to determine if objectives are achieved and appropriate and to improve the clerkship experience. Medical students (184) had a 12 week clerkship between 1969 and 1973. Emphasis was on data collection, problem solving, pediatric knowledge, and attitude in the clinical setting. Clerkship objectives, content and evaluation method were made known prior to the experience. Evaluation was done in the above emphasis areas. Student attitudes were quantified using pre-established criteria. Students, upon completion of the clerkship and later as housestaff, were asked to permit 2 supervisors to evaluate their performance as housestaff. One hundred fifteen students responded and 153 evaluations were made by housestaff supervisors. Performance was analyzed and comparisons made of emphasis areas as well as between clerkship, housestaff, and National Board performances. Performance was compared to specialty choice and graduates indicated the degree of clerkship influence, if any, on their choice.

Achievement was documented by: National Boards (NB) (Pass: Clerkship-99%/HS-97%); evaluation of housestaff (HS) (96% no deficit in ped. knowledge, average or above performance: clerkship-79%/NB-99%); and retrospective assessment by HS (objectives highly appropriate-47% and preparation especially strong-61%). There were notable differences in performances for various objectives and all, except attitude, correlated with specialty choice (ped. HS significantly higher than 2 and 4 of six specialty choices).

27 GESTATIONAL AGE ESTIMATION IN SICK NEWBORNS Cecelia Daum, Diane Kurtzberg, Bruce Grellong, Susan

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The Dubowitz examination for estimation of gestational age is often difficult or impossible to administer in its entirety in sick infants, especially those receiving ventilatory support. A shortened version of the examination has been devised which permits assessment of gestational age with minimal loss of predictive accuracy. The complete Dubowitz examination was administered to 112 infants from 29 to 42 weeks gestational age. Factor analysis and stepwise regression were performed to identify the items that contributed preponderantly to the total variance. Three non-discriminating items (edema, skin color, posture) were eliminated on the basis of these analyses, as well as three additional items (lanugo, head lag, ventral suspension) which cannot be assessed in infants on respirators. The shortened scale correlated highly with the total Dubowitz score ($r = .985$), providing an instrument which can be administered to seriously ill infants with little loss of predictive accuracy (95% confidence limit ± 1 week).

28 NEUROBEHAVIORAL ASSESSMENT OF HIGH-RISK NEONATES Cecelia Daum, Diane Kurtzberg, Bruce Grellong, Susan
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A new examination has been developed which provides a reliable evaluation of neonatal neurological and behavioral organization, and is sensitive to individual differences in neurobehavioral status at conceptional ages from 30 to 42 weeks. Items evaluate maturational level, sensorimotor status and functions thought to involve cortical processing (i.e., visual tracking and auditory orienting).

Fifty normal full-term infants (NFT) were compared to 120 low-birth-weight (LBW) infants (< 37 weeks gestational age, and/or weight < 10 percentile for age) tested at 40 weeks conceptional age. Interscorer reliability was .97 and test-retest reliability .91. 78% of LBW infants fell outside the range of NFT infants on visual tracking and auditory orienting items. Head position preference thought to be an early expression of hemispheric dominance was overwhelmingly right-sided (90%) in the NFT group and substantially less so (49%) in LBW infants. The LBW infants as a group manifested significant deficits on active motility, and in complex reflexes (rooting and Moro), as well as a somewhat higher incidence of hypotonia and hyper-tonia. Items considered sensitive to deficient cortical functioning showed a strikingly greater disparity between LBW and NFT than did the standard neurological tests of motor and reflexive performance.

29 DYSGRAPHIA AND SUPERIOR INTELLIGENCE: A PROCESSING SYNDROME? Ronald B. David and Robert H. Willoughby (Sponsored by Harold M. Maurer). Medical College of Virginia/Virginia Commonwealth Univ., Univ. of Virginia School of Medicine, Depts. of Pediatrics, Richmond and Charlottesville.

Six boys, mean age 9.6, presented with an unusual processing syndrome. All subjects were evaluated for school difficulties. A highly consistent psychoeducational profile was found in all subjects. This consisted of superior verbal intelligence (mean IQ 131) and highly discrepant performance skills (mean IQ 105). In particular, performance skills were found to be impaired in the area of visual motor dexterity for sequential material. Supplementary tests indicated disproportionately lower spelling and math scores. All displayed dysgraphic symptoms of a varying type and degree with handwriting consequently poor to illegible and characterized by reversals, distortions and sequencing errors. Traditionally employed measures of perceptual motor integration e.g. Bender-Gestalt were, however, age appropriate.

The findings in this sample, though small, suggest a processing syndrome consisting of high verbal-conceptual abilities accompanied by dysgraphia. Whether the dysgraphia results from poor visual perception, visual memory, conceptualization of written form, conception form-motor translation or pure fine motor difficulty is unknown. The data would however tend to suggest that the defect is either in visual memory or conceptualization of written form. Reliance on traditional tests of figure copying are invalid screens for some dysgraphic children. Early recognition is important so that their verbal talents can be realized and performance deficits remediated.

30 HEALTH VISITORS' ROLE IN PREDICTION OF EARLY CHILDHOOD INJURIES AND FAILURE TO THRIVE.

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Health visitors (registered nurses) in Aberdeen, Scotland, administered a brief "maternal attitude questionnaire" and recorded a subjective assessment of mother-child interaction at age 3-4 months on all 7,700 births within the city. During the first two years of life, 1,388 (20%) of these children presented with an injury or failure to thrive (FTT). This index group was matched at age 2 with children from the original group who had no such findings. Within the index group, 76% were seen for accidents, 10% for overtly negligent injuries, and 14% for suspected non-accidental injury or FTT. The questionnaire revealed no significant differences between the index and control groups; however, analysis of the health visitors' subjective assessments revealed that twice as many index children as control children received assessments of "moderate" to "great concern." A comparison of outcome variables within the index group revealed that these ratings related significantly to two variables: the higher the level of concern, the more likely an injury would be non-accidental and, within this group, the more likely an injury would be a serious hospitalized case. Of the total study population (2,776), 10% (218) were rated as "moderate" to "great concern." Two-thirds of these 218 children later presented with injuries or FTT which might have been prevented by intensive intervention.