

79 NEUROLOGICAL AND NEUROPSYCHOLOGICAL STATUS OF DETAINED YOUTH. Monica Meyer, Harvey Bennett, Dana Luck, Frank Miller, Claire Haaga, Judith Zarin-Ackerman, (Spon. by Michael I. Cohen) Albert Einstein Coll. Med., Montefiore Hosp. & Med. Ctr., Depts. Peds., Neuro., & Neuropsych. Bronx, N.Y. & Vera Institute of Justice, New York City.

A number of investigators have reported the presence of soft neurological signs and measurable neuropsychological dysfunction among incarcerated juveniles. This study was undertaken to further explore the relationship between parameters of neurological dysfunction and delinquent behavior. Seventy-one teenagers admitted to an urban detention center were evaluated utilizing neurological examination, neuropsychological testing and an assessment of reading levels. Although the group studied was selected at random from among the detainees it included a disproportionate number of alleged serious offenders as compared with the general detention center population. Fifty-one percent of the youth were found to have two or more soft neurological signs including left-right confusion, lack of coordination, mirroring, dysidiadochokinesis, choreiform movements and astereognosis. The mean reading level for the group was three grade levels below the norm for age. Continued difficulties with both experimental design and the separation of environmental factors from inherent disabilities mandate caution in labeling delinquent youth as being neurologically impaired. However, these results would suggest that incarcerated youth may have a greater than expected incidence of neurological and neuropsychological dysfunction.

80 THE NON-MEDICAL COSTS OF CHRONIC AND CATASTROPHIC CONDITIONS IN CHILDREN: THE FINANCIAL AND HUMAN PRICE. Eva T. Molnar, and Theresa B. Haddy (Spon. by Melvin E. Jenkins) from the Department of Pediatrics and Child Health, Howard Univ., College of Medicine, Washington, D.C.

"Non-Medical costs" appear at first to mean the out-of-pocket expenses in connection with the child's condition such as transportation, food, lodging, etc. These can be a great burden on the family since they have to be paid immediately and are rarely reimbursed by insurance. There are, however, other non-medical costs that are emotional in nature and may lead to a temporary overload of the coping ability of the family. While these human and emotional costs cannot be alleviated by dollars and cents alone, counseling and other support services that may assist families in need will have to be financed.

It appears imperative that both the financial and human non-medical costs of illness be taken into account in future health care planning. Data documenting such costs is scanty or non-existent.

The authors have contacted parents of children with five randomly selected conditions, in a pilot mailing, in preparation for a later nationwide inquiry. The questionnaires are well accepted by parents. Preliminary results show gaps in the financing of vital equipment and services.

81 TEMPERAMENTAL PROFILE OF CHILDREN WITH ENURESIS AND ENCOPRESIS. Timothy F. Murphy, Craig B. Liden, and Edith J. Krak (Spon. by Thomas K. Oliver). School of Medicine, Univ. of Pittsburgh, Dept. of Pediatrics, Children's Hospital of Pittsburgh.

Parents of 423 school age children (60-144 mo.) were surveyed by questionnaire to assess the relationship between temperamental characteristics and selected somatic dysfunctions. From questionnaire responses 3 experimental groups were identified: current nocturnal enuresis (N=26), past history of nocturnal enuresis (N=18) and current encopresis (N=12). Each subject was matched with a control without somatic dysfunction for age, sex, grade & school. Parents of all subjects completed the Parent Impression of Temperamental Traits (PITT) a behavior rating scale which generated raw scores for 9 standard temperamental variables. PITT scores correlated favorably with the Carey Behavioral Style Questionnaire for all characteristics except mood.

One-way analyses of variance (Som. Dysf. Group x Temperamental Variable) demonstrated that there was no interaction of individual groups by temperamental trait. The combined somatic dysfunction group differed ($p < .05$) from controls on 3 variables: low adaptability ($F=4.44$); negative mood ($F=4.55$), low persistence ($F=4.16$)

These results suggest a characteristic temperamental profile for children who manifest two of the more common somatic dysfunctions of childhood. Characterization of a child's temperamental profile may be used to facilitate identification of children at risk for selected somatic dysfunction, assist in anticipatory guidance around toilet training issues and refine the behavioral treatment of children with manifest somatic dysfunction.

82 THE NINE MONTH OLD'S EXPANDING WORLD: PEOPLE, PLACES, AND THINGS. John T. McCarthy, Amy S. Wey, Carey L. Halsey, David E. Barrett, and Michael W. Yogman (Spon. by T.B. Brazelton) Harvard Medical School, Children's Hospital Medical Center, Department of Medicine, Boston.

As infants solidify emotional attachments with their mothers during the second half of their first year, they become increasingly interested in their environment. To study this developmental process during a pediatric interview, we videotaped 45 healthy normal 9 month olds while they sat on their mothers' lap facing a pediatrician. An object (rubber duck, spoon, or eye-glasses) lay on the desk within the infants' reach. In reviewing the videotapes, we focused on the infants' interest in these novel stimuli (object or pediatrician) or familiar stimulus (mother) using looking rates (frequency/unit time) during specific phases of the session. Throughout (mean length=12.3 minutes), the infants' rates of looking at the pediatrician were significantly higher ($p < .05$) than rates of looking at their mother. Peak interest in the object occurred prior to object pickup (mean latency to pickup=59.9 seconds). This was the only time the looking rate at the pediatrician was significantly lower ($p < .05$) than the rate of looking at the object. Although the infants' interest in both the pediatrician and the object decreased over time, rates of looking at their mothers remained stable. Gender and type of object made no significant difference on any of the looking rates. Our study suggests that normal 9 month olds, with their mothers as a secure base, show distinct looking patterns with novel stimuli and that pediatricians can use this paradigm in making behavioral observations during a well baby visit.

83 THE RELATION BETWEEN OBSTETRIC FACTORS, CULTURAL FACTORS AND NEWBORN BEHAVIOR. J. Kevin Nugent, Barry M. Lester (Spon. by T. Berry Brazelton).

This study examines the effects of cultural and biomedical variables on newborn development by comparing a sample of Irish (n=48) and American (n=54) newborns on the Brazelton scale on day 1 and day 3. The contribution of biomedical variables was assessed by the Obstetric Complications Scale (Parmelee et al., 1976), so that subjects were selected on a basis of comparable obstetric histories. By controlling for as many confounding obstetric stress variables as possible, we were able to assess the contribution of other factors on newborn behavior. Labor and delivery management practices were therefore compared in both settings. Using the 7-point cluster scoring system developed by Lester et al. (1978), results showed that Irish infants scored significantly higher on the Orientation, Range of State, and Autonomic Regulation clusters. They were more responsive to both visual and auditory stimuli, were predominantly in quiet alert states, and showed fewer signs of physiological stress than American infants. These results may suggest that the forms of childbirth environments and different cultural attitudes towards pregnancy, labor and delivery have an effect on newborn behavior. We were therefore able to raise the possibility that the superior performance of the Irish infants in these areas may be due to the provision of an extremely supportive psychological environment with minimal technological intervention during labor and delivery.

84 DEFICITS IN MOTHER-INFANT INTERACTION (MIA) ASSOCIATED WITH EARLIER OCCURRENCE/SEVERITY OF MALTREATMENT. Susan M. O'Connor, Wm. A. Altemeyer (Vanderbilt Univ. Hosp., Dept. Peds.), Patricia S. Gerrity, Howard M. Sandler, Kathy A. Sherrod (Peabody College, Dept. Psych.), Nashville

It is not clear what factors influence early versus later onset of child maltreatment sufficiently severe to be detected. In a prospective double-blind study, 34 mother (M)-infant (I) pairs were observed @ 6 months (m) postpartum; 13 I's already had been identified (ID) as maltreated & were compared with the 21 later (TBI) identified. Data from these MIA observations were examined for probability of transition between 4 dyadic states: both (B), infant (I), mother (M), or neither (N) responding. Response transitions (RT) more likely in the ID group were: I drops out (B+M, $p=.02$), abrupt mutual cessation (B+N, $p=.04$) & I stops (I+N, $p=.004$). RT more likely for TBI were: continuation of coacting (B+B, $p=.002$), initiation of coacting (M+B, $p=.10$) & M failing to join (I+I, $p=.006$). TBI also spent more total time coacting (B, $p=.006$) while ID spent more time quiescent (N, $p=.01$). From other research comparing normal with TBI MIA, it is known that the coacting state (B) & RT B+B & M+B distinguish normal while the quiescent state (N) & RT B+N & I+I characterize TBI. In this study the coacting state (B) & RT B+B, M+B & I+I predominate in TBI while the quiescent state (N) & RT B+N are more likely for ID. The remaining RT distinguishing ID (B+M, I+N) reflect cessation of I response. Except for RT I+I, TBI MIA resembles normal more than ID, suggesting that deficits in MIA are associated with earlier occurrence and/or severity of maltreatment.