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MATERNAL SOCIAL RISK FACTORS AS PREDICTORS OF COMPETENCE IN EARLY CHILDHOOD. Earladeen Badger, Donna Burns, Belinda Rhoads, Anne Zwertschek, Sharon Elsass, Kathy Kazmaier, and Peter Vietze (Sponsored by James M. Sutherland). University of Cincinnati College of Medicine, Cincinnati, Ohio.

A three year follow-up of previously reported educational intervention program--delivered to matched sample of 36 socially disadvantaged mother-infant pairs during first year of life--resulted in the development of a maternal social risk score instrument. In the retrospective analysis of 15 social variables describing multi-problem families, mother's age, education, plans for returning to school, living arrangement, geographic living area, and any reported socially deviant behavior were most predictive of social risk status. Interaction between social risk scores of mothers and performance of their infants was analyzed. There was a negative correlation between risk scores of mothers and performance of their infants at year one ($r=-.388$; $p<.02$); at year two ($r=-.488$; $p<.008$) and at year three (verbal, $r=-.340$; $p<.049$ and cognitive, $r=-.288$; $p<.099$). An instrument which is able to assess maternal risk at birth may be an important new parameter in preventive pediatric treatment.

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PRE-TERM INFANTS: POSTNATAL ILLNESS AND EARLY HOME CARE. Leila Beckwith, Sarale E. Cohen, Arthur H. Parmelee, School of Medicine, University of California at Los Angeles, Department of Pediatrics.

There has been some speculation that neonatal illness may interfere with subsequent maternal care. Contrary to this speculation, neonatal illness in pre-term infants tended to enhance rather than diminish maternal caregiving effort as assessed in the home. Naturalistic observations were made in the home at one month past the infant's expected date of birth, 44 weeks conceptional age. The home behaviors were related to assessments of obstetrical and postnatal complications (Obstetrical Complications Scale and Postnatal Complications Scale) in a group of 122 pre-term infants. Caregiving behaviors were more strongly related to postnatal illness than to obstetrical complications. All relationships that were significant between the caregiver's behavior and the illness of the infant were such that the sicker infant received more attentiveness than the less sick infant. The increased attentiveness was evidenced in social interaction, verbal stimulation, and caretaking. The results suggest that the caregivers of the babies who have experienced more neonatal complications have not pulled away from or rejected their infants. Although the relationships were moderate and accounted for only a small amount of the variance in the caregiver's behavior, the results do suggest that withdrawal from the sick infant is not a necessary outcome.

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PEDIATRIC EMERGENCY ROOM UTILIZATION BY DIAGNOSIS AND SEX. Jay E. Berkelhamer, Francis Munkenbeck, Stephen M. Davidson, Catherine M. Wigder, and Suzanne Bornstein (Spon. by John D. Madden). University of Chicago, Wyler Children's Hospital, Department of Pediatrics, Chicago, Illinois

A previous study of utilization patterns in the Wyler Children's Hospital Emergency Room established that males consistently visit more often than females. Data collected from 1807 consecutive visits from August 1 thru August 15, 1977 were reviewed by diagnosis and sex to determine if particular disease categories account for this difference. 53.2% of the visits studied were male while the population served was 50.5%. This difference was significant at the $p<.003$ level. Diagnoses reviewed showed a male predominance for simple lacerations with 67 of 107 visits ($p=.016$) and acute asthmatic episodes with 58 of 84 visits ($p<.003$). These were the third and sixth most common diagnoses made respectively. None of the other common diagnostic categories demonstrated a statistically significant difference from the population served. Urinary tract infections which accounted for only 14 visits during the study were strongly weighted toward females with 13 ($p=.003$). These data confirm the observation that males use the emergency room more than females. During the study period, this difference was attributable to the larger number of males requiring treatment for acute asthmatic episodes and simple lacerations.

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NEONATAL TRANSPORT, MATERNAL ATTITUDES AND INFANT BEHAVIOR. Virginia R. Brush, Rachel T. Burroughs and Alistair G. S. Philip (Spon. by Jerold F. Lucey). University of Vermont, Dept. of Pediatrics, Burlington, Vt.

Low birthweight infants have been shown to be at greater risk than full-term infants for problems in parent-child interaction. Whether or not transporting babies to neonatal centers might increase the risk has been questioned.

This study evaluated the effects of early parent-child separation upon parental attitudes and neonatal behavior in the very low birthweight (VLBW) infant (<1500 grams). During an 18 month period, 30 VLBW infant-mother pairs and 30 full-term controls (C) entered the study. They were matched by maternal age and parity, and sex of the infant. The VLBW cases consisted of 10 inborn (Gp. I), 10 transported (Gp. II) and 10 maternal/fetal transports (Gp. III). Parental visiting patterns and behavior were unobtrusively recorded by the nursing staff. The Michigan Screening Profile for Parenting (MSPP - Helfer, et al.) was administered to each mother, and the Brazelton Assessment Scale (BAS) was used to evaluate the newborn at the time of discharge and again one month later.

There were no differences in parental attitudes between Groups I-III. However, there were differences between VLBW and C groups on a) emotional needs met and b) realistic expectations.

When infants with intracranial hemorrhage were excluded, there were no differences on BAS between Groups I-III, or VLBW compared to C. Visiting patterns were variable.

These findings support the concept of regionalized care.

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MATERNAL EMOTIONAL DEPRIVATION ASSOCIATED WITH LOW BIRTH WEIGHT. Virginia R. Brush, James F. Clapp and Alistair G.S. Philip (Spon. by R. J. McKay, Jr.) Univ. of Vermont, Depts. of Pediatrics and Obstetrics, Burlington, Vt.

Early prenatal identification of the mother who is likely to produce a low birth weight (LBW) infant is difficult, but would be helpful in management.

Thirty very low birth weight (VLBW, <1500 grams) infant-mother pairs and 30 full-term controls (C) were selected sequentially over an 18-month period. They were matched by maternal age, parity and sex of infant. The Michigan Screening Profile for Parenting (MSPP, Helfer et al), which identified potential for problems in parent-child interaction, was administered to each mother at the time of the infant's discharge and again one month later.

Preliminary analysis shows significant differences between VLBW's and C's: 1) 42% of VLBW mothers responded negatively or inconsistently to "Emotional needs met" (reflecting a non-nurturing upbringing) versus 19% of C's; 2) 21% of VLBW mothers reported poor relationships with their parents versus 6% of C's; 3) 17% of VLBW mothers had realistic expectations for their children, versus 44% of C's; 4) 29% of VLBW mothers reported a pregnancy interval of less than 1 year versus 7% of C's. 67 LBW's (1500-2500 grams) showed 38% with pregnancy interval less than 1 year, and 45% with psychosocial problems.

These results suggest that knowledge of emotional deprivation might lead to earlier identification of women at risk for LBW infants, and to more effective prevention of LBW.

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PREDICTABILITY OF DEVELOPMENTAL TESTING IN HIGH RISK INFANTS. Kalo Cardozo, Charles R. Bauer (Spon. by Eduardo Bancalari) University of Miami, School of Medicine, Department of Pediatrics, Miami, Florida.

One hundred and ten neonates requiring intensive care and felt to be at risk for developmental deficits were followed for periods up to 2 years. Denver Developmental Screening Test (DDST) and Bayley Scales were administered alternately at 6 month intervals. The DDST was scored as normal or abnormal and the Bayley was considered abnormal if the Mental Developmental Index (MDI) was less than 80. Data was analyzed in terms of conditional probabilities; that is, the percent of later diagnoses of normality or abnormality predicted from earlier testing. Results:

TESTS	NORMALITY	ABNORMALITY
DDST (6mo) vs Bayley (12mo)	91% (89/97)	69% (9/13)
DDST (6mo) vs DDST (18 mo)	93% (58/62)	60% (3/5)
DDST (6mo) vs Bayley (24mo)	80% (16/20)	50% (2/4)
Bayley (12mo) vs DDST (18mo)	96% (55/57)	44% (4/9)
Bayley (12mo) vs Bayley (24mo)	81% (13/16)	20% (1/5)
DDST (18mo) vs Bayley (24mo)	87% (14/16)	67% (2/3)

Assuming the 24 month test has the most predictive validity, then these results suggest that testing prior to 18 months may not reliably predict later performance. This may be explained by the fact that early developmental assessment consists of primarily sensory and motor tasks; whereas later tests begin to stress verbal and conceptual abilities. Parents of infants considered to be high risk due to perinatal events should be encouraged to participate in long term evaluations and overly optimistic prediction based on early motor progress alone should be avoided.