61 SEVERLY ILL PREMATURE INFANTS' MOTHERS' ATTITUDES. Nathan Szajnberg,Mary Jo Ward,Alfred Krauss,Daniel Kessler, Depts.Pediatrics & Psychiatry,Cornell Univ. Medical College, New York, N. Y. 10021.

Previous investigations have demonstrated an increased sensitivity to the behavior of premature infants in the first 6 months of life. It has been assumed that this difference is a result of the mothers' experience of the infants' behavior after discharge. This study reports on the attitudes of mothers of preterm infants before hospital discharge. Twenty-two mothers of AGA preterm infants (28-32 weeks gestation) with medical complications completed the Cohler Maternal Attitude Scale, a 233 item Likert-type instrument, when their infants reached 34 weeks post-conceptional age. We examined 5 issues which assess attitudes towards maternal and infant attachment and infant separation. Scores were compared with Cohler's norms of 212 full-term uncomplicated deliveries. Two issues had elevated values: "period of reciprocal exchange"($2\frac{1}{2}$-5 months,$p < 0.01$), and "period of early directed infant activity"(5-9 months,$p < 0.02$). There were no statistically significant differences in the three remaining issues ("focalization on the mother", "widening reciprocity of interchange", and "female sexuality".) This suggests that mothers of ill prematures tend to be more sensitive to the infants' early efforts at stimulating and opening new areas of reciprocity with the mother, and that maternal attitudes toward premature infants are formed before hospital discharge of the baby.

62 MATERNAL DISTRESS AND DURATION OF NEONATAL INTENSIVE CARE. J. Tyson, F. Eubanks, R. Lasky, R. Cox, L. Bowman, (spon. by C. Rosenfeld), Dept. of Ped. and Fam. Practice, Southwestern Med. Sch., Dallas, TX.

Maternal distress with neonatal ICU care has received little study. In a study to relate maternal distress to care duration as well as infant outcome, we interview mothers weekly during ICU care and 6 months after ICU discharge. Distress intensity is rated by mother on a 0-10 scale(0=none;10=unbearable distress) and compared to that of prior distressing life events (Rahe Scale). Statistics deferred until sample completed, but data to date include:

	Wk 1	Wk 2	Wk 3
Total interviews	30	27	13
Distress Score = 9 or 10	10%	19%	39%
DIstress intensity rated as			
≥ that with serious illness in in self or family	89%	87%	100%
≥ that for death of close friend or family member	41%	50%	50%

Among distress sources, infant appearance was very distressing to 33% in 1st wk but only 8% in 3rd wk; upset with infant caregivers, 10% in 1st wk but 46% in 3rd wk. Reasons for infant illness remained highly distressing at 1-3 wks (>40%). In 11 six mo. interviews to date, moderate distress (rated by mother and by psychologist) but high scores (>7) on 10 point life satisfaction scale are generally noted. Duration ICU care may affect both intensity and sources of maternal distress. Followup distress is not necessarily correlated with maternal life satisfaction.

●63 LANGUAGE DEVELOPMENT AT 2 YEARS OF AGE IN LOW BIRTH WEIGHT(LBW)(<1500 GRAMS) INFANTS. Betty R. Vohr, Cynthia Garcia Coll, and William Oh. Brown Univ., Women & Infants Hosp., Dept. of Ped., Providence, R.I.

Early delays in language development are related to subsequent learning difficulties. Previous studies have shown LBW infant survivors are at increased risk for learning disability. We hypothesized that receptive and expressive language skills, an early measure of learning, may be delayed in 2 y.o. LBW survivors. 18 appropriate-for-gestation (AGA) (B.WT 1281±207 gm; Gest 29±2 wks), 9 small-for-gestation (SGA) (B.WT 1282±150 gm; Gest 33±2 wks) LBW and 15 term (B.WT 3489±59 gms; Gest 40 wks) infants were studied. Both LBW AGA and SGA infants lagged significantly at 2 yrs in Bayley MDI (corrected for gestation) and Mullen language scores when compared with term infants. LBW AGA infants also lagged significantly when compared with SGA LBW infants.

	AGA	SGA	TERM	AGA vs SGA	AGA vs TERM	SGA vs TERM
MDI	88±20	106±20	118±13	<.05	<.001	n.s.
Receptive Score	38±10	57±8	64±5	<.001	<.001	<.05
Expressive Score	38±9	52±10	62±2	<.005	<.001	<.05

Linear regression analysis indicated the language scores correlated directly with gestation ($p<.01$), Hollingshead SES score ($p<.05$), and abnormal neurological status at 8 months (<.05). We conclude that language delay is observed in LBW infants at 2 yrs, particularly those who are of low gestation at birth, low SES, and †abnormal or suspect neurological findings at 8 months.

64 METHYLPHENIDATE EFFECTS ON ATTENTION DEFICIT DISORDER; CHILDREN'S ASSOCIATIVE LEARNING. Esther H. Wender and Marcel Kinsbourne (Spon by Gerald Nathenson, Albert Einstein Coll of Med, Montefiore Med Cent, Dept of Peds, Bronx NY and Harvard Med School, Mass Gen Hosp, Dept of Neurol, Boston MA)

Stimulant treatment of Attention Deficit Disorder (ADD) remains controversial, in part, because adverse medication responses to cognitive testing in the laboratory suggests that medication may impair learning. Some investigators recommend that pharmacologic treatment be based upon response to learning tests in the laboratory. However, the reliability of learning tests within and across dose levels has not been established. Therefore, treatment recommendations based upon such testing remain controversial. 23 males, age 6-12, with ADD were assessed on .3, .5 and .75 mg/kg of methylphenidate and placebo on a paired associate learning task in the laboratory, in an acute, double-blind, drug-placebo paradigm. Data consists of the total errors made while learning a list of picture-number associations to criterion. Test-retest reliability was assessed in 10/23 subjects. A total of 84 medication response learning curves were classified as favorable (fav) adverse (adv) or non-response compared to placebo. In 12/23 subjects, both fav and adv curves were seen; 6 revealed responses that were adv at low dose and fav at higher doses; 3 were adv and fav on the same dose on repeated testing. The percentage of fav response curves at the 3 doses were: 32% at .3 mg/kg; 30% at .5 mg/kg and 70% at .75 mg/kg. Across the group, data suggests that fav and adv stimulant medication responses on a laboratory learning task is dose related with higher doses resulting in more fav response. At the individual level, interpretation is complicated by considerable variability across tests.

65 DEVELOPMENTAL FOLLOW-UP OF INFANTS WITH INTRACRANIAL HEMORRHAGE. S. Wilkerson, C. Topinka, A. Bloom, A. Reese, L. Cook. University of Louisville, Division of Neonatal Medicine and Child Evaluation Center. Spon. B.F. Andrews.

Twenty-two infants with neonatal intracranial hemorrhages were evaluated medically and developmentally at 3,6,9 and 12 months of age. These infants were divided into 3 groups having the following characteristics:

	SAH(mod-severe) n = 6	IVH(Grade I/II) n = 5	IVH(Grade III/IV) n = 11
Gest. Age	37.5wk(34-43)	29.8wk(26-34)	28.8g(26-31)
Birth Weight	2428g(1956-3005)	1193g(624-1673)	1153g(765-1531)

All infants were assessed developmentally by child clinical psychologists using both the mental (MDI) and motor (PDI) Bayley Scales of Infant Development. Twelve-month scores (corrected for gestational age) are reported:

	MDI $\bar{x}$	MDI SD	PDI $\bar{x}$	PDI SD
SAH	103.8	15.4	104.2	12.7
IVH (I/II)	86.8	34.2	80.0	30.6
IVH (III/IV)	80.7	30.3	76.5	28.3

T-tests revealed no significant group differences in mental function although there was a strong trend toward better mental abilities in the SAH group than in the IVH (III/IV) group ($p<.10$). There was a significant difference in motor development between SAH and IVH (III/IV) infants ($p<.05$) and a strong trend toward differences between SAH and IVH (I/II) ($p<.10$). Unlike SAH and even Grade I/II IVH, Grade III/IV IVH adversely affects both mental and motor performance at 1 year even when corrected for gest.age.

†66 THE DEVELOPMENTAL PROFILE OF THE NON-HANDICAPPED VERY LOW BIRTH WEIGHT (VLBW) INFANT AT 1 YEAR OF AGE. W. Daniel Williamson, Susan A. Thurber, Murdina M. Desmond, Geraldine S. Wilson, Marta H. Lifschitz. Baylor College of Medicine, Texas Childrens's Hosp., Dept. of Ped., Houston.

Information about general outcome of VLBW infants (i.e. those with retardation, C.P., blindness or deafness vs. those without major handicaps) is readily available. Yet, descriptions of the developmental profile of the non-handicapped VLBW infant are limited. Do VLBW infants without major handicaps exhibit uneven development at any early age? This question was addressed by studying 61 VLBW infants (followed prospectively to a mean age of 34 mo.) who met the following criteria: 1) normal cognitive functioning (group mean 92±19) 2) absence of major motor or sensory impairment 3) assessment on the Revised Gesell Developmental Schedule (GDS) at 1 year of age (mean chronologic age of 53±5 wks, mean corrected age 42±5 wks). Mean birth weight was 1082±221 gms; mean gestational age was 28.9±2 wks. The following is the developmental profile on the GDS (quotient of performance age ÷ corrected age):

	Adaptive	Gross Motor	Fine Motor	Language	Per/Soc
Mean ±1 S.D.	89.4±10.9	90.9±13.6	82.1±13.6	81.2±11.0	89±10.5

Both fine motor and language quotients were significantly lower than adaptive quotient (Student's t test for matched pairs; t=8.35, 9.21; $p<.001$). 36 infants had ≥4 wk difference between fine motor and adaptive performance; for language performance, 32 had ≥4 wk difference. This study reveals that a majority of non-handicapped VLBW infants have significant deficits in fine motor and/or language skills at an early age. Longitudinal follow-up will reveal whether these weaknesses persist to school age, when such skills become major determinants of academic success.