

49 SOURCE OF ERRORS IN WT. DISCREPANCIES BETWEEN BIRTH CERTIFICATE TAPES & NEWBORN HOSP. RECORD. Angelo Ferrara, Helen Page, Susan Highhouse, Frank Borriello. In order to obtain NB hosp. charts for auditing purposes, birth tapes of all neonates medical records <2500g. in '79 were presented to indiv. hosp. to match \bar{x} 1494 NB charts from 14 hosp. All wts. on birth tapes are in gms. while several hosp. normally use lbs. There was an overall birth wt. discrepancy of 37% (557 out of 1494). Significance testing was done by the paired t-test & X^2 . RESULTS: The sources of error included: transcribing wrong digits; inaccurate conversion of lbs. to gms; reversing digits; recording birth wt. at different times on birth certif. & neonatal chart. 2) III ctrs. had signif. fewer errors compared to I ($X^2=13.2$; $P<.001$) & to II ctrs. ($X^2=20.8$; $P<.001$). 3) Of the 14 hosp. most of the errors had lower NB wt. listed on the birth certif. 4) Highly signif. diff. ($P<.001$) in wt. were noted in 2 hosp. while an addit. two had borderline signif. diff. ($P<.1$). In performing survey chart research, a reliability wt. check \bar{x} the NB chart needs to be done when using birth certif. data. TABLE I: LEVEL NEONATE CARE PERCENT DISCREPANCY.

LEVEL CARE	% DISCREPANCY	t-TEST & SIG./HOSP.
I N=3	86/214=40.2	A=1.06(NS) B=1.52*(P<.1) C=1.36*(P<.1)
II N=7	406/1023=39.7	A=2.9** B=1.78* C=1.62* D=.55 E=1.3 F=-9.50** G=-1.12
III N=4	62/257=25	A=-.21 B=-1.09 C=1.54* D=.06

* $P<.1$ (Borderline Statistical Significance)

** $P<.05$ (Highly Significant Difference)

Supported by: NCHSR Grant HPA-R18HS03832.

50 INSIGHT INTO CHILD NEGLECT AMONG DRUG ABUSING WOMEN. Loretta P. Finnegan, Martha E. Rudrauff, Thomas Jefferson Univ. Hosp., Dept. of Pediatrics, Phila.

In an effort to further define factors that contribute to, or predict, an inability to provide adequate parenting often observed in drug abusing women, 14 women enrolled in Family Center (FC), a comprehensive program providing obstetrical, psychological and addictive services, were evaluated. Of these women, 7 (Group I) who had infants involuntarily placed in foster care by the Department of Public Welfare were compared to 7 (Group II) drawn at random from FC women delivering in the same year and who were caring for their infants. Variables which may impair maternal/infant bonding or would indicate a basic irresponsibility or antisocial behavior were investigated. The groups were similar in socioeconomic and marital status, age, use of amphetamines, infant sex, incidence of neonatal abstinence symptomatology and treatment, and other neonatal illness. There was no significant difference between groups for reported arrests, gravity, parity, or neonatal hospitalization. In Group I, there was a slightly greater incidence of black women, polydrug abuse and personal illegitimacy, but decreased incidence of methadone maintenance. There was a significant difference in number of prenatal clinic visits ($t_{12}=2.141$, $p<.05$), infants' birthweight ($t_{12}=2.5701$, $p<.05$) and gestational age ($t_{12}=2.3391$, $p<.05$). These data suggest that lack of prenatal care is a strong indication for risk of child neglect. The same personality traits or lifestyles may predispose to neglect of both the pregnancy and the child. This may be in terms of lack of concern for, or lack of ability to cope with, either responsibility.

51 MOTHERS' EXPECTATIONS OF DEVELOPMENTAL MILESTONES. Deborah A. Frank and David E. Barrett (Spon. by T.B. Brazelton) Harvard Medical School, Children's Hospital Medical Center, Department of Medicine, Boston.

Studies of both adolescent and abusive parents suggest that unrealistic expectations for an infant's development stress the child and family. How prevalent are such expectations among more typical, lower-SES urban mothers? What demographic characteristics are associated with accurate or inaccurate expectations for developmental landmarks? We addressed these questions by interviewing 100 adult mothers (67% black, 22% white, 11% Hispanic) attending a hospital primary care clinic with infants less than 90 days old. During a structured interview, mothers indicated the age at which an average infant should master motor, language, social and self-care milestones. We scored responses as accurate or inaccurate by comparing mothers' expectations with Denver, Bayley and other published norms. Mothers also reported how they learned about child-rearing. Major findings were: a) proportions of accurate responses were highest for smiling (78%), rolling (73%) and understanding "no" (74%); b) mothers held early expectations for walking (40% before 11 months), speaking sentences (40% before 14 months), and toilet training (60% before 18 months); c) compared to black mothers, white mothers expected significantly later toilet training; d) 80% of mothers did not expect newborns to see faces; e) factors predicting inaccurate expectations included low SES, low education, foreign birth and primiparity; f) mothers who learned about children from direct experience had more accurate expectations for developmental milestones.

52 CHARACTERISTICS OF THE HOME SCREENING QUESTIONNAIRE (HSQ). William K. Frankenburg and Cecilia E. Coons, University of Colorado Health Sciences Center, John F. Kennedy Child Development Center, Denver, Colorado.

About 50% of children in low socio-economic status (SES) environments have school problems, many of which may be due to factors in the home. The HSQ was developed from the Home Observation for Measurement of the Environment (HOME) to improve the early identification of children who will have school problems. Unlike the HOME, the HSQ requires only 15 to 20 minutes of the parent's time to complete and does not require a home visit. The HSQ was developed for two age groups of children: birth to 3 years (0-3 form), and 3 to 6 years (3-6 form). 868 children (0-3 years) and 497 children (3-6 years) were screened with the HSQ. Of these, 503 in the 0-3 group and 287 in the 3-6 group were also given a HOME. The internal consistency of the HSQ is .73 for the 0-3 form and .80 for the 3-6 form. Test-retest reliability is .62 for the 0-3 form and .86 for the 3-6 form. School performance of siblings of children screened was evaluated to estimate test validity. Of the 191 siblings followed, 55% had school problems. The sensitivity of the HSQ, based on sibling school outcome, was 81% as compared with .61% for the HOME; a non-significant difference. The specificity of the HSQ was, however, significantly lower than the HOME ($p<.05$). There were no significant differences between the 3-6 HSQ and HOME on measures of sensitivity (81% vs. 79%) or specificity. Results suggest that the HSQ may be an efficient screening instrument of the young child's home environment.

53 CHILDREN WITH CHRONIC LUNG DISEASE: A TWO-YEAR FOLLOW-UP. Edward J. Goldson, Carol A. Sullivan and Carol A. Wells (Spon. by L. Joseph Butterfield). The Children's Hospital, Department of Perinatology, Denver, Colorado.

The two year developmental findings on 9 children with diagnosed chronic lung disease at discharge from the nursery are reported. The children had birthweights of 709-1270 grams, gestational ages of 25-30 weeks and were appropriate for gestational age. The 1270 gram child had the Micky-Wilson Syndrome. The other children had bronchopulmonary dysplasia and birthweights below 1100 grams. There was no clinical evidence of intracerebral hemorrhage. The Bayley Scales of Infant Development and an Occupational/Physical Therapy (OT/PT) assessment were administered at 2 years of age. Four of the 6 less than 1001 gram infants had Bayley scores below 78 and pathologic OT/PT findings. They had moderate-severe lung disease at discharge from the nursery. The 2 other children had Bayley scores above 78 but had suspicious OT/PT findings. They had mild-moderate lung disease. Of the 2 children with birthweights 1001-1250 grams one had advanced lung disease with Bayley scores below 78 and pathologic OT/PT findings. The other child had mild disease with normal Bayley scores, but with suspicious OT/PT findings. The 1270 gram child had mild lung disease, normal Bayley scores, but had suspicious OT/PT findings. In summary, the data suggest that children with very low birthweights, with moderate-severe lung disease at discharge from the nursery are at high risk for developmental problems. It is recommended that such children be followed closely.

54 SIGNIFICANCE OF TRANSIENT NEUROLOGICAL ABNORMALITIES IN VERY LOW BIRTHWEIGHT INFANTS. M. Hack, D. Gordon P. Jones, I. Merkatz, A. Fanaroff, Dept. Ped, CWRU, Cleveland

Early identification of neurologic handicap is imperative to monitor the quality of perinatal care and for appropriate intervention. To determine the incidence and significance of "transient neurologic abnormalities" (TNA) during infancy we utilized the French method which serially evaluates posture, active and passive muscle tone and primitive reflexes (Amiel-Tison, Curr Probl Ped, 1976). 85 of 93 VLBW (mean BW 1.2Kg, range .5-1.5Kg, GA 29.6wks, range 26-36 wks) in 1977 were assessed by the Tison exam at term, 4 and 8 mos corrected age. Stanford Binet or Bayley and standard neurological exams were performed at a mean of 31 (range 19-40) mos. Neurologic abnormalities were noted in 36 infants. These resolved in 20 by 8 mos, in 14 additional infants by 31 mos and 2 infants remained with Spastic Diplegia but normal IQ's.

NEUROLOGICAL STATUS	n	DQ or IQ <80	DQ or IQ (Mean \pm SD)
Normal	49	8%	95.7 \pm 16*
TNA (Normal by 8 mos)	20	10%	95.6 \pm 14
TNA (Normal by 31 mos)	14	71%	77.5 \pm 12* * $p<.005$

The results demonstrate the high incidence of early neurological abnormalities in VLBW infants, however, many are transient and apparently benign. Age 8 mos is a critical time for determining later prognosis. Persistence of abnormalities beyond 8 mos results in either permanent neurological handicap or in poorer developmental outcome even though the neurological examination becomes normal.