43 NEWBORN ASSESSMENTS IN AN AFRICAN POPULATION. Constance H. Keefer, Suzanne D. Dixon, Edward Tronick, T.Berry Brazelton. Harvard Medical School, Children's Hospital Medical Center, Child Development Unit, Boston.

This study describes the behavior of 24 healthy full-term newborn Gusii infants of Kenya, using the Brazelton Neonatal Assessment Scale. The Scale defines the infant's motor and social behavior and state and physiological organization. This behavior was then correlated with biomedical assessments done during the antecedent pregnancies and during the newborn period. Findings included: a)the quality of the infant's motor performance was unique in our experience in its synthesis of increased yet balanced tone with slow, smooth, large-arced movement; overshooting, startles or tremors were rarely seen;b)state changes were slow and gradual leading to long periods of alertness; c)performances on all items were stable over the first ten days; this is in marked contrast to American samples which show a characteristic "recovery curve"; d)pre- and perinatal, biomedical and cultural factors placed these infants at high-risk for poor neonatal outcome; this made their organized and stable behavior all the more impressive. A comparison is made to an American sample of low risk infants. On all scale items, the Gusii infants performed at least as well as the American group, and scored significantly higher in three areas: motor maturity ($p < .001$), general tone ($p < .001$) and startles ($p < .05$). These findings will be discussed in three contexts: 1)the cultural variations in pregnancy risk factors, 2)the question of differences in motor development between black and white infants, and 3)the contribution of the infant's behavior to his caregiver within a specific cultural milieu.

44 PITFALLS IN EVALUATION OF THE NEONATAL ICU. Hilda Knobloch, Anthony Malone, Frances Stevens, Herman Risemberg. Albany Medical College, NY State Dept. of Mental Hygiene, Capital Region Neonatal Care Center, Albany.

The crucial test of the effectiveness of modern neonatal intensive care is outcome for infants weighing 1500 gm or less at birth. Reports indicate decrease in mortality and an apparent decrease in neuropsychiatric disability in the few instances where followup is done. Data from our center also indicate a significant drop in both mortality and morbidity, with better outcome for those born in than for those transferred. But are populations of two decades ago comparable to today's? Do reports include both inborns and transfers then and now? There could be fewer in the under 1500 gm group born today because of better prenatal nutrition and affluence or because of more abortions or greater use of birth control in those young and/or unwed at high risk of having very low birth weight infants. What are the reasons for transfer and when does it take place? Decades ago infants usually survived for 24 hours first. Today, transfer can occur very early, or conversely, where some upgrading of community hospital services has occurred, only after the birth hospital gets into trouble. What is the relationship between outcome and the need for a respirator? to antenatal complications? Who is the examiner at followup and what are the evaluation methods? Data on these points will be presented and credit given to the many individuals who participated in the care and followup of about 110 infants in this weight group cared for from 7/1/75 to 6/30/76.

45 TREATMENT OF THREATENED S.I.D.S. WITH MEGADOSE THIAMINE HYDROCHLORIDE. Derrick Lonsdale. (Spon. by William Michener). The Cleveland Clinic Foundation, Dept. Ped., Cleveland, Ohio.

Steinschneider presented good evidence that infants who died suddenly and unexpectedly frequently have premonitory symptoms which enable the alert physician to recognize the danger (Pediat 50:646, 1972). Fehily (Br. Med. J. 2:590, 1944) described a syndrome of sudden death in Chinese infants in Hong Kong called "breast milk toxicity syndrome". It commonly occurred in infants who were breast fed by their B_1 avitaminotic mothers and was related to caloric intake. When maternal calorie intake was forcibly reduced by Japanese invaders, the syndrome disappeared. It reappeared when rationing of rice was discontinued. Rarity of the syndrome under the age of 1 month and over 5 months, a peak incidence at 3-4 months, predilection for "well nourished" males, higher incidence in early spring, death during sleep and lack of autopsy histopathology, were identical to the epidemiology of modern S.I.D.S. with the exception of breast Vs bottle feeding. Japanese investigators showed that thiamine deficiency produced autonomic dysfunction and detected histopathology within the central and peripheral components of the system. In 9 infants within this age group, symptoms of autonomic dysfunction suggested candidacy for S.I.D.S. and included life threatening apnea in all. Monitoring in hospital confirmed the symptoms. All of the infants were treated with thiamine hydrochloride, varying from 30 to 300 mg/day. No damaging side effects were seen and symptoms disappeared rapidly in all. All are well in follow up and only 2 have remained extensively dependent upon thiamine.

46 INFANT MENTAL DEVELOPMENT AND MOTHER'S RESPONSIVENESS Betsy Lozoff, Mary Anne Trause, (spon. by M. Klaus), CWRU School of Med., Rainbow B & C, Dept. Ped., Cleve.

Studies in the U.S. have reported that maternal interaction is more important for early infant development than maternal education or economic status. To assess the influence of maternal behavior in a developing country, 30 poor urban Guatemalan mothers and their 1-year-old infants were observed. We dictated detailed narratives of mother-infant interaction in the home during 60 minutes of infant waking time, scheduled to avoid feeding and bathing. From these, episodes of crying and social interaction were quantitatively analyzed. A researcher who did not participate in home observations evaluated infant abilities with the Bayley Scales. Although from a poor section of a developing country, the children were not delayed; in fact, their mental development indices (MDI) were higher than published U.S. norms (MDI $\bar{x}$=110, $p<.001$). Two important dimensions of maternal responsiveness were related to infant performance; infants with higher scores had mothers who 1) initiated social exchange ($p<.02$), 2) responded to crying effectively and quickly ($p<.05$). Mothers who were successful in terminating crying ignored their babies' crying less ($p<.001$) and were less likely to end social interaction ($p<.01$). Residential stability ($p<.05$) and maternal working ($p<.05$) were also associated with higher scores, whereas maternal education, socioeconomic status, duration of nursing, and infant sex did not affect mental development testing. Thus, among the urban poor of Guatemala infant development related not to socioeconomic factors but to qualitative aspects of the mother-infant relationship.

47 THE "PANEL PARENT" AS AN ADJUNCT TO THE SPECTRUM OF NEONATAL INTENSIVE CARE. Gilbert Martin, Steven Shapiro, William Ireland, Ralph Bertolin, Robert Neuenschwander and Newell Johnson. (Spon. by P.Y.K. Wu) Univ. of Southern California Sch. of Med., Magan Medical Clinic, Dept. of Pediatrics, Los Angeles and Covina, Calif.

Early maternal-newborn interaction and the concept of maternal infant bonding is stressed in neonatal ICU'S today. Parents are encouraged to touch, fondle and visit their infant immediately. An organized support program can play a prominent role in maintaining family stability during this period. Only the parent who has gone through the experience can appreciate all of the fears and doubts which must be understood and explained. We have designed a "Panel Parent Program" to augment our open visitation policy. These parents have been through the experience and are chosen on the basis of infant diagnosis, ethnic, social, educational and financial background. The panel parent contacts the family within 48 hours and subsequently communication varies depending upon the problem and parent availability. After the infant is discharged from the ICU the family evaluates their "Panel Parent". Since adopting this policy we have noted less grief response and a greater degree of total family stability both during and after the infant's stay in our neonatal intensive care unit.

48 HOME CARE FOR THE DYING CHILD WITH CANCER - AN ALTERNATIVE TO HOSPITALIZATION. Ida M. Martinson, Evelyn T. Peterson, Dorothy P. Geis, Mary A. Anglim, John H. Kersey, Mark E. Nesbit, University of Minnesota, School of Nursing and School of Medicine, Department of Pediatrics, Minneapolis.

To identify both the feasibility and desirability of home care for dying children as a health care service, a field research study was set up in August, 1976. During the first five months of this study, 14 families have been supported by professional nurses in caring at home for their dying child. Both rural and urban families have been included in the study population. Support has included from two to twelve home visits to the families while the total number of days of involvement with each family ranges from two to forty days. The average length of involvement has been ten days.

The major problems identified thus far in maintaining the child's comfort have been pain, hemorrhage, hypoxia and dehydration. With such support, eleven of the fourteen families have been able to care for their child at home through his/her death and have been present at the time of death. Two children with hemorrhage and one with pain died in the hospital. Post-death interviews with parents has indicated the need for extension of the care by health professionals beyond the death itself. Though our experience is limited, home care for the dying child appears to be a feasible and a less expensive alternative to hospitalization that still provides the necessary support for the family and patients.

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