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CHRONIC MEDICAL CONDITIONS AND PERCEIVED HEALTH STATUS AMONG MEXICAN-AMERICAN CHILDREN. Fernando S. Mendoza, Laura E. Saldivar, Robert O. Valdez, Ricardo O. Castillo, Reynaldo Martorell, Catherine Baisden (Spon. by Iris F. Litt). Stanford University Stanford Center for Chicano Research, Stanford, Calif

The health status of Mexican-American children (MAC) has been difficult to assess because of the lack of data about this population. Utilizing the Hispanic Health and Nutrition Examination Survey, 3,710 MAC, ages 6 mos. - 18 yrs., were evaluated as to the prevalence of chronic medical conditions, and perceived health status as determined by the physician, mother, and child. The results demonstrated that 140 subjects, or 3.8%, of MAC had at least one chronic condition. There were no differences with respect to poverty status. Physicians rated children (6 mos. - 11 yrs.) in poor health only 1% of the time, while mothers rated them in poor health 15% of the time ($P < .001$). The national parental norm is 3%. Children 6 years to 11 years and 12 years to 18 years reported poor health 11.3% and 19% of the time respectively. In contrast, the physician's report was 1.2% and 0.7% respectively. The physician's perception of the child's health status was worse if the child had a chronic condition or lived in poverty ($P < .025$) while the mother's perception of her child's health was most affected by poverty ($P < .001$). The child's perception (age 6-12 yrs.) was not associated with either poverty or chronic condition. These results suggest that MAC have prevalence rates of chronic conditions similar to the U.S. norms, but MAC are perceived to be in poorer health by their mothers and themselves than by physicians.

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INFANT DEATH & HOME MONITORS: COMPLIANCE AND DEMOGRAPHICS. Robert G. Meny, Ronald L. Gutberlet, Eric G. Naumburg, Deborah Fleischmann. (Spon. by Allen Schwartz). Univ. of Md., Dept of Peds., Baltimore.

10 of our infants died suddenly & unexpectedly at home over a 2 yr period in spite of the availability of a cardiorespiratory monitor (M). Reasons for monitoring were: apparent life-threatening events (ALTE) (3), bronchopulmonary dysplasia (BPD) (3), siblings of SIDS victims (2), prematurity with other risk factors (2). Death was associated with non-use of monitors in 5 instances & questionable use in 3. However, 2 infants did die despite proper monitoring technique & family knowledge of CPR. Autopsies were done in 9/10; all were classified as SIDS. The proportion of both ALTE & BPD infants was greater ($P < .05$, one tail) than in a control group of all 211 new patients started/continued on M over a 6m period. These controls did not die suddenly & unexpectedly up to ≥ 1 yr of age. The table displays demographics of the 2 groups.

	Male	Black	Unmarried Mom	Medicaid
Deaths (D)	8(80%)**	7(70)*	8(80)*	8(80)**
Controls	107(51%)	72(34)	90(43)	103(49)

* $P < .05$, one tail; ** $P < .07$, one tail.

The demographics of the D are similar to those of SIDS victims in general, but in an exaggerated sense. For example, males generally constitute 60% of SIDS victims, whereas they constitute 80% of these D. These characteristics and the diagnoses ALTE & BPD define infants at increased risk for death with M available. We hypothesize that initial emphasis on the necessity of rigorous M use and frequent follow-up may increase compliance. This might also be aided by better monitors with fewer false alarms.

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CHILDBEARING IN WOMEN ≥ 35 YEARS. Kathleen Meyer, George Hepner, Bhavesh Shah. (Sponsored by Edward O. Reiter). Baystate Medical Center, Department of Pediatrics, Springfield, MA.

The risk of childbearing at or beyond age 35 is thought to be greater than that of younger women. We compared the course of pregnancy and neonatal outcome for all women ≥ 35 yrs. delivering at Baystate Medical Center at ≥ 20 wks. gestation, with controls 20-34 yrs., and with all women < 20 yrs. for the year 1985. 1992 women were enrolled.

Premature labor, fetal distress, Apgars, resuscitation, prematurity and death were comparable in all groups by Chi square analysis. The < 20 yr. group had significantly more SGA infants, RDS, and NICU admissions as compared to the other 2 groups which were similar. Mean birth weight was lower for the < 20 yr. group. Numbers of malformations/chromosomal abnormalities were inadequate for analysis. The ≥ 35 yr. group had more C-sections, but when repeat sections were eliminated, the older group had 19.7% and the controls 17.3%.

Age	Total	C/S	Adm/NICU	Mean BW	SGA	RDS
< 20 yrs.	679	125 (18.41%)	108 (15.91%) $P = .019$	3198 grams $P < .001$	22 (3.24%) $P = .018$	21 (3.09%) $P = .007$
20-34 yrs.	999	258 (25.85%)	114 (11.41%)	3320 grams (1.70%)	17 (.96%)	16 (.96%)
≥ 35 yrs.	314	108 (34.39%) $P = .000$	36 (11.46%)	3341 grams	3 (.96%)	1 (.32%)

The data show that mothers ≥ 35 yrs., achieving 20 wks. gestation, are at no greater risk for perinatal problems than mothers 20-34 years. We conclude that women delivering later in their reproductive lifespan may view pregnancy with optimism.

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ACCEPTANCE OF CARRIER TESTING AND FETAL DIAGNOSIS OF CYSTIC FIBROSIS (CF) IN AMISH-MENNONITE AND Hutterite CF KINDREDS: Shelley R. Miller, Robert H. Schwartz, Jeff D. Sapiro, and Richard A. Doherty, University of Rochester Medical Center, Department of Pediatrics, Rochester, New York

This study examined the attitudes, feelings, and knowledge of 37 parents, 29 adult siblings, 126 aunts and uncles, and 30 cousins of 50 CF-affected individuals in 2 large inbred kindreds (Amish-Mennonite and Hutterite) prior to the availability of carrier testing and fetal diagnosis by DNA marker linkage analyses. Data was ascertained by self-administered questionnaires. Some responses could be compared to 2 non-inbred CF populations studied by Kaback et al. (California) and Steele et al. (Pittsburgh).

Knowledge of the recurrence risk of CF changed planned family size (51% - present study vs 48% - Kaback et al.). Families continued to reproduce when other than the first child had CF (50% - present study vs. 15% - Steele et al.). The majority incorrectly identified the recurrence risk for CF to carrier parents (57%) and felt that carrier screening (61%) and fetal diagnosis (56%) should be done. The majority also felt that CF might be a possible reason for pregnancy termination (54%).

Despite our preconceived notions that these populations would not consider fetal diagnosis and carrier testing, our survey suggests that these optional procedures, which are now available may influence reproductive decisions in these families.

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IS ALTERED OXYGEN TRANSPORT THE MECHANISM FOR INCREASED LEFT VENTRICULAR THICKNESS IN PASSIVE SMOKING CHILDREN? William B. Moskowitz, Joann N. Bodurtha, Michael Mosteller and Richard M. Schieken. Medical College of Virginia, MCV Hospitals, Dept. of Pediatrics, Richmond, Virginia.

Active smoking, a risk factor for ischemic heart disease, causes marked changes in systemic oxygen transport. To determine the effects of chronic passive smoking (PS) on oxygen transport and myocardial oxygen demand, we examined the relationship of PS to both left ventricular (LV) wall thickness and red cell 2,3 diphosphoglycerate (DPG). We studied 168 nonsmoking (NS) and 40 PS preadolescent twins (11.6 years old) by supine m-mode echocardiography and measured blood levels of DPG and thiocyanate (SCN). PS twins had a thicker ventricular septum (VS) (.67 $\pm$.08 vs .64 $\pm$.08 cm, $p < .05$) and LV posterior wall (LVPW) (.66 $\pm$.09 vs .64 $\pm$.07 cm, $p < .05$). M-mode increases occurred mainly in male PS twins ($p < .001$). LV radius/LVPW was lower in PS twins (3.36 $\pm$.45 vs 3.56 $\pm$.45, $p < .05$) and correlated with SCN, $r = -.37$, $p < .01$. LV wall stress index was higher in PS twins (32.8 $\pm$ 4.8 vs 31.0 $\pm$ 5.2 torr, $p < .05$) and correlated with SCN, $r = +.31$, $p < .05$. DPG was increased in twins whose mothers smoked > 10 cigarettes/d (2.34 $\pm$.25 vs 2.06 $\pm$.26 μ mol/ml, $p < .05$). DPG correlated positively with VS ($p < .005$) and with LVPW ($p < .001$) and correlated negatively with LV radius/LVPW ($p < .0001$). We conclude that chronic PS twins have both increased LV wall thickness and wall stress which increase myocardial oxygen requirements. These changes occur mainly in males. Since twin DPG is increased in chronic PS, altered oxygen supply/demand may be the mechanism for the increased LV thickness and the subsequent development of ischemic heart disease.

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CARDIOVASCULAR RISK FACTORS IN CHILDREN: SOCIOECONOMIC VARIABLES AFFECTING THE COLLECTION OF VALID DATA. Joseph K. Murphy, Bruce S. Alpert, Elaine S. Willey. University of Tennessee, Memphis, Department of Pediatrics, Memphis.

Though physical fitness and activity level (AL) have been associated with disease and mortality reductions, few studies have examined methods applicable to epidemiologic studies of children. In this study, parents classified their child's AL as (1) sedentary, (2) slightly active, or (3) active. Children (25 black females [BF], 32 white females [WF], 47 black males [BM], and 52 white males [WM] aged 6-18) completed a maximal exercise test. AL reports correlated significantly with maximal oxygen consumption ($\dot{V}O_2$ max) largely due to the association among WM. Analysis of household (HH) demographic variables indicated that in mother-headed HH, AL reports were uncorrelated with $\dot{V}O_2$ max (Table of means and correlations; * $p < .05$; ** $p < .01$). Indirectly, race affected AL reports, i.e., 59% of black children were from mother-headed HH versus 13% of white children. Thus, a single question provided

Ss	$\dot{V}O_2$ Correlations (r)				
	AL	max	All HH	Father	Mother
BF	2.3	32.8	.29	.69*	-.01
BM	2.5	41.4	.13	.32	-.01
WF	1.9	35.1	.07	.23	Undefined
WM	2.3	44.2	.33*	.30*	-.06
All	2.3	39.7	.22**	.38**	-.09

an approximation of children's fitness; the accuracy was affected by family structure, e.g., mothers who head HHs may have less time to observe their children.