

## Distribution of low-birth weight babies in developing countries

*To the Editors:*

It is generally accepted that about two thirds of low-birth weight (LBW) babies are preterm (born before 37 weeks of amenorrhea) while one third are born at term and suffer intrauterine growth retardation. We want to point out that, although these figures may be correct for affluent societies where the incidence of low birth weight is about 7 per cent, they may be wrong for poor communities where the incidence of LBW babies may be as high as 40 per cent and where protein-energy malnutrition and common infections are predominant environmental factors.<sup>1</sup>

As shown in Table I, when over-all incidence of LBW increases, the distribution of term and preterm babies varies significantly. When the incidence of LBW has a value of 6 per cent, 70 per cent of those babies are preterm and the remaining 30 per cent are term babies.<sup>2</sup> In populations with a high incidence of LBW (41.6 per cent), the balance turns to 17 per cent preterm babies and 83 per cent term babies.<sup>3</sup> This comparison suggests: (1) that the increase observed in the incidence of LBW in poor areas is principally due to an increase in the incidence of intrauterine growth retardation and (2) that in poor communities the incidence of preterm babies remains similar to that of affluent societies.

In areas with a low incidence of LBW (6 to 7 per cent), where the main problem is preterm delivery,

**Table I.** Percentage of LBW babies who are preterm and term by categories of incidence of LBW

Categories of incidence of LBW ( $\leq 2,500$ grams)	LBW babies		Total incidence	
	Preterm ( $\leq 37$ weeks) (%)	Term ( $\geq 37$ weeks) (%)	Preterm (%)	Term (%)
6*	69.5	30.5	4.2	1.8
10†	50.0	50.0	5.0	5
16‡	27.0	73.0	4.0	12
23§	23.0	77.0	5.0	18
41.6	17.0	83.0	7.2	34.4

\*National figures from United States.<sup>2</sup>

†Urban poor population, Argentina (Belizán, J. M.: Unpublished data, 1975).

‡Rural Ladino population, Guatemala (Delgado, G.: Unpublished data, 1977).

§Urban poor population, Guatemala (Belizán, J. M., and Berganza, E. R.: Unpublished data).

||Rural indigenous population, Guatemala.<sup>3</sup>

programs of prevention of premature deliveries must have first priority. On the other hand, in areas with a high incidence of LBW (15 to 40 per cent), similar programs would have little impact. In these poor communities, perinatal programs must be focused on the prevention of intrauterine growth retardation. Thus, programs based on early detection of high-risk pregnancies and the improvement of the health and nutritional condition of pregnant women will have the highest probability of impact on the incidence of LBW babies.<sup>4</sup> These considerations are very important since 20.5 million (93 per cent) of the 21.9 million LBW infants born in the world during 1975 were born in developing countries (these countries represent 72 per cent of the world population).<sup>5</sup>

*José M. Belizán, M.D.*

*Aaron Lechtig, M.D.*

*José Villar, M.D.*

*Division of Human Development  
Institute of Nutrition of Central America  
and Panama (INCAP)  
P.O. Box 1188  
Guatemala, Guatemala, Central America*

#### REFERENCES

1. Lechtig, A., Delgado, H., Martorell, R., Burd, D., Yarbrough, C., and Klein, R. E.: Causas de bajo peso al nacer en Latinoamérica, *Arch. Latinoam. Nutr.* 27(Suppl. 1): 147, 1977.
2. Manniello, R. L., and Farrell, P. M.: Analysis of United States neonatal mortality statistics from 1968 to 1974, with specific reference to changing trends in major causalities, *Am. J. OBSTET. GYNECOL.* 129: 667, 1977.
3. Mata, L., Urrutia, J. J., and Mohs, E.: Implicaciones de bajo peso al nacer para la salud pública, *Arch. Latinoam. Nutr.* 27(Suppl. 1): 198, 1977.
4. Lechtig, A., Habicht, J.-P., Delgado, H., Klein, R. E., Yarbrough, C., and Martorell, R.: Effect of food supplementation during pregnancy on birth weight, *Pediatrics* 56: 508, 1975.
5. Lechtig, A., Margen, S., Farrell, T., Delgado, H., Yarbrough, C., Martorell, R., and Klein, R. E.: Low birth weight babies: world wide incidence, economic cost and program needs, in Rooth, G., and Engström, L., editors:

*Perinatal Care in developing Countries (based on the Workshop held at Gimo, Sweden, jointly sponsored by the World Health Organization and the Fifth European Congress of Perinatal Medicine), Uppsala, Sweden, 1977, University of Uppsala, Chap. 2, p., 17.*

#### Intracervical block with needle and syringe

*To the Editors:*

There is one sentence in the paper by Drs. McKenzie and Shaffer (*Am. J. OBSTET. GYNECOL.* 130: 317, 1978) that made me feel uneasy. On page 320, the authors stated: "An equianalgesic paracervical block can be obtained with one fifth the amount of anesthetic drug necessary with the syringe and needle." Are they cognizant of the fact that for the indication (therapeutic abortion) studied, as well as for several others (i.e., diagnostic curettage and insertion of an intrauterine contraceptive device in a woman with a tightly closed cervical canal), perfect analgesia can be obtained by applying with a plain needle and syringe exactly the same dose of local anesthetic they used with the jet injector? Indeed, a total dose of 4 ml. of a 1 per cent solution of plain lidocaine (40 mg.) instilled at 3 and 9 o'clock sites a few millimeters underneath the vaginal mucosa will just "do the trick" in most women. If the uterine cervix is soft (as it is in pregnant women), an intracervical block is as efficacious as the standard paracervical technique.

*M. Thiery, M.D., Ph.D.*

*Department of Obstetrics  
Academic Hospital  
University of Gent  
9000 Gent, Belgium*

#### Use of fetoscopy

*To the Editors:*

We wish to report a case in which the combined use of amniotic fluid alpha-fetoprotein (AFP) determination, sonar examination of the fetal vertebrae, and di-