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NEONATAL INTENSIVE CARE UNIT COSTS OF MORBIDITIES IN VERY LOW BIRTHWEIGHT INFANTS

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Objective: Very low birthweight (VLBW; < 1500g weight) infants often have multiple morbidities, translating into longer neonatal intensive care unit stays and higher hospital costs. The primary aim was to examine the relationship between morbidities and the charges, payments and costs for VLBW infants during their initial hospital stay.

Methods: This was a retrospective, cross-sectional analysis of all VLBW infants discharged alive between July 2005 and June 2009 at a large, urban academic medical center. Infants were classified by the presence of individual and combinations of morbidities, including necrotizing enterocolitis (NEC), sepsis, retinopathy of prematurity (ROP), chronic lung disease (CLD) and respiratory distress syndrome (RDS). Mean hospital charges, payments and costs were examined across morbidities for infants < 750g and 750-1499g. **Results:** Of the 475 VLBW infants, 20.4% were < 750g at birth. The most expensive combinations of morbidities for infants < 750g were NEC, with or without other morbidities (\$755,000 (2009 USD) charges; \$312,700 payments; \$161,500 costs) and the combination of sepsis, ROP, RDS and CLD (\$715,800 charges; \$291,900 payments; \$159,300 costs). For infants 750-1499g, the most expensive combinations were sepsis, ROP, RDS and CLD (\$438,300 charges; \$195,900 payments; \$99,100 costs), followed by ROP, RDS and CLD (\$385,300 charges; \$192,700 payments; \$88,000 costs), while those without any morbidities were the least expensive (\$119,000 charges; \$66,900 payments; \$29,800 costs).

Conclusions: It is critical to examine the combinations of morbidities, rather than simply the presence or absence of individual morbidities, to understand their effect on hospital charges, payments and costs.

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THE FIRST SIX YEARS EXPERIENCE OF TUNISIAN CONGENITAL ANOMALIES REGISTRY

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Introduction: Congenital anomalies are a major cause of handicap in childhood. Whether they are frequent in Tunisia, epidemiological studies are rare. Establishing the surveillance of congenital anomalies in Monastir area since 2003 respond to a lack of epidemiological and etiological research in a preventive policie of these anomalies.

Population and Methods: We underwent the study in Monastir area (Center of Tunisia) between 2003 and 2008. All congenital anomalies diagnosed during the first month of life were evaluated by a physician committee of the research unit 01/UR/08-14 and registered

Results: 633 congenital anomalies were identified in 529 newborn infants. Their global prevalence was 1.04 per 10,000 births. Parents were consanguineous in 26.6%, prenatal diagnosis was made in 21.1% of cases. 92% of newborn infants were alive, 1.9% were still born infants while 5.8% were issued of termination of pregnancy for fetal anomaly. Sex-ratio was 1.48. Congenital anomalies were as follow: Congenital heart malformations (30.2%), Limb and skeletal anomalies (18.6%), Urinary and genital anomalies (16.6%), Facial anomalies (12.3%), Chromosomal anomalies (7.7%), Digestive system anomalies (7%) and respiratory system anomalies (3%).

Conclusions: Surveillance and epidemiological evaluation of congenital anomalies in our country underline the high frequency of these events. This will help to better target congenital anomalies prevention and screening policies in our population.