

32. THE ECONOMIC IMPACT OF PURCHASE OF ARTIFICIAL MILK AND OF ADMISSION FOR DIARRHEAL DISEASE ON THE PERSONAL INCOME OF PUERTO RICAN FAMILIES

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Health care costs in Puerto Rico have increased markedly in recent years. Personal expenses for medical services and medicines have increased from 3.2% of personal income in 1950 to 17.0% in 2000. The 2000 Population Census has shown that 48.2% of the Puerto Rican population live below the federal poverty level standard.

Objective: Study the impact of purchase of artificial milk and the cost of a hospital admission for diarrheal diseases on the available personal income of a Puerto Rican family.

Methods: The sample consisted of $n = 317$ babies cared for in a private office from birth to 4 months of age. There were no babies with congenital anomalies or premature births. The study design was analytical retrospective. A simulation was carried out to estimate the costs of a hospitalization for a baby fed artificial milk.

Results: Two thirds of the patient population studied were exclusively breastfed and there were no visits to the pediatrician's office for diarrheal disease. We found that a Puerto Rican family can spend from 7.96% to 30.30% of their available personal family in the purchase of artificial milk. We found, likewise, that a hospital admission for diarrheal disease can cost up to \$947.00 and that the average monthly income of a Puerto Rican family is \$970.71.

Conclusions: Findings suggest a protective effect of human milk against diarrheal diseases. The simulations carried out in this study show the impact on available personal income of the purchase of artificial milk. The economy is a priority item in the national agenda, for which reason we must pursue further research on the economic impact of breastfeeding on the family budget and on Puerto Rican society.

33. INCIDENCE OF MRSA IN POSTPARTUM BREAST ABSCESSSES

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Objective: The objective of our study is to determine the incidence of MRSA in postpartum breast abscesses in two Houston area hospitals.

Design/Methods: This is a retrospective chart review of women hospitalized for postpartum breast abscesses at Woman's Hospital of Texas and Memorial Hermann Hospital between January 1, 2000 and December 31, 2006. Patients were identified by searching admission records for ICD-9 codes related to breast abscesses. Demographic characteristics, past medical history, culture results, and pertinent procedures were recorded. Statistical analyses included the Fisher exact test for categorical data and the Student t test for continuous variables.

Results: Thirty three postpartum abscesses were identified, nineteen from Memorial Hermann Hospital, and

fourteen from Woman's Hospital. MRSA and *S. aureus* were the only two causative bacteria identified by culture. Twelve of the nineteen abscesses from Hermann Hospital were MRSA positive (63%), and nine of the fourteen from Woman's Hospital were MRSA positive (64%). There were no statistically significant differences among women with MRSA abscesses versus those with *S. aureus* abscesses in terms of ethnicity, age, time to presentation, parity, type of insurance, or mode of delivery. Susceptibility patterns were consistent with community-acquired MRSA.

Conclusions: MRSA is a significant pathogen in postpartum breast abscesses in our population, and a high level of suspicion is warranted. Local susceptibility patterns should guide treatment. Empirical treatment of breast abscesses without first obtaining cultures should be discouraged.

34. BACTERIAL PATHOGENS ISOLATED FROM NIPPLE WOUNDS: A FOUR-YEAR PROSPECTIVE STUDY

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Objectives:

1. To determine bacterial pathogens cultured from nipple wounds in breastfeeding mothers in our practice.
2. To assess for antibiotic resistance patterns.
3. To track changes in pathogens isolated and resistance patterns over time.

Design/Methods: All mothers presenting to our Breastfeeding Medicine clinic from July 1, 2003 through June 30, 2007 with a chief complaint of "sore nipples" were assessed clinically for presence of open wounds. All open wounds with visible drainage were cultured, the results tallied at six-month intervals, and trends noted. This study was limited by lack of ability to culture for fungal pathogens.

Results: Two hundred total cultures were performed. Four percent showed no growth and 22% showed "mixed skin flora". The largest number (31%) of isolates were *Staph aureus*, with 37% of those being MRSA. A significant number of cultures were positive for pathologic counts ($>100,000$ CFU) of *Staph epi.* (21%, with 61% of those being MRSE). Other isolates included: *Enterococcus faecalis*, beta-hemolytic *Strep*—group B, *E. coli*, *Klebsiella oxytoca*, *Acinetobacter lwoffii*, *Serratia marcescens*, *Stenotrophomonas maltophilia*, *Acinetobacter calcoaceticus*, *Citrobacter koser*, beta-lactamase-negative *Hemophilus*, *Micrococcus sp.*, *Proteus mirabilis*, *Pseudomonas aeruginosa*, alpha-hemolytic *Strep*, and beta-hemolytic *Strep*—group A.

Conclusions: Most (52%) pathologic bacterial nipple wound infections are due to *Staph aureus* or *Staph epi.*, with a fairly high number (48%) of both being MR. MR in our patient population has increased in the last 2 years.

35. BREASTFEEDING MOVEMENT IN THAILAND: PROMISING A BRIGHTER FUTURE

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