

in practice in future. This is an additional method, which could be a supplement to traditional one, based on pathophysiology of hypoglycemia.

Results: Familiarity with this problem could speed the diagnosis and warn students about rare but life-threatening diseases and syndromes. On the basis of this method we want to devise diagnostic algorithm for students to diagnose a proper disease among many causes of hypoglycemia in children.

Conclusions: An awareness of rare diseases has a role in formation of right students' attitude to diagnostication in pediatrics. Presented method facilitates memorization of characterization and making the diagnosis of rare disease, that prepares students for practice and lifelong learning.

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RISK FACTORS FOR RESPIRATORY TRACT INFECTIONS AMONG PRESCHOOL CHILDREN

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Background: Acute respiratory tract infections (ARI) are an important public health problem. Improved identification of risk factors might enable targeted intervention.

Objective: To study some of the risk factors related to acute respiratory tract infections among preschool children at Derna, Libya.

Methodology: This descriptive study included 800 preschool children from the three kindergartens in Derna between October 2008 and March 2009. All children were subjected to: short questionnaire for detection of detailed history regarding risk factors of acute respiratory infection, history of the illness within the last six months, lines of management and clinical examination. Coding of diagnostic information according to the International Classification of Primary Care (ICPC) coding system was done. Ethical consecrations were taken.

Results: Males represented 54.4% of all studied preschool children. The number of preschool children suffering from ARI was 320 (40 %). Male gender and passive smoking were considered risk factors for ARI (P< 0.05). There was no significant relationship between the number of children in the family, the number of rooms in the house, the crowding index and the prevalence of acute respiratory infections

(P>0.05). The use of antibiotics in this study was found in 70% of diseased cases, although most of them had no real indication for the use of antibiotics.

Conclusion: There is a significant relationship between passive smoking and acute respiratory infection among preschool children.

Keywords: Acute respiratory infection, preschool children, passive smoking, risk factors

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EFFECT OF POSITIONING AND ENVIRONMENTAL STRESSORS ON PHYSIOLOGICAL STRESS OF PRETERM INFANTS

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Aims: The purpose of the study was to examine the effects of prone and supine sleeping positions and stressors in the acute care environment on physiological indicators of stress and sleep-wake states of preterm infants.

Methods: A quasi-experimental, repeated-measures research design was used. Twenty-two preterm infants in an intermediate baby care unit at a medical center in Taiwan were enrolled in the study. Each infant was alternately placed in the supine or prone sleep position for an hour each time. Measurements of sleep-wake states and physiological indicators of stress were taken every two minutes during the observation period.

Results: A total of 2410 observations were accrued. In the prone position, preterm infants had a significantly higher level of oxygen saturation than in the supine position (p=0.0002). Moreover, preterm infants demonstrated significantly more frequent and longer sleep states in the prone position (p < .0001). Interventions with infant handling by nurses resulted in 10 times more episodes of waking states, 5 times greater stress levels as measured by heart rate and 7 times more episodes of oxygen saturation falling

below 90% than other environmental interventions for preterm infants.

Conclusion: These results suggest that the prone position might be the best position for facilitating sleep and reducing stress for preterm infants. Providing an environment that controls noise and light and decreases infant handling may best support the infant's emerging organization, and foster growth and development.

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WHEEZING AT CHILDREN AGE UP TO TWO YEARS OF AGE

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Introduction: Episode wheezing and cough is very common even in children who do not have asthma and particularly in those under age two. At this age causes are many, most commonly bronchiolitis and asthma.

Objective: To show frequency of wheezing at children age 2 years or less with and without atopy, diagnosed by private pediatric practice.

Methods: Viral etiology and atopy were probed by retrospective analyzes at 170 children age 2 years or less which reported at private primary health care institution for treatment of wheezing.

Results: 170 children were diagnosed with wheezing. Whith fever were 89 (52,3%), no fever 81 (47,6%). Laboratory analyzes (CRP, Le) are done in 39 (22,9%) and were normal. All children had sO₂ over 94%. Out of total number of patients 101 (59,4%) were atopic. We had 38 (22,3%) children with atopy and fever, atopy without fever was observed in 57 (33,5%) children. Fever without atopy were 36 (21,1%) of which during the period november-april 27 (75%) and april-november 9 (25%).

Conclusion: Children less then 2 years of age reporting to primary pediatric health care for treatment of wheezing are mostly without fever and with atopy. At children without atopy, wheezing is usually accompanied with fever during the viral infections season.

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RELATIONSHIP BETWEEN SELF-REPORTED AND OBJECTIVELY MEASURED ADHERENCE TO INHALED CORTICOSTEROIDS IN U.S. INNER-CITY CHILDREN WITH PERSISTENT ASTHMA

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Background and aims: Poor adherence to inhaled corticosteroids (ICS) has been implicated as one of the major contributors to asthma morbidity in US inner-city children. The aim of this study was to determine the relationship between self-reported and objectively measured ICS adherence in inner-city children with persistent asthma.

Methods: A prospective observational study of 2-9 year-old children with persistent asthma currently prescribed ICS in the Bronx, NY. Subjects received a marked ICS inhaler at enrollment to be collected one month later. Parental self-reported adherence was measured with a validated 10-item survey. One month post-enrollment, ICS adherence was calculated using a dose counter, an objective measure of adherence. Adherence $\geq 75\%$ was defined as good. We used Spearman correlation analysis to measure the relationship between self-reported and objectively measured adherence.

Results: A total of 33 children (mean age 6 (SD 2), 58% male, 52% Hispanic) participated. Overall, 76% of parents stated that they "often" or "always" give ICS pump only when their child needs it, and 36% sometimes forget to administer it. Self-reported ICS adherence was high: 85% of parents reported that they give ICS to their child exactly as the label says. Objectively measured ICS adherence was poor (mean 48%, range 2%-100%). We found no correlation between two adherence measures (Spearman's rho .004, p=.986).

Conclusions: Our findings suggest a discrepancy between self-reported ICS adherence and adherence measured objectively using a dose counter. These results may have implications for physicians who often rely on self-reported adherence in caring for patients with asthma.