CONCLUSIONS: More than 60% of all Canadian pediatric residents pursue subspecialty careers. There was a significant increase in the frequency of subspecialty training among later-year graduates. Few graduates are practicing in rural/remote or underserviced areas. Canadian pediatric residency programs may not be producing the right mix of graduates to meet societal needs.

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Features in Septic Children With or Without Severe Acute Malnutrition and the Risk Factors of Mortality

BACKGROUND AND OBJECTIVE: Immunity is heavily impaired in children experiencing severe acute malnutrition (SAM), often resulting in sepsis and death. Knowledge of biochemical derangements during the early stage of sepsis among these children with SAM would help in their treatment and reduce fatality. The goal of this study was to describe and compare the features of sepsis in children with SAM and those without SAM, and the risks and associated factors of death in septic children.

METHODS: Children aged 6 to 59 months with SAM (weight-for-height z score ≤ 3) or bipedal edema and non-SAM admitted with diarrhea plus sepsis at the icddr,b hospital from April 2010 to December 2011 were studied prospectively.

RESULTS: A total of 126 children (48 with SAM and 78 without SAM) were studied; all had diarrhea and sepsis. Their mean ± SD age was 19.1 ± 14.2 months; 52% were female; capillary refill time, neutrophil and band %, serum urea nitrogen, pH, hemoglobin, platelet, serum total CO_2, phosphate, calcium, C-reactive protein, creatinine, and creatine kinase were similar between SAM and non-SAM children ($P > .05$). However, serum sodium and albumin levels were lower and leukocyte count, hypoglycemia, septic shock, and mortality rates were higher in SAM than in non-SAM children ($P < .05$). Logistic regression showed that septic children with SAM were 13 times more likely to have fever or hypothermia than septic children without SAM. Among these 126 children, 25 (19.8%) died. Weight-for-height z score (–3.0 ± 2.1 vs –2.7 ± 1.5), % band cell (5.2 ± 6.4 vs 2.6 ± 5.5), sodium (154 ± 29 vs 142 ± 21), serum urea nitrogen (25.7 ± 21.5 vs 17.8 ± 16.1), and septic shock (92% vs 9%) findings were significantly higher, and hemoglobin (9.2 ± 1.6 vs 10.3 ± 2.0) and albumin (2.9 ± 1.1 vs 3.4 ± 0.8) levels were significantly lower, among those who died than in the children who survived, respectively. Children who died were 4 times more likely to be severely wasted and 3 times more likely to have had moderate anemia.

CONCLUSIONS: The case fatality rate is significantly high in sepsis, particularly in septic shock and children with SAM. These features may assist in the better management of septic children with or without SAM and thus reduce fatality.

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Effect of Guided Imagery Relaxation Session and Story-Telling on the Intensity of Nausea and Vomiting Among Children Undergoing Chemotherapy

The aims of this study were to develop, implement, and evaluate the effect of a guided imagery relaxation session and telling stories on reducing the intensity of nausea and vomiting, as well as make comparisons between the 2 methods. The study used a quasi-experimental design and was conducted at the Pediatric Oncology Department in Tanta University Hospital, the Pediatric Oncology Department in the Tanta Oncology Center, and the Pediatric Oncology Department in the Specialized Pediatric Hospital in Benha University. The study included a convenience sample of 90 children aged between 4 and 18 years receiving chemotherapy. They were classified randomly into 3 groups; the guided imagery relaxation sessions were the first group, story-telling was the second group, and the third group was the control group. The first and second groups were assessed at the first and second months of intervention.

Tools of this study included the Morrow Assessment of Nausea and Emesis Questionnaire, the Rhodes Index of Nausea and Vomiting Likert scale, the Katz Index of Independence in Activities of Daily Living checklist, and a self-rating scale.

The results showed that approximately all children in the relaxation and story-telling groups did not have nausea and vomiting compared with the control group after the first and second months of relaxation and story-telling.

The study concluded that children exposed to guided imagery relaxation sessions and story- telling experienced a lower intensity of nausea and vomiting compared with children in the control group. This study therefore recommends that guided imagery relaxation sessions and story-telling should be integrated into routine nursing care along with pharmacologic

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