

The survey was submitted to anthropometric assessment, with measurement of body weight and height to calculate the weight-for-stature and stature-for-age describing the children in overweight and obesity, or separating them in past malnutrition, acute, chronic, according to Waterlow / Batista.

Results: The prevalence of nutritional deficiency was 525 (29.81%), 52.76% males and 42.24% were female. The population enrolled in the region's EMEF Parelheiros (81.04%) showed a higher proportion of past malnutrition, 22.15%, while 6.13% are acutely malnourished, and 1.53%, chronically. The prevalence of overweight was 13% and of obese 9.09%. In this sample, 33.42% of males were overweight and 24.16% obese, 25.45% of females were overweight and 16.97% obese.

Conclusion: Malnutrition persists among the low-income population and its irretrievable form, the past malnutrition, is the most expressive. However, this study notes that overweight and obesity are a growing problem in low-income population due to its customs, food and lack of information. There is a difference in percentage between obesity and overweight among the genders and considering the whole sample, overweight individuals prevails against obese ones. Thus, it is important to stress that we are experiencing a period of transition in nutritional status, in which obesity and overweight have proved to be one of the most significant public health problems.

1078

FOOD CONSUMPTION HABITS AND PHYSICAL ACTIVITY IN CHILDREN AND TEENAGERS WITH CHRONIC DISEASES

J.C.S. Herrera¹, A.M. Treviño², C.P. Ortiz³

¹*Pediatric Oncology Unit*, ²*Clinical Laboratory*,
³*Pediatrics Unit, Mexican Social Security Institute,*
Cd. Obregón, Mexico

Background and aim: Patients with chronic diseases are exposed to increasing weight due to multiple factors. Study was orientated towards possibility of knowing and compare food habits and physical activity in chronic conditions group patients.

Methods: Across convenience sampling was carried out a comparative study, applying by consented form in one occasion to relatives of patients with chronic diseases attended in a general concentration medical unit in Mexico, an instrument

of habitual physical activity and frequency of food and healthy drinks consumption. We established groups by disease and gender to categorize them in four groups of physical activity and in two for food habits. Data analysis was non parametric statistics.

Results: We included information granted by 52 parents. Oncologic group was predominating (53.84%). Statistical difference determined by minor values in oncology group observed in: height ($p=0.012$), weight ($p=0.042$), degree of nutrition ($p=0.014$), energetic rest expense ($p=0.059$) and energetic total expense ($p=0.000$). Also presented between patients with solid tumors and rest, in physical activity index ($p=0.037$) and energetic total expense ($p=0.002$). Fifty one (98.07%) patients were classified sedentary. Oncologic group showed minor physical activity (IAF < 2.00) and major frequency in consumption of not healthy food habits.

Conclusions: This group were sedentary, being cancer patients more inclined to physical inactivity and a major not healthy food habits. Integral management of patients with chronic diseases must include programs orientated for change physical activity and food consumption habits like a health priority.

Key words: dietetic habits, physical activity, chronic diseases, fitness.

1079

ANALYSIS OF RELATED FACTORS AMONG SECONDARY SCHOOL STUDENTS IN CHONGQING, CHINA

Y. Zhao, F.Y. Liu, Y.X. Xu, L.L. Han, Y. Li, M.D. Liu

Chongqing Medical University, Chongqing, China

Objective: To analyze the prevalence of overweight and obesity, as well as the risk factors among secondary school students, and to put forward policy suggestions for health management department.

Methods: A stratified and cluster sampling trial was conducted in Chongqing City, China. A total of 524 students who met the criteria from 5 secondary schools were recruited in the present study. The study carried out by questionnaire.

Results: The overweight and obesity among the students were overall prevalent, and the rates were 7.82% and 1.72%, respectively. The body mass index (BMI) of parents and birth weight of the students were significantly correlated ($P <$

0.05). It was of great significantly difference on the living habits and food consumption choice, such as eating food two hours before bedtime, having pressure to learning, introvert, eating vegetables infrequently and drinking carbonated drinks often, among the overweight and obesity students group and control group ($P < 0.05$). Multiple variables Logistic regression analysis showed that the BMI of parents, birth weight, and bad eating habits were the risky factors of the secondary school students in overweight and obesity, while doing exercise was the protective factor.

Conclusion: The BMI of parents and the birth weight of students were significantly correlated with the BMI of the students. The overall prevalence of overweight and obesity of the students in the study was significantly lower than the average of the nation, but overweight and obesity among the adolescents are nutritional problems, which should be emphasised by all sectors of society.

1080

IRON STATUS AT BIRTH IN TERM SMALL-FOR-GESTATIONAL AGE INFANTS

K. Mukhopadhyay¹, R.K. Yadav¹, **S.S. Kishore**², G. Garewal¹, V. Jain¹, A. Narang¹

¹PGIMER, ²Pediatrics, PGIMER, Chandigarh, India

Objectives: To determine body iron stores at birth in term small-for-gestational age (SGA) infants as compared to appropriate-for-gestational age (AGA) infants.

Design: Prospective cohort study

Setting: Level III neonatal unit

Patients: Mother infant pairs with gestation of ≥ 37 weeks and birth weight of at least 1.5 kg were enrolled. Asymmetric SGA infants were taken as cases and gestation matched AGA infants as controls. Maternal and cord blood samples and infant blood samples during follow up were obtained for measurement of various iron indices.

Outcomes: Primary- cord serum ferritin at birth, Secondary- proportion of infants with 'low' ferritin, serum ferritin in followup, and correlation among maternal and neonatal iron indices - Hb, serum Iron and total Iron binding capacity (TIBC).

Results: There were 50 SGA and 50 AGA mother-infant pairs. Cord serum ferritin levels were less in

SGA group as compared to AGA group [median (IQR): 68 (30,136) vs. 141 (63,259), $p=0.007$]. The proportion of infants with 'low' cord ferritin (defined as $< 40 \mu\text{g/L}$) were more in SGA group [17 (34%) vs. 9 (18%) in AGA group, $p= 0.05$]. Other iron indices were similar in both the groups. There was no correlation among various maternal and neonatal cord iron parameters. The serum ferritin levels at 28 ± 3 days of age were also less in SGA group with a trend towards significance ($p=0.06$).

Conclusions: Term asymmetric SGA infants have lesser total iron stores as compared to gestation matched AGA infants at birth.

Implications: SGA infants need iron supplementation starting from early infancy.

1081

MANAGEMENT AND PREVALENCE OF OBESITY IN BOSNIAN CHILDREN

M. Omerovic¹, **A. Bajraktarevic**², A.D. Djulepa³, Z. Begic⁴, I. Suljevic⁵, L. Sporisevic⁶

¹Pediatrics Endocrinology Department, ²Pediatrics Department, Public Health Institution of Canton Sarajevo-Pediatrics Department, ³Perinatology Department, General Hospital Sarajevo, ⁴General Pediatrics Department, Pediatrics Clinic Sarajevo, ⁵Biochemistry Department, Clinical Medical Center Sarajevo, ⁶Pediatrics Department, First Medical Aid Sarajevo, Sarajevo, Bosnia-Herzegovina

Background-aims: Childhood obesity is often the result of an interplay between many genetic and environmental factors. Obese children can develop serious health problems, such as diabetes and heart disease, often carrying these conditions into an obese adulthood. Obese children become targets of early and systematic discrimination.

Methods: We retrospectively examined the medical charts of all children who were between the ages of three and twelve years and presented to the physicians with pediatrician-diagnosed obesity in calendar years 2008-2009. For laboratory and radiographic evaluations of childhood obesity, the degree of investigation depends on the BMI, physical and historical findings, and the presence of risk factors.

Results: The prevalence of obesity in children has steadily risen during recent years in Bosnia and Herzegovina. Our reports have reached epidemic levels, with approximately 14 percent of Bosnian