

EXCERPTS FROM PERSIAN MEDICAL LITERATURE

THE FREQUENCY OF HIV INFECTION IN BLOOD DONORS IN SHIRAZ IN 1998 – 2002

Infection with human immune deficiency virus (HIV) or hepatitis B virus (HBV) is one of the health problems in blood transfusion centers. This study was conducted in Shiraz for determination of the rate of HIV positivity in blood donors during the years 1998 – 2002. This cross-sectional and descriptive study was conducted on 615,790 blood donors. All samples were screened by ELISA for HIV; all positive samples were analyzed by western-blot for final confirmation; and positive samples in western-blot were considered true positive for HIV. Epidemiological data such as age, sex, marriage and number of blood donation were studied and the rate of hepatitis B and C in HIV positive and HIV negative blood donors were compared. The rate of HIV positivity in blood donors was 5.5 in 100,000. The mean age of HIV positive persons was 33.4 ± 4.2 yr. There were 94.2% HIV positive males; and 79.4% of them were married. HIV positivity was more common in the first male (32.4%) ($p < 0.005$) blood donors, but there was not any significant difference between married and single persons regarding the HIV infection rate. HCVAb was positive in 10.4% of HIV positive blood donors and HBSAg was positive in 5.2% of them. The frequency of HIV infection in blood donors in Iran is lower than that in many other countries. Regarding the higher prevalence of the infection in young age, educational programs in these age groups are recommended.

Authors: Kasraia and Torab Jahromi SA.

Source: Journal of Zanjan University of Medical Sciences & Health Services. 2003; 42: 49 – 54.

A SURVEY ON BLOOD PRESSURE IN SCHOOLCHILDREN AGED 7 TO 11 YEARS IN TEHRAN, IN THE YEARS 2002 – 2003

Hypertension is one of the most important risk factors in the etiology of cardiovascular and renal diseases both in children and adults. Due to the absence of a blood pressure (BP) normograph in children living in Tehran, this study was conducted in Fall of 2002 to determine the BP status in children 7 – 11 years old and its relationship with age, sex, height and weight. This descriptive study was carried out on 1,061 boys and girls. The age, sex, height, weight, systolic, and diastolic blood pressure were measured according to the standard procedures, then 50th, 75th, 90th, and 95th percentiles of BP were tabulated. The data showed that systolic and diastolic blood pressure increased by height and weight. The 90th and 95th percentiles of systolic BP were equal in boys and girls aged 7 and 8 years; however, it was higher in girls aged 9, 10 and 11 years. The diastolic BP at 90th and 95th percentile was equal in boys and girls aged 7, 8, and 9, but it was higher in girls aged 10 and 11 years. When blood pressure percentile of the American children was compared to that of Iranians it was found that boys and girls living in Tehran had a lower systolic and diastolic BP than those children living in America. These data show that, in addition to age and sex, other factors such as height, weight, race, nutrition, genetics, and environment have influence on normal range of BP in children. Therefore, each society should have its own standardized BP normograph for its populations. Further studies comprising larger number of patients are warranted.

Authors: Fallah A, Gachkar L, and Faraji SA.

Source: Journal of Zanjan University of Medical Sciences & Health Services. 2003; 42: 43 – 8.

GROSS CONGENITAL MALFORMATIONS IN 10,000 BIRTHS, 1997 – 1999

It is reported that the rate of congenital malformation is about 2 – 3% at birth. They are one of the major causes of morbidity, mortality and disability in childhood and later in adulthood. The aim of this study was to determine the rate of gross congenital malformation that was present at birth. The other factors studied were anatomic location of anomalies, neonatal sex, race, maternal age and race. This study is a cross-sectional, descriptive study, with the sample population of 10,000 at birth. The rate of congenital malformations was 10.1/1000 in our sample; 11.8/1000 in male and 7.5/1000 in female neonates. The rate of malformations in musculoskeletal system was 3.8; in CNS, 2.8; and in urogenital system, 2.5 per 1000 births. It is concluded that the most frequent malformations in CNS, musculoskeletal and urogenital system were cystic spinabifida, clubfoot and hypospadias, respectively. The rate of newborn malformations was 14.5 per 1000, 8.5 per 1000, and 17 per 1000 birth in Turkman, Native Fars and Sistani ethnic groups, respectively. Rates of overt malformation, race, and sex of individuals were related. The results from this investigation showed that there were relations between the rate of overt malformation, race, and sex of individuals.

Authors: Golalipour MJ; Ahamadpour M; and Vakili MA.

Source: *Journal of Gorgan University of Medical Sciences.* 2002 – 2003; 4 (10): 42 – 7.

INVESTIGATION OF ATTITUDE OF THE IRANIAN PHYSICIANS ON EUTHANASIA

Euthanasia (know as mercy killing) has been a controversial topic in the world during the recent decades and the civil, ethical, medical, and social aspects of euthanasia are still subject to debate. Euthanasia is not considered a crime in some countries such as the Netherlands, and Canada, as well as in certain states within the United States. In many countries, however, it is considered an act of murder, although the due punishment is less severe compared to other common murders. This is the first investigation of attitude of the Iranian physicians toward euthanasia. Three hundred and seven physicians participated in the study. One hundred and eighty (58.6%) disagreed with the practice of euthanasia, but 127 (41.4%) agreed believing that at least certain types of euthanasia might be acceptable. Fifty-three of the physicians had actually witnessed the administration of euthanasia by other physicians, and 7 of them had administered euthanasia themselves.

Authors: Taghaddosi Nejad F; Mehrdad R; and Vaghar Doost A, et al.

Source: *Journal of Teb and Taskieh.* 2003; 17 (49): 1 – 22.

G6PD DEFICIENCY AND ITS CONTRIBUTION TO NEONATAL JAUNDICE, AN EPIDEMIOLOGIC SURVEY IN 2000 NEWBORNS

Glucose-6-phosphate dehydrogenase (G6PD) is one of the vital enzymes involved in the metabolism of red blood cells. The deficiency of this enzyme is one of the most common enzymatic deficiencies in human being. More than 400 variants of G6PD have been identified and 400 million people are suffering from this deficiency world-wide. This condition can cause acute hemolysis during oxidative stress and also severe neonatal hyperbilirubinemia in some population. The objective of this study was to determine the prevalence of G6PD deficiency and its relation to neonatal jaundice. Two thousand consecutively-born babies at Tehran's Najmieh and Baghiyatollah (a.s.) Hospitals were screened for G6PD deficiency from August 1999 up to February 2000. Blood samples were obtained from umbilical cord and examined by fluorescent spot test. The infants were observed for 10 days for development of jaundice. The frequency of G6PD deficiency was 2.1% (3.6% in males and 0.6% in females). Significant jaundice (abdomen and soles) developed in 51.4% of infants having G6PD deficiency, versus 16.6% in normal infants. Mean of bilirubin level in G6PD

deficient and normal infants were, 18.76 ± 56 mg/dL and 15.5 ± 4.2 mg/dL, respectively ($p < 0.0001$). Phototherapy was required in 48.6% of G6PD deficient infants and in 11.9% among normal infants $p < 0.0001$. 11.4% of G6PD deficient and 0.9% of normal infants, required exchange blood transfusion $p < 0.0001$. Hemoglobin and reticulocyte values and hospitalization days in the G6PD deficient and normal infants were not statistically different. Owing to the relatively high prevalence of G6PD deficiency, its relation to neonatal jaundice, and the related side effects, a wide scale country-wide population screening is strongly needed, so that highly risk prone neonates can be taken care of under intensive coverage and their jaundice can be speedily treated. In additions, because of probable attacks of hemolysis, due to fava bean consumption during childhood, and beyond, necessary warnings and adequate health education are warranted.

Authors: Abolghasemi H; Mehrani HA; and Hosseini SM, et al.

Source: Journal of Medical Council of I.R. Iran. 2003; 21 (2): 93 – 100.

PREVALENCE OF VITAMIN D DEFICIENCY AND ITS ASSOCIATED FACTORS IN 20 – 69 YEARS OLD POPULATION IN THE CITY OF TEHRAN

In recent years, several studies have been carried out in developing countries to assess the prevalence of vitamin D deficiency. The majority of these studies were limited to specific age groups and were not populationally based. Results of these studies point to the high prevalence of vitamin D deficiency in these countries. This report assesses the prevalence of vitamin D deficiency and its associated factors. This study was randomly carried out on 1,210 subjects, aged 20 – 69, living in Tehran. Serum level of 25(OH) D was assessed and a questioner was used to evaluate the time of sun exposure, clothing, calcium intake, and BMI. Vitamin D deficiency was detected in 79.6% of the study population. Prevalence of severe, moderate, and mild vitamin D deficiency was found to be 14.2%, 57.6%, and 9.5%, respectively in this population. Serum level of vitamin D had no significant correlation with sun exposure, calcium intake, or BMI. The mean serum level of vitamin D in young females was significantly lower than that in older ones. Application of different methods such as food fortification seems to be necessary in improving vitamin D deficiency in Tehran population and in preventing the possible side effects.

Authors: Larijani B; Hashemipoor S; and Gooya MM; et al.

Source: Journal of Medical Council of I.R. Iran. 2003; 21 (2): 125 – 31.