

EXCERPTS FROM PERSIAN MEDICAL LITERATURE

EVALUATION OF PHYSICAL VIOLENCE BY SPOUSES AGAINST WOMEN REFERRED TO A FORENSIC MEDICINE CENTER OF TEHRAN

Violence against women is a social problem all over the world. This social problem, in addition to its physical and mental sequelae, has a significant social impact. Therefore, in an effort to show the magnitude of the problem and prevent such antisocial phenomena in the society, a group of researchers decided to investigate such physical injuries referred to forensic centers. This cross-sectional study investigated the frequency, types, and effectors of partner's maltreatment in autumn 2000. Data were collected from all women referred to the Women's Ward of the Forensic Center of Tehran who had admitted to being subjected to violence by their spouses. For each of them, a checklist was completed that consisted of data items regarding the victim's and her partner's demographic characteristics; the type, frequency, and history of violence; and the causes of disagreement in the family. Of the women studied, 87.2% either had finished high school or had lower education. The average age of the study population and the average age at marriage were 28.9 and 20.2 years, respectively. Among the subjects, 68.7% had been physically abused by their spouses. In addition, 58.7% of their children have no spouses. Forty percent and 42.4% of the spouses were alcohol users and drug abusers, respectively. Overall, the most important causes of partner's mistreatment detected in the study population were: the young age and low education level of both partners and the female partner being primarily a housekeeper and the male partner's alcohol use or a drug abuse. Therefore, public and special education is recommended to prevent this social problem.

Authors: Aghakhani K, Aghabigloie A, Chehrei A.

Source: J Iran Univ Med Sci. 2003; 9 (31): 485 – 90.

PREVALENCE AND CONTRIBUTING FACTORS OF UNWANTED PREGNANCY IN 10 CITIES IN IRAN

Unwanted pregnancy is one of the most important problems in family planning programs, especially in developing countries. This cross-sectional study was conducted to determine the prevalence of unwanted pregnancy and the factors that contribute to it in 10 cities in Islamic Republic of Iran. Among cases referred to the antenatal clinics of university hospitals in 10 cities in 10 Iranian provinces (Fars, Sistan Balochestan, Hamadan, Kerman, West Azerbaijan, Gilan, Khorasan, Khozestan, and Esfahan), 1,548 subjects were enrolled in the study. Mean \pm SD of the prevalence of unwanted pregnancy in Ahwaz and Hamadan constituted the maximum and minimum values among all the cities and were 29.6 ± 7.1 and 23.9 ± 5.2 years, respectively. A face-to-face interview was conducted during which a questionnaire was completed. The results demonstrated that the rate of unwanted pregnancy was around 34.9%. Knowledge of contraceptive methods was quite poor in some cities. Contraceptive pills and condoms were not used correctly, which led to failure of these methods at the rates of 12.5% and 8.8%, respectively.

It is concluded that there is a need to schedule a suitable educational plan in order to reduce the rate of unwanted pregnancy.

Authors: Jahanfar S, Ramazani-Tehrani F, Sadat-Hashemi M.

Source: J Facul Med. 2003; 60 (4): 334 – 40.

PSYCHIATRIC AND PHYSICAL DISORDERS CONTRIBUTING IN SUICIDES ATTEMPTED BY SELF-BURNING IN MAZANDARAN PROVINCE

Deliberate self-burning is very common in some Middle Eastern, Asian, and African cultures. About 1.39% to 40% of suicides have been reported to be of self-immolation type in different parts of Iran. In a prospective descriptive study, all cases involving attempted suicide by self-burning referred to the burn centers of Mazandaran Province were evaluated to detect psychiatric and physical disorders as well as the medications used to treat the disorders.

Three-hundred and eighteen cases were identified in 3 years (264 women and 54 men), among whom 74.6% of female cases and 72.2% of male cases terminated in death. Thirty percent of the cases had remarkable physical disorders, the majority of which were chronic. In addition, 39.1% of the cases were using medications, most of which were psychotropic (27%). About 95% of the cases suffered from one or more psychiatric disorders. The most common psychiatric disorders were: adjustment disorders, nicotine dependence, major depressive disorder, dysthymic disorder, and anxiety disorders. Psychoses were noticed in only 9.6% of all cases. The prevalence of psychiatric disorders in this study was higher than that in western studies but depression, alcohol and other drug dependence, and especially psychoses were less common in all cases of parasuicide (attempted suicide) or suicide through deliberate self-burning.

Regarding the high prevalence of adjustment disorders (42% of parasuicide and 39.8% of suicide cases), it is necessary to pay special attention to the environmental precipitating factors. It is suggested that the diagnostic category of "adjustment disorder with suicidal ideas" should be declared in the literature again.

Authors: Zarghami M, Khalilian A.

Source: Hakim. 2003; 5 (4): 263 – 70.

EPIDEMIOLOGY OF TICK-BORNE RELAPSING FEVER IN ZANJAN CITY

Considering the importance of tick-borne relapsing fever (TBRF), its side effects, and different reports of its prevalence, this study was carried out to determine the epidemiology of tick-borne relapsing fever in Zanzan City in the years 1991 to 1998.

This descriptive study was conducted on 1,226 randomly-selected patients. After clinical examination, patients' blood samples were collected and thick blood smears were prepared. The smears were stained with Giemsa and examined by laboratory specialists. Antibody against *Borrelia persica* was detected by immunofluorescence assay (IFA) in sera. In addition, 240 *Ornithodoros tholozani* ticks were caught from animal settlements, squeezed and injected to hamsters and subsequently the rate of catching *B. persica* infection in the hamsters was evaluated.

Of the 1,226 subjects, consisting of equal numbers of males and females, 48.9% were from urban areas. The results showed that 121 (9.9%) of the sera were positive by IFA and *B. persica* was detected in nine (0.007) of the blood smears. Fever and chills were reported in 21% of the subjects while 23.5% had muscular pain and fatigue. Laboratory examination of 240 *O. tholozani* ticks showed that 12.5% of them had been infected with *B. persica*. Nine people suffered from *B. persica* infection. There was no relationship between the age and sex of the subjects but occupation rate of literacy, and residence each had a role in the incidence of this disease.

Although the prevalence rate of TBRF in Zanzan is as high as that in neighboring countries, the rate of tick infections with *B. persica* seems higher and can be regarded as an important public health problem. Further evaluations are recommended in order to unmask the predisposing factors to the infection and find the optimal ways of controlling it.

Authors: Ghavami MB, Asmar M, Piazak N.

Source: J Zanzan Univ Med Sci. 2002; 9 (37): 22 – 7.

BIRTH PARAMETERS IN 1,000 IRANIAN HEALTHY NEWBORNS IN FIROOZABADI HOSPITAL

The determination of birth parameters is one of the first primary evaluations carried out for every newborn and consists of the measurements of body height and weight and the circumferences of the head and chest. Because social, economical, and cultural factors can impress fetal growth and birth parameters, their determination seems necessary in different ethnic and socioeconomic groups. In this cross-sectional study, these parameters were measured in 1,000 healthy Iranian newborns born at Firoozabadi Hospital in Tehran and matched with the standard National Center for Health Statistics (NCHS). The parameters of body height, weight, and head and chest circumferences were measured by one pediatrician using standard measurement tools. Multiple longitudinal regression models were used for the prediction of anthropometric characteristics.

Male to female ratio was 1:1. The mean measurements of the males' body weight and height were significantly higher than the females' ($p = 0.009$ and $p = 0.003$, respectively). The mean measurements of body weight and head circumference were meaningfully lower for both boys and girls than those in NCHS reports. The females' mean height was significantly higher than that of NCHS, but the males' height measurements compared to those in NCHS reports. For prediction of height, weight, and head circumference by using the results of this paper and applying regression methods, some models were developed.

In this study we found meaningful differences between our measured values of body height, weight, and head circumference of newborns of both sexes and those of NCHS standards. Social, economical, maternal, and placental factors are supposed to be contributing factors in causing these differences. The clinical importance of such differences has not been determined as yet and further studies amongst different ethnic and socioeconomic groups in the country are recommended.

Authors: Nickavar A, Moghimi A.

Source: J Iran Univ Med Sci. 2003; 9 (31): 603 – 8.

A STUDY ON PERIPHERAL BLOOD T-LYMPHOCYTE SUB-SETS ALTERATIONS IN PATIENTS WITH ACUTE AND CHRONIC BRUCELLOSIS

Brucellosis is caused by *Brucella* species which are intracellular pathogens. In the presence of these pathogens, cell-mediated immunity plays a crucial role in immune responses against the invading pathogens. In the present study alterations of T-lymphocyte sub-sets, which are cellular elements of cell-mediated immunity (CMI), were investigated in cases with acute and chronic brucellosis.

Overall, 71 patients with acute brucellosis and 28 patients with chronic brucellosis took part in this study. Diagnosis of brucellosis was based on taking history, physical examination, and serological tests for brucellosis. The blood T-lymphocytes with CD₃, CD₄, and CD₈ surface markers were enumerated by using flow-cytometry through applying specific monoclonal antibodies against the above surface markers. The results indicated that the percentage of CD₃⁺ T-lymphocytes did not show any significant difference in patients with acute and chronic brucellosis ($p = 0.131$), whereas the percentage of CD₄⁺ T-lymphocytes in patients with chronic brucellosis decreased significantly ($p = 0.007$). On the contrary, the percentage of CD₄⁺ T-lymphocytes in the blood circulation of patients with chronic brucellosis had increased significantly ($p = 0.008$). This dysfunction manifests mainly by CD₄⁺ to CD₈⁺ ratio imbalance and T-lymphocytes proliferation and function.

Authors: Hagherizadeh M, Eslami MB, Sarrafnejad A.

Source: Ahwaz Sci Med J. 2003; 35: 36 – 40.

THYROID DYSFUNCTION AND AUTOANTIBODIES 10 YEARS AFTER IMPLEMENTATION OF UNIVERSAL SALT IODIZATION: TEHRAN THYROID STUDY

Increased frequency of thyroid antibodies following correction of iodine deficiency has been reported in several studies, although its clinical implications are still unclear. Ten years after initiation of universal salt

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iodization, the prevalence of thyroid dysfunction and antibodies were investigated in adults in Tehran, Iran. A systematic sample of 1,434 people aged more than 20 years, selected from Tehran Lipid and Glucose Study population, participated in this cross-sectional study from December 1999 to September 2000. Thyroid size was graded according to the World Health Organization grading system and thyroid nodules were detected by palpation. A fasting blood sample was taken for serum TSH, total T_4 , T_3 uptake, antithyroperoxidase, and antithyroglobulin antibodies. Urinary iodine concentration was measured for a random subsample of 160 people. In persons with no history of taking thyroid drugs within the month before the evaluation, overt and subclinical hypothyroidism was defined as $TSH > 3.5 \mu U/mL$ and low (< 1.0) or normal FT41, while overt and subclinical thyrotoxicosis as $TSH < 0.3 \mu U/mL$ and high (> 4.2) or normal FT41, respectively. Median urinary iodine concentration was $18.5 \mu g/dL$. Total goiter prevalence decreased with age and was higher in women than men (33.0% vs 15.5%, $p < 0.001$). In this study, 5.9% of people had thyroid nodules and the prevalence was higher in female than male (8.3% vs 3.0%, $p < 0.001$). The prevalence of overt and subclinical hypothyroidism were 3.5/1000 (1.6/1000 in males and 5.1/1000 in females) and 2.2% (0.9% in males and 3.2% in females), respectively. No new case of overt thyrotoxicosis was found and the prevalence of subclinical thyrotoxicosis was 4.2/1000 (3.1/1000 in males and 5.1/1000 in females). Mean TSH was higher in females than males ($p < 0.01$). In women, positive antibodies were more prevalent ($p < 0.001$) and the frequency of TPOAb+ increased with age. The frequencies of TPOAb+ and TgAb+ were in agreement ($p < 0.001$), 8.3% in men and 15.9% in women for TPOAb+ and 11.0% in men and 21.5% in women for TgAb+. In logistic regression model, TPOAb+, TgAb+, and female sex were determinants of $TSH > 3.5 \mu U/mL$. On the other hand, TgAb+, $TSH > 3.5 \mu U/mL$, and goiter were determinants of TPOAb+. TPOAb+, $TSH > 3.5 \mu U/mL$, nonsmoking, and female sex were determinants of TgAb+. Using different categories for TSH in the model, $TSH > 0.3 \mu U/mL$ predicted TPOAb+ (odds ratio = 1.77, $p < 0.05$) and $TSH > 2.1 U/mL$ predicted TgAb+ (odds ratio = 1.73, $p < 0.05$). There is a relatively high prevalence of subclinical hypothyroidism in adults of Tehran. One decade after initiation of universal salt iodization, the association between positive antibodies with elevated TSH and goiter suggests the pathogenic importance of thyroid antibodies, especially TPOAb.

Authors: Heydarian P, Azizi F.

Source: *Iran J Endocrinol Metabol.* 2003; **16 (4)**: 229 – 41.

RELIABILITY AND VALIDITY OF SHORT FORM-36 (SF-36) QUESTIONNAIRE IN THE STAFF OF SHIRAZ MEDICAL SCHOOL

Measuring perception of the population about their health in order to evaluate the usefulness of health care is important. To ascertain the reliability and validity of the Persian version of SF-36 health questionnaire, this study was conducted on the staff of Shiraz Medical School in 2001.

In this descriptive study, we used Cronbach's alpha coefficient for reliability, one way ANOVA, Spearman's correlation coefficient, and linear regression for validity. Of 134 questionnaires distributed, 112 (83.6%) were sent back. The response rate was 83.6%. SF-36 was internally consistent as Cronbach's alpha coefficient was 0.87 which was more than the least recommended of 0.85. The construct validity of SF-36 was acceptable as the scores of physical component and physical functioning decreased significantly with increasing age. Also, these two scores were less in married people. The correlation between physical and mental component scores and eight scales were acceptable.

The reliability and validity of the translated SF-36 were acceptably high. The translated SF-36 questionnaire is recommended for the assessment of population's health status due to its easy application. However, the choices regarding physical and psychological health seem to need reform. Further studies with greater sample size are strongly recommended to uncover other frailties of translated version of SF-36.

Authors: Motamed N, Ayatollahi A, Zare N, Sadeghi-Hasanabadi A.

Source: *J Zanjani Uni Med Sci.* 2002; **10 (38)**: 38 – 46.
