

EXCERPTS FROM PERSIAN MEDICAL LITERATURE

REASONS FOR NOT ADMITTING BLOOD DONORS IN THE TEHRAN BLOOD TRANSFUSION CENTER

Increasing number of patients with hematologic transmissible infectious diseases, such as, AIDS mandates adopting a special strategy to provide safe blood products. Selection of those donors with the fewest risk factors would be the best strategy. In this study, causes and frequencies of not admitting potential blood donors were reviewed. In a period of 6 months from Autumn 1999 to Winter 2000, information about donor age, sex, occupation and marital status, and the causes for not admitting were obtained and analyzed by SPSS 10 software. Out of the 163,418 potential donors, 32,226 (21.1%) could not donate their blood; among those, 80.7 % were males and 19.35% females, 45.7% were single and 54.3% married. Nearly 5% of donors refused to donate their blood after formally completing the application forms and reading the blood transfusion centre's brochure. Of those rejected, 99% had a known pathology as the cause of rejection. Also of the rejected donors, 91.2% were deferred temporarily and 8.8% permanently; 15.5% had had unsafe previous sexual contact which was the most common cause of rejection; 12.4% were currently consuming an antibiotic; 11.5% had hypotension; and 7.8% had already done Hejamat pilgrimage. Most of the rejected donors were under 25 years old (40.7%) and most (33.1%) were business people. It seems that the rate of blood deferral in Tehran is very high. To decrease this rate we have to consider the main causes of rejection, which are mostly temporary, and then choose the best way to prevent them.

Authors: Abolghasemi H, Kheirkhah M, Hosseini SM.

Source: Hakim. 2002; 5:120 – 5.

STUDY OF IRANIAN SOUTHERN COAST SHRIMPS FOR CONTAMINATION BY *VIBRIO* SPP WITH A FOCUS ON *VIBRIO CHOLERAE* (SUMMER AND FALL-2000)

With regard to the economic importance of shrimp export and reports of cases of cholera, especially on the southern coasts of Iran, and because of the possibility of contamination of surface water with waste water used in shrimp farms, this study of *Vibrio* spp contamination was conducted. In this study marine and farm shrimps from the southern coasts of Iran were evaluated for possible infection with *Vibrio* spp, particularly *Vibrio cholerae*.

In three stages, 770 samples of shrimps from marines and farms in the provinces of Hormozgan, Boshehr and Khuzestan were collected. After early preparation in the provincial food control laboratories, the samples were transferred to Tehran. Each sample included 25 g shrimps in a sterile ice bag. Samples were tested for *Vibrio* spp by enrichment and culture on selective media and by biochemical tests.

Although four species of *Vibrio* having little importance in food hygiene, including *V. parahaemolyticus*, *V. damsella*, *V. alginolyticus* and *V. fluvialis* were isolated from the samples, no *V. cholerae* was found. It is currently very unlikely that shrimps contaminated with *V. cholerae* in the southern coasts of Iran will be found; however, it is still recommended that contaminated surface water with sewage be prevented.

Authors: Hosseini H, Cheraghali A, Yalfani R, Razavilar V.

Source: Hakim. 2002; 5: 114 – 8.

DETERMINATION OF ORGANOCHLORINE PESTICIDES (ALDRIN, DIELDRIN, DDT AND ITS DERIVATVES) IN THE KAROON RIVER BY HPLC

Organochlorine pesticides are important groups of chlorinated compounds that have been used for different purposes since the beginning of the 20th century. The bioaccumulation and biomagnification of these compounds within various food chains are a direct consequence of their chemical stability and lipid solubility. However, even with the ban on their application by World Health Organization and Iranian authorities, it is thought that some of these organochlorine pesticides are still being used in Iran. The aim of this investigation was to identify and quantitate the above-mentioned organochlorine pesticides in Karoon river water by a new high-pressure liquid chromatography (HPLC) method. Determination of their residues in Karoon river water can be considered as an index of their presence in living organisms of Khuzestan Province. For this research, samples were collected from 16 stations along the Karoon river as well as from tap water in the Winter and Autumn of 1999. Extraction was carried by a liquid – liquid extraction method with n-heane. The clean-up process was conducted by fluorocil column chromatography. Identification and quantification of each component was performed by a new reverse-phase HPLC method. A spherisorb (25 X 0.46 cm) 5 µm ODS column was used as stationary phase, and the mobile phase was composed of acetonitrile: methanol: water at 44:40:16, with a flow rate of 0.7 mL/min isocratically. A UV detector set at 218 nm was used for detection.

Method validation showed that recovery, coefficient of variation, detection and quantitation limits were quite satisfactory, all of which are described in the paper. Results obtained indicated that the concentrations of the above-mentioned organochlorine pesticides in tap water were negligible, but in the samples of Karoon river, they were in the unacceptable range of 0.013 to 9.2 µg/L.

Authors: Zand-Moghaddam A, Kalantari H, Mohammad-Poor A, Jafar-Zadeh N.

Source: Sci Med J. 2002; 33: 10 – 8.

A SURVEY OF THE AUTOPSY AND MORTALITY RATE IN MODARRES HOSPITAL, 1990 – 99

There has been no accurate report of mortality rate and malpractice in our surgery departments, however, these reports may lead to increased mortality probability, further stress on physicians and patients, and also distrust on physicians. Autopsy is the most reliable diagnostic technique, and its educational value is noticeable too. We have evaluated the autopsy and mortality rate in Department of Surgery, Modarres General Hospital, between 1990 and 1999.

It was an existing data study. The causes of death were classified in accordance to Gordon Guidelines to five subdirectories: Error in Judgement (EJ), Error in Diagnosis (ED), Error in Technique (ET), Error in Management (EM), and Patient's Disease (PD).

During the study period, a total of 14,041 patients were hospitalized, of whom 12,441 (88.6%) underwent operation. The overall mortality rate was 3.9% (488 patients). Autopsy was performed on 390 cases. The cause of death was: EM (14.5%), EJ (11.6%), ET (10.6%), and ED (7.1%). 59.6% of the patients died due to their own diseases (PD). Error in diagnosis has shown significantly lower probability ($p < 0.0266$).

Our findings are comparable to Western societies, which demonstrate a unique educational performance. Having the same studies performed in other surgery departments, we could promote the educational level of residency training program.

Authors: Pirmoazen N, Arami S, Saidi F.

Source: Pejuhandeh. 2002; 7 (2): 99 – 103.