ISSN: 2071-2510

# Index Medicus for the WHO Eastern Mediterranean Region

with Abstracts



# **IMEMR Current Contents**

June 2012

Vol. 11 No. 2





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Design, layout and printing by WHO Regional Office for the Eastern Mediterranean, Cairo, Egypt

ISSN: 2071-2510

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# **IMEMR Current Contents**

#### Rationale

The Index Medicus for the WHO Eastern Mediterranean Region (IMEMR) has sustained its indexing policy, which has made it a vital current awareness information tool, for technical staff of the Regional Office, health care staff, and medical professionals who are able now to access heath literature published in the Region as soon as it is published. A document delivery service to support the Index has also been activated which will enable any user to acquire a copy of any article listed in the Index.

The cumulative version of the Index Medicus is available now on the Internet as part of EMRO web site. A CD-ROM version of the same is also being provided upon request.

## **Scope and Coverage**

The **IMEMR Current Contents** is issued on a quarterly basis including the most recent articles added to Index Medicus for the Eastern Mediterranean Region (IMEMR) Database<sup>1</sup>.

### Indexing Level

Each article has been indexed and assigned to a "Main Heading", plus added headings according to the Medical Subject Headings (MeSH) list of the National Library of Medicine (NLM). Up to five added headings (including the respective country) have been allowed. Subheadings (or qualifiers) are used in indexing to qualify MeSH headings by pinpointing some specific aspects of the concept represented by the heading, e.g. "LIVER-Drug Effects" indicates that the article is not about the liver in general, but about the effect of drugs on the liver.

# Organization of the IMEMR Subject Index

The Index is organized in alphabetical order, according to the Main Subject Headings (MeSH). In most cases one main subject is assigned to each article. Under the main subject, entries are sorted by Subheading in alphabetical order also. Each entry includes the bibliographic information of the article e.g. title of the article, author(s), first author's affiliation, journal title, year (date of publication), volume number, issue number, page numbers, number of references, subject descriptors and geographic descriptors. Abstracts have been added and are searchable on the database on the Internet. (as shown in Figure 1)

#### Author Index

The IMEMR includes the author's index, which also indicates the subjects covered by each author. (Appendix I)

# **List of EMR Journals by Country**

The IMEMR includes an updated list of EMR Journals, which are indexed in the index. The list is sorted in alphabetical order by the country of publication, which also indicates the number of journals in each country. (Appendix II)

#### List of EMR Journals by Title

The IMEMR includes an updated list of EMR Journals, which are indexed in the index. The list is sorted in alphabetical order by journal's title, which also indicates the status of indexing for each journal. (Appendix III)

## Computer facilities

The Current Contents has been produced using the UNESCO WINISIS package. Countries or journals publishers interested in a subset of the database may be provided with data sets in WINISIS format upon request.

<sup>&</sup>lt;sup>1</sup> Including the countries of Afghanistan, Bahrain, Djibouti, Egypt, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Morocco, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, Yemen

## **Availability of photocopies**

Photocopies of articles cited in IMEMR may be obtained from EMRO Library free of charge upon request.

# Availability on the Internet

This issue, as well as all forthcoming issues, will appear in WHO/EMRO web site on the Internet, as part of the complete edition of the Index. Internet address is <a href="http://www.emro.who.int/information-resources/imemr/imemr.html">http://www.emro.who.int/information-resources/imemr/imemr.html</a>

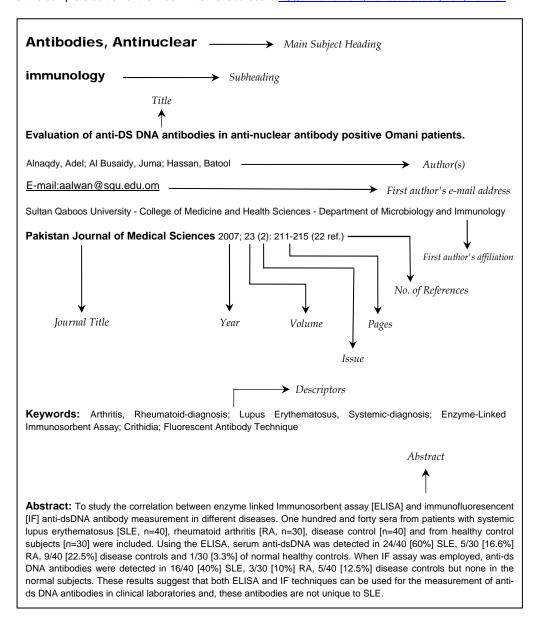


Figure (1): Sample of IMEMR citation

# **Subject Index**

## Abnormalities, Multiple

#### diagnosis

#### Sanjad Sakati syndrome: a case series from Jordan.

Albaramki, J.; Akl, K.; Al Muhtaseb, A.; Al Shboul, M.; Mahmoud, T.; El Khateb, M.; Hamamy, H.

E-mail:jumanabaramki@hotmail.com

Jordan University Hospital - Department of Pediatrics

EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 527-531 (13 ref.)

**Keywords:** Abnormalities, Multiple-genetics; Growth Disorders-diagnosis; Hypoparathyroidism-diagnosis; Intellectual Disability-diagnosis; Seizures-diagnosis; Syndrome; Arabs; Consanguinity

**Abstract:** Sanjad Sakati syndrome is a rare autosomal recessive disorder that has been described in Arabs. We report 8 patients from 7 Jordanian families, 6 of whom underwent genetic testing and were found to have a 12 bp [155-166 del] deletion within the tubulin-specific chaperone E [TBCE gene] in exon 3 at Iq42-43. All patients had severe growth retardation, distinct phenotypic features and hypoparathyroidism. Parental consanguinity was recorded in all families. This is the first genetically proven case series of Sanjad Sakati syndrome in Jordan.

#### Accidents, Traffic

#### prevention and control

#### Author's Response.

Davey, Jeremy; Freeman, James E-mail:je.freeman@qut.edu.au

Queensland University of Technology - Centre for Accident Research and Road Safety - Institute of Health and Biological Innovation

SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 421-423 (12 ref.)

Keywords: Safety; Program Evaluation

#### Re: Improving road safety through deterrence-based initiatives.

Al Azri, Nasser; Al Maniri, Abdullah

E-mail:almaniri@gmail.com

Sultan Qaboos University - College of Medicine and Health Sciences - Department of Family Medicine and Public

Health, Epidemiology and Statistics Unit

SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 420-421 (15 ref.)

Keywords: Safety

# **Acquired Immunodeficiency Syndrome**

#### AIDS: still a hidden epidemic.

Lalani, Nasreen Sulaiman

E-mail:nasreen.sulaiman@aku.edu

Aga Khan University Hospital - Pediatric andAdult Surgery

PJPH - Pakistan Journal of Public Health 2011; 1 (1): 36-41 (13 ref.)

**Keywords:** HIV; Epidemics; Poverty; Emigration and Immigration; Drug Users; Blood Transfusion; Health Literacy; Awareness; Contraception; Sex Education; Stereotyping; Prejudice

**Abstract:** HIV/AIDS is not only related to the health of a person but is a disease of the entire society. As Pakistan is a developing country, HIV/AIDS has major impacts over the socio-economic and other developments of the country. The epidemic is destroying peoples' lives, eroding socio-economic progress, impairing productivity and straining social cohesion. This scholarly paper aims to highlight the underlying individual, societal and structural factors or determinants contributing towards the HIV/AIDS epidemic. To discuss the effects of HIV/AIDS on the population and

development of the country with reference to the available statistics. To suggest possible strategies to fight against this hidden epidemic of HIV/AIDS. A thorough and detailed systematic literature reviews from various national and international journals, databases and local and regional newspapers was conducted to analyze various factors and effects of HIV/AIDS on the population and development of the country with reference to the available statistics. The HIV/AIDS related factors are interdependent and interrelated to each other and are on the rise day by day. HIV/AIDS related issues can only be addressed by using a collective approach at all levels including private, public and governmental in the country.

#### Social and behavioural HIV/AIDS research in Jordan: a systematic review.

Alkhasawneh, E.; Ismayilova, L.; Olimat, H.; El Bassel, N.

E-mail:emanursing@yahoo.com

Hashemite University

EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 487-494 (33 ref.)

Keywords: HIV Infections; Research; Knowledge; Attitude; Cross-Sectional Studies

**Abstract:** This systematic review evaluated the extent of HIV/AIDS research conducted in Jordan related to behavioural and/or social outcomes. MEDLINE, CINAHL, PsycINFO and OVID [1980-2009] were searched as well as the International AIDS Society abstract archives [2000-2009]. Existing reviews and primary studies were cross-referenced for further citations, and unpublished literature and ongoing trials were searched by contacting experts and active researchers in the field. Google Scholar was used to search in peer-reviewed local or regional journals not included in the above-mentioned databases. Searches were also conducted of Arabic literature. Only 8 relevant studies were identified; all were descriptive cross-sectional studies, either quantitative or qualitative. Convenience samples were used in the majority of the studies, severely limiting the generalizability of the findings. The studies focused on HIV/AIDs knowledge and attitudes in the general population and among health professionals; at-risk populations were not assessed.

# **Acute Coronary Syndrome**

#### blood

Diagnostic importance of platelet parameters in patients with acute coronary syndrome admitted to a tertiary care hospital in southwest region, Saudi Arabia.

Abdullah, S. Assiri; Jamil, Abdul moneim; Mahfouz, Ahmed A.; Mahmoud, Zizi S.; Ghallab, Mohamed E-mail:aassiri@yahoo.com

King Khalid University - College of Medicine

Journal of the Saudi Heart Association 2012; 24 (1): 17-21 (25 ref.)

**Keywords:** Blood Platelets; Platelet Count; Retrospective Studies; Cohort Studies; Chest Pain; Angina, Unstable; Myocardial Infarction

Abstract: Identifying risk factors for acute coronary syndrome [ACS] is important for both diagnostic and prognostic purposes. Abnormal platelet parameters, mainly platelet count [PC], mean platelet volume [MPV] and platelet distribution width [PDW] are thought to be among these risk factors. In this study, the associations between PC, MPV and PDW and ACS were investigated in patients admitted to the tertiary care hospital in the south west region of Saudi Arabia. A retrospective cohort of 212 patients with the diagnosis of ACS admitted to Aseer Central Hospital during the period extending from February 1, 2008 to October 31, 2008 were included. The control group consisted of 49 matched subjects who were admitted for chest pain investigation and subsequently found to be non-cardiac chest pain after performing relevant investigations. Blood samples were taken at the time of admission for platelet parameters. Statistical analysis was made using SPSS software and P-values were considered significant if <0.05. A total of 212 patients with acute coronary syndrome [80 patients with MI and 132 patients with UA] and 49 matched controls were studied. The PC was not statistically different among the three groups [283.3 +/- 94.8 x 10[9] L[-1] for MI cases, 262 +/-60.8 x 10[9] L[-1] for UA cases and 275.8 +/- 58.9 x 10[9] L[-1] for controls]. The MPV was significantly larger in MI cases compared to controls [8.99 +/- 1.5 fl vs. 8.38 +/- 0.51 fl, respectively, P < 0.009], similarly, the MPV was significantly larger in UA cases compared to controls [9.23 +/- 1.19 fl vs. 8.38 +/- 0.51 fl, respectively, P < 0.001]. The PDW was significantly higher in MI cases compared to controls [15.88 +/- 1.5 fl vs. 11.96 +/- 1.8 fl, respectively, P < 0.001], similarly, the PDW as also significantly larger in UA cases compared to controls [18.1 +/- 18 fl vs. 11.96 +/- 1.8 fl, respectively, P < 0.019]. Platelet parameters mainly MPV and PDW are readily available and relatively simple and inexpensive laboratory tests which we detected to be significantly raised in patients who have suffered an acute coronary syndrome compared with controls.

#### epidemiology

Acute coronary syndrome, diabetes and hypertension Oman must pay more attention to chronic non-communicable diseases.

Al Lamki, Lamk

E-mail:miournal@squ.edu.com

Sultan Qaboos University - College of Medicine and Health Sciences

SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 318-321 (17 ref.)

**Keywords:** Acute Coronary Syndrome-etiology; Diabetic Angiopathies; Diabetes Complications; Hypertension-complications; Risk Factors; Hypertension-prevention and control

#### Acute coronary syndrome in Oman results from the gulf registry of acute coronary events.

Panduranga, Prashanth; Sulaiman, Kadhim; Al Zakwani, Ibrahim

E-mail:prashanthp 69@yahoo.co.in

Royal Hospital - Department of Cardiology

SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 338-342 (15 ref.)

Keywords: Acute Coronary Syndrome-diagnosis; Acute Coronary Syndrome-mortality; Registries

Abstract: Acute coronary syndrome [ACS] is the most common cause of cardiovascular mortality and morbidity in Western countries. International guidelines for diagnosis and treatment have been developed based on randomised clinical trials. However, data from international registries report a lack of association between guideline recommendations and actual clinical practice. Similarly, the Gulf Heart Association initiated a registry called Gulf Registry of Acute Coronary Events [Gulf RACE]. This registry was developed to determine the characteristics and management of ACS in the Gulf countries including Oman. Here, we report on the results of the various Gulf RACE registry studies from Oman and compare our results with the main Gulf RACE data as well as other international registries.

### mortality

# Age and its relationship to acute coronary syndromes in the Saudi project for assessment of coronary events [SPACE] registry: the SPACE age study.

Al Saif, Shukri M.; Al Habib, Khalid F.; Ullah, Anhar; Hersi, Ahmed; Al Faleh, Husam; Alnemer, Khalid; Tarabin, Amir; Abuosa, Ahmed; Kashour, Tarek; Al Murayeh, Mushabab

E-mail:shukrialsaif@yahoo.com Saud AlBabtain Cardiac Center

Journal of the Saudi Heart Association 2012; 24 (1): 9-16 (21 ref.)

**Keywords:** Age Factors; Prospective Studies; Outcome Assessment (Health Care); Diabetes Mellitus; Smoking; Myocardial Ischemia; Myocardial Infarction; Coronary Angiography; Coronary Artery Bypass

Abstract: To characterize risk profile of acute coronary syndrome [ACS] patients in different age groups and compare management provided to in-hospital outcome. Prospective multi-hospital registry. Seventeen secondary and tertiary care hospitals in Saudi Arabia. Five thousand and fifty-five patients with ACS. They were divided into four groups: </=40 years, 41-55 years, 56-70 years and >/=70 years. Main outcome measures: prevalence, utilization and mortality. Ninety-four percent of patients <40 years compared to 68% of patients >70 years were men. Diabetes was present in 70% of patients aged 56-70 years. Smoking was present in 66% of those <40 years compared to 7% of patients >70 years. Fifty-three percent of the patients >70 years and 25% of those <40 years had history of ischemic heart disease. Sixty percent of patients <40 years presented with ST elevation myocardial infarction [STEMI] while non-ST elevation myocardial infarction was the presentation in 49% of patients >70 years. Thirty-four percent of patients >70 years compared to 10% of patients <40 years presented >12 h from symptom onset with STEMI. Fiftyfour percent of patients >70 compared to 64-71% of those <70 years had coronary angiography. Twenty-four percent of patients >70 compared to 34-40% of those <70 years had percutaneous coronary intervention. Reperfusion shortfall for STEMI was 16-18% in patients >56 years compared to 11% in patients <40 years. Mortality was 7% in patients >70 years compared to 1.6-3% in patients <70 years. For all comparisons [p < 0.001]. Young and old ACS patients have unique risk factors and present differently. Older patients have higher in-hospital mortality as they are treated less aggressively. There is an urgent need for a national prevention.

# **Adiponectin**

#### Is adiponectin related to orofacial clefts?

Khazaei, S.; Kazemi, Sh.; Khazaei, M.

Isfahan University of Medical Sciences - School of Dentistry - Student Research Committee IRCMJ - Iranian Red Crescent Medical Journal 2012; 14 (1): 51-52 (11 ref.)

Keywords: Cleft Lip; Cleft Palate; Diabetes Mellitus

## **Air Pollution**

#### Forecasting extreme PM[10] concentrations using artificial neural networks.

Nejadkoorki, F.; Baroutian, S. E-mail:f.nejadkoorki@yazduni.ac.ir

Yazd University - Department of Environmental Engineering

International Journal of Environmental Research 2012; 6 (1): 277-284 (30 ref.)

Keywords: Air Pollutants; Urban Population; Neural Networks (Computer); Particulate Matter; Meteorology

Abstract: Life style and life expectancy of inhabitants have been affected by the increase of particulate matter 10 micrometers or less in diameter [PM] in cities and this is why maximum PM[10] concentrations have received extensive attention. An early notice system for PM[10] concentrations necessitates an accurate forecasting of the pollutant. In the current study an Artificial Neural Network was used to estimate maximum PM[10] concentrations 24-h ahead in Tehran. Meteorological and gaseous pollutants from different air quality monitoring stations and meteorological sites were input into the model. Feed-forward back propagation neural network was applied with the hyperbolic tangent sigmoid activation function and the Levenberg-Marquardt optimization method. Results revealed that forecasting PM[10] in all sites appeared to be promising with an index of agreement of up to 0.83. It was also demonstrated that Artificial Neural Networks can prioritize and rank the performance of individual monitoring sites in the air quality monitoring network.

# **Anatomy**

#### education

# Perceptions and attitudes of medical students towards two methods of assessing practical anatomy knowledge.

Inuwa, Ibrahim M.; Taranikanti, Varna; Al Rawahy, Maimouna; Habbal, Omar

E-mail:ibrahiml@squ.edu.com

Sultan Qaboos University - College of Medicine and Health Sciences - Department of Human and Clinical Anatomy

SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 383-390 (23 ref.)

**Keywords:** Attitude; Educational Measurement-methods; Computers; Online Systems; Software; Students, Medical; Questionnaires

Abstract: Traditionally, summative practical examination in anatomy takes the form of 'spotters' consisting of a stream of prosections, radiological images and dissections with pins indicating specific structures. Recently, we have started to administer similar examinations online using the quiz facility in Moodle[TM] [a free, open-source web application for producing modular internet-based courses] in addition to the traditional format. This paper reports on an investigation into students' perceptions of each assessment environment. Over a 3-year period, practical assessment in anatomy was conducted either in traditional format or online via learning management software called Moodle[TM]. All students exposed to the two examination formats at the College of Medicine and Health Sciences, Sultan Qaboos University, Oman, were divided into two categories: junior [Year 3] and senior [Year 4]. An evaluation of their perception of both examination formats was conducted using a self-administered questionnaire consisting of restricted and free response items. More than half of all students expressed a clear preference for the online environment and believed it was more exam-friendly. This preference was higher amongst senior students. Compared to females, male students preferred the online environment. Senior students were less likely to study on cadavers when the examination was conducted online. Specimen quality, ability to manage time, and seating arrangements were major advantages identified by students who preferred the online format. Computer-based practical examinations in anatomy appeared to

be generally popular with our students. The students adopted a different approach to study when the exam was conducted online as compared to the traditional 'steeplechase' format.

## **Angiotensin-Converting Enzyme Inhibitors**

## therapeutic use

Angiotensin converting enzyme inhibitor as an additive treatment after successful balloon dilation of a critical pulmonary valve stenosis.

Galal, M.O.; Alzahrani, A.M.; Elhoury, M.E.

E-mail:ogalal@yahoo.com

King Fahad Medical City - Prince Salman Heart Center

Journal of the Saudi Heart Association 2012; 24 (1): 47-50 (6 ref.)

**Keywords:** Balloon Dilation; Pulmonary Valve Stenosis-therapy; Adrenergic alpha-Antagonists; Oxygen; Electrocardiography; Heart Catheterization

**Abstract:** A 2 days old, 2.7 kg heavy baby boy with critical pulmonary stenosis, underwent successful balloon dilation. After the uneventful procedure, he remained oxygen dependent. The baby was given oral angiotensin converting enzyme inhibitor [ACE inhibitor] instead of an infusion of alpha blocker. Within few hours, in the afternoon of the same day after administration of ACE Inhibitor, the baby could be weaned off oxygen, maintaining on room air, oxygen saturation between 87% and 92%. At follow-up, two months later, his saturation was 99% on room air. We believe that some neonates with critical pulmonary valve stenosis who remain oxygen dependent despite successful balloon dilation, could benefit from such management.

#### **Aorta**

#### pathology

#### Photoclinic. what is your diagnosis?

Huang, Chun Chieh; Tsai, Ching Wei; Kuo, Chin Chi

Far Eastern Memorial Hospital - Department of Medical Imaging

Archives of Iranian Medicine 2012; 15 (1): 63-64 (3 ref.)

Keywords: Aortic Diseases-diagnosis; Coral Reefs; Tomography, X-Ray Computed; Vascular Calcification;

Calcinosis

#### **Aortic Coarctation**

#### diagnosis

#### The unusual hypertensive patient.

Al Bugami, Saad; Al Motairi, Mansour; Al Zahrani, Ahmed; Al Zahrani, Atif

E-mail:sbugami@gmail.com

King Saud Bin Abdulaziz University - King Abdulaziz Medical City - king Khalid National Guard Hospital, Jeddah 21423. Saudi Arabia

Journal of the Saudi Heart Association 2012; 24 (1): 41-45 (26 ref.)

**Keywords:** Hypertension; Aortic Valve; Ductus Arteriosus, Patent; Adrenal Glands-pathology; Angiography; Tomography, X-Ray Computed; Pheochromocytoma

**Abstract:** Many young patients with systemic hypertension have secondary causes which if identified early could lessen the cardiovascular complications associated with long standing hypertension. Coarctation of the aorta is one of those rare causes. We describe a 40 year old male with hypertension, coarctation of the aorta, bicuspid aortic valve, PDA and an adrenal mass.

## **Appendicitis**

#### diagnosis

#### Alvarado scoring system in prediction of acute appendicitis.

Jalil, Ana; Shah, Syed Aslam; Saaiq, Muhammad; Zubair, Muhammad; Riaz, Umbreen; Habib, Yasir E-mail:drana24@yahoo.com

Pakistan Institute of Medical Sciences [PIMS] - Department of General Surgery

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 753-755 (19 ref.)

Keywords: Appendectomy; Sensitivity and Specificity; Predictive Value of Tests; Acute Disease

**Abstract:** To evaluate the diagnostic accuracy of Alvarado score for the prediction of acute appendicitis. Analytical study. This study was carried out in the Department of Surgery, Pakistan Institute of Medical Sciences [PIMS], Islamabad, during the period from January 15, 2009 to July 15, 2010. The study included all adult patients of either gender who presented with clinical findings suggestive of acute appendicitis, who were assigned Alvarado score of < 4 pre-operatively and subsequently underwent emergency appendicectomy with histological examination of the resected specimens. Based on the Alvarado score, the patients were stratified into two groups. i.e. Group I [with a score of > 7] and Group II [with a score of 5-7]. Alvarado score was compared with the histopathology. The data was subjected to statistical analysis to measure the objective. The overall sensitivity, positive predictive value and negative predictive value of Alvarado score for acute appendicitis were 66%, 81%, 96%, 29% respectively. The sensitivity was higher though not significant, for males with a score over 7 than females with similar scores [97% vs. 92%]. However, for scores less than 7, sensitivity among males was significantly higher than females with similar scores [79% vs. 61%; p < 0.05]. The presence of a high Alvarado score in adult males is highly predictive of acute appendicitis, however, in women of child bearing age other causes of similar clinical presentation lead to a low diagnostic accuracy of the score.

# **Arabidopsis**

# Functional analysis of glycin rich- RNA binding protein, a suppressor of trehalose-6-phosphate mediating growth arrest in Arabidopsis thaliana.

Aghdasi, Mahnaz; Schluepmann, Henriette

E-mail:Aghdasi46@yahoo.com

Golestan University - Faculty of Science - Department of Biology

IJB - Iranian Journal of Biotechnology 2012; 10 (1): 22-31 (40 ref.)

**Keywords:** RNA-Binding Proteins; Arabidopsis Proteins; Sugar Phosphates; Trehalose-analogs and derivatives; Growth; Phylogeny; Blotting, Western; Chromatography, Gel; Sepharose

Abstract: Metabolism of the alpha-1,1 glucose disaccharide, trehalose, is indispensable in plants. In the Murashige and Skoog [MS] medium, trehalose inhibits plant growth and allocation of carbon to roots. A suppressor of trehalose-6-phosphate [T6P] mediated growth arrest, GR-RBP2, is characterized in more detail. Phylogenetic analysis revealed that GR-RBP2 is a protein of likely prokaryotic origin. A knockout mutant of GR-RBP2 was identified in the T-DNA insertion line SALK-059714, yet plants of this line were not altered with regard to growth on different carbon sources and on trehalose compared to WT. GUS expression analysis showed that GR-RBP2 was detected in adult leaves, flowers and siliques. Expression was particularly high in root tips. GR-RBP2 expression also is insensitive to 100 mM trehalose. TAP-tagged versions of this protein showed that GR-RBP2 is part of a protein complex in planta.

#### Arteriovenous Malformations

#### surgery

Reconstruction of cavopulmonary pathway for the patient with persistent arteriovenous malformations due to offset flow from hepatic vein.

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Children's National Medical Center - Cardiovascular Surgery

Journal of the Saudi Heart Association 2012; 24 (1): 51-54 (9 ref.)

**Keywords:** Heart Bypass, Right; Hepatic Veins; Azygos Vein; Vena Cava, Inferior; Pulmonary Artery; Angiography; Magnetic Resonance Imaging

**Abstract:** The hypoxemia caused by arteriovenous malformations after cavopulmonary shunt in patients with heterotaxy, an interrupted inferior vena cava and single ventricle physiology have been treated by incorporation of hepatic vein flow into the pulmonary circulation. However, some patients have persistent arteriovenous malformations because of offset hepatic venous flow to one pulmonary artery. Various approaches have been used to change offset flow to achieve balanced hepatic flow to the lungs in this patient population. This case report highlights the challenges that may be associated with anastomosis of the azygos vein to the inferior vena cava at the level of the diaphragm and illustrates an alternative technique to direct hepatic venous blood into an affected lung with arteriovenous malformations. The redirection of hepatic venous flow to the affected pulmonary artery resulted in resolution of symptoms within months of surgery.

#### **Ascorbic Acid**

The effect of oral ascorbic acid pretreatment on feeding changes following injection in nucleus accumbens shell in adult male rats.

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Tehran University Medical Journal [TUMJ] 2012; 69 (11): 703-709 (34 ref.)

Keywords: Nucleus Accumbens; Eating; Rats

Abstract: Ascorbic acid [AA] is not synthesized in the brain but it is actively transported through blood-brain barrier by SVCT2 cotransporter and it is stored in high concentrations with heterogeneous distribution in areas such as nucleus accumbens shell [AcbSh] in the mammalian brain. Previous studies have shown that Ascorbic acid injection into AcbSh decreases feeding; therefore, in the present study we evaluated the effects of oral Ascorbic acid pretreatment on changes in feeding upon its injection in AcbSh in adult male rats. Sixty-three adult male rats [220-280 g] were divided into five treatment and five pretreatment groups. The treatment groups included the control [intact] group, sham-operated Ascorbic acid group that received normal saline as vehicle, and three other groups that received different doses of ascorbic acid [10, 50 and 250 microg/rat] by injection into AcbSh for four days. The pretreatment groups received Ascorbic acid [10, 50 and 250 microg/rat] gastric gavage before receiving the aforementioned doses in treatment groups into intra nucleus AcbSh. Feeding measurement was repeated every 12 hours by automatic metabolic cage. The results indicated that all injected doses of Ascorbic acid [10, 50 and 250 microg/rat] into nucleus accumbens shell decrease food intake [P<0.05] in rats and oral Ascorbic acid pretreatment had no effects in this regard. Our findings show that ascorbic acid is an effective factor in feeding regulation. Oral pretreatment seems to have no influence on the central effects of ascorbic acid in the nucleus accumbens shell.

#### **Aspirin**

#### therapeutic use

Prevalence of aspirin use and its concurrent use with ibuprofen among two middle eastern countries: Jordan and the UAE - a cross sectional study.

Abu Gharbieh, Eman; Fahmy, Sahar; Basheti, Bazigha Abdul Rasool Iman; Mohammad, Mohammad; Bustanji, Yasser Dubai Pharmacy College

Jordan Journal of Pharmaceutical Sciences 2011; 4 (3): 155-165 (30 ref.)

**Keywords:** Prevalence; Ibuprofen-therapeutic use; Cross-Sectional Studies; Drug Interactions; Cardiovascular Diseases-prevention and control; Questionnaires

Abstract: The objective of this study was to assess the prevalence of aspirin use as a prophylactic agent in two countries: Jordan and the United Arab Emirates in addition to the frequency of concurrent use of aspirin and ibuprofen which might be associated with lower cardio protection. The data was collected using a structured questionnaire from December 2009 to February 2010. The results showed significantly higher proportion of Jordanian patients with cardiovascular problems [85.97%] who were using aspirin as compared to patients from the United Arab Emirates [71.26%] [p= 0.0205, chi square test]. The percentage of Jordanian patients with different cardiovascular problems taking aspirin concurrently with ibuprofen was relatively high. Patients' adherence to aspirin administration in both populations was suboptimal. Patients' age and previous myocardial infarction episodes were found to have a

significant [p<0.001] association with the use of aspirin in both populations. These results call for reasonable strategies for aspirin administration in both countries.

#### **Asthma**

#### Feasibility of a peer-led, school-based asthma education programme for adolescents in Jordan.

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EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 468-473 (27 ref.)

**Keywords:** Health Education-methods; National Health Programs; Friends; Knowledge; Health Promotion; Questionnaires; Awareness; Students; Program Evaluation; Schools

Abstract: The Adolescent Asthma Action programme [Triple A] has been used successfully to promote asthma knowledge, awareness and quality of life in adolescents with asthma in Australia. We describe the feasibility and acceptability of an adaptation of this English-language, peer-led, asthma education programme in a girls' high school in Northern Jordan. The pilot was conducted by bilingual health workers. Feasibility, acceptability and adaptability were measured through participation rates, open-ended questionnaires completed by peer leaders, a focus group for junior students and reflective journal notes. The programme was well-received by staff and students, with high levels of participation. The peer-led approach was viewed positively. Students reported that they enjoyed the interactive learning activities and the opportunity to practise English. The students reported increased asthma knowledge and awareness, with students with asthma reporting receiving more support from peers. A peer-led asthma education programme is feasible and acceptable in the Jordanian school context.

#### Atrioventricular Block

#### A rare cause of trauma in the elderly: Mobitz type-II second-degree atrioventricular block.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 769-771 (10 ref.)

**Keywords:** Aged; Rib Fractures-complications; Adrenergic beta-Antagonists; Wounds and Injuries-complications; Pacemaker, Artificial; Thoracic Injuries

**Abstract:** Cardiac rhythm problems are frequently seen in the geriatric population, and they can experience trauma after syncope. A 78-year-old female was examined for thoracic trauma after falling. With a history of -blocker use, arterial blood pressure measured 60/30 mmHg and pulse rate was 30 bpm. Electrocardiogram showed a Mobitz type-II second-degree atrioventricular block. There was no response to atropine, so a transcutaneous external pacemaker and after that a transvenous pacemaker were applied. On the 4th day, the pacemaker was removed and the patient was discharged.

#### **Bacterial Proteins**

#### In silico genome-wide screening for TnrA-regulated genes of Bacillus clausii.

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IJB - Iranian Journal of Biotechnology 2012; 10 (1): 61-65 (14 ref.)

**Keywords:** Bacteriocins; Repressor Proteins; Nitrogen; Transcription Factors; Genome-Wide Association Study; Genome; Consensus Sequence; Glutamate-Ammonia Ligase; Operon; ATP-Binding Cassette Transporters; Regulatory Elements, Transcriptional

**Abstract:** Bacillus clausii TnrA transcription factor is required for global nitrogen regulation. In order to obtain an overview of gene regulation by TnrA in B. clausii KSM-K16, the entire genome of B. clausii was screened for the consensus sequence, 5'-TGTNAN7TNACA-3' known as the TnrA box, and 13 transcription units were found containing a putative TnrA box. The TnrA targets identified in this study were tnrA, glnA, nrgA, nasFDEB, puc genes, licT, the two operons of the oligopeptide ABC transporter, lytR, transcriptional regulator of the Lrp/AsnC family, sodium-dependent transporter of SNF family, hyu genes and a biochemically uncharacterized protein.

#### **Bacteriuria**

#### epidemiology

#### Asymptomatic bacteriuria in antenatal patients in Ilorin, Nigeria.

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Oman Medical Journal 2012; 27 (1): 31-35 (38 ref.)

**Keywords:** Prospective Studies; Pregnancy; Prevalence; Staphylococcus aureus; Proteus; Nitrofurantoin; Gentamicins; Prenatal Care

**Abstract:** To determine the prevalence of asymptomatic bacteriuria, bacteriology and sensitivity pattern in Ilorin using the gold standard of urine culture. A prospective study was carried out from 1st July to 31st October 2007, at the University of Ilorin Teaching Hospital [UITH] on 125 consenting asymptomatic pregnant women, A structured proforma was used to collect information from the women and a midstream urine specimen collected for bacteriological culture, Of the 125 pregnant women, 50 had bacteriuria on urine culture giving a prevalence of 40%. The mean age of the women was 28.5 years with a standard deviation of 4.95. The age ranged between 14 and 40 years. Staphylococcus was the commonest pathogen isolated [72%], followed by Proteus spp [14%]. Most of the organisms showed good sensitivity to Nitrofurantoin and gentamicin. The prevalence of asymptomatic bacteriuria in Ilorin is high and routine urine culture is advocated for all pregnant women at booking.

#### **Balloon Dilation**

# Initial experience of using intracardiac echocardiography [ICE] for guiding balloon mitral valvuloplasty [BMV].

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Journal of the Saudi Heart Association 2012; 24 (1): 23-27 (13 ref.)

Keywords: Mitral Valve Stenosis-therapy; Echocardiography

**Abstract:** BMV is an established treatment for rheumatic mitral valve stenosis. The procedure is historically guided by fluoroscopy, and the role of intracardiac echocardiogram [ICE] guidance is not well defined. We report our initial experience of using ICE to guide BMV procedures. During BMV procedure, ICE catheter was inserted into the right atrium from the right femoral vein, and the septal puncture was monitored by ICE, as well as positioning of the balloon in the mitral valve. Comparisons were made between ICE, transthoracic echocardiography [TTE], and catheterization derived hemodynamic measurements [cath]. Seventeen patients with mitral stenosis underwent the procedure. The mean age was 44.4 +/- 21 years. The mean MV area increased from 0.9 +/- 0.1 cm[2] to 1.7 +/- 0.2 cm[2], P < 0.0001 and the mean gradient decreased from 12.6 +/- 5.8 mmHg to 4.9 +/- 1.8 mmHg, P < 0.001. Atrial septum puncture and guidance of the balloon into the MV apparatus were obtained in all patients under ICE guidance. Severe MR developed in one patient and was readily detected by ICE. ICE derived gradient measurements were comparable to those obtained by TTE, and cath. ICE guidance of BMV is feasible, and useful in monitoring safe septal puncture, optimizing balloon positioning, and in detecting complications. The hemodynamic measurements obtained were comparable to those obtained by TTE, and cath.

#### **Benzimidazoles**

#### therapeutic use

Dabigatran etexilate, a novel oral direct thrombin inhibitor, for preventing thromboembolic events after knee replacement arthroplasty.

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Tehran University Medical Journal [TUMJ] 2012; 69 (11): 725-729 (15 ref.)

**Keywords:** Pyridines-therapeutic use; Antithrombins; Venous Thromboembolism-prevention and control; Arthroplasty, Replacement, Knee

**Abstract:** Dabigatran etexilate is one of the few direct thrombin inhibitors with anti-coagulant activities and the following distinctive features: taken orally, no need to closely monitor for complications, and no need for regular dose adjustments. Relying on the above mentioned valuable advantages, dabigatran etexilate can be considered as a premier choice for the prevention of venous thromboembolism after knee replacement arthroplasty. Forty five patients undergoing 50 knee replacement surgeries were included in this case-series study undertaken in Hazrat Rasool Akram and Khatam-alanbia Hospitals during 2010. Dabigatran, etexilate was administered for the prevention of venous thromboembolism after knee arthroplasty in doses of 110 mg in the first 1-4 h after surgery followed by daily doses of 220 mg for 10 days. Patients were examined 3 times and a color Doppler sonography was performed on the Ilth day to check for venous thrombosis. Finally, the patients were re-examined at the end of the 1st and the 3rd months postoperatively. Only one out of 45 patients was diagnosed to have venous thrombosis on sonography done on the 11th day but the patient did not have any symptoms and repeat sonographies at the end of the 1st and the 3rd months postoperatively showed no venous thrombosis either. No complications were witnessed in the patients in the 3-month follow-up period. Dabigatran etexilate [220 mg/d for 10 days] can be an effective drug against venous thrombosis after total knee replacement surgeries.

#### beta-Lactamases

# Frequency of extended spectrum beta lactamase producing enterobacteriaceae among urinary pathogen isolates.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 741-744 (25 ref.)

**Keywords:** Disk Diffusion Antimicrobial Tests; Enterobacteriaceae; Klebsiella; Escherichia coli; Enterobacter; Proteus mirabilis; Urinary Tract Infections

**Abstract:** To determine the frequency of extended-spectrum beta lactamase [ESBL] producing Enterobacteriaceae in urinary isolates. Observational study. Ziauddin University Hospital, Karachi, from February to October 2008. All members of Enterobacteriaceae isolated from urinary samples of in-patients were included and identified using standard biochemical tests. Urinary samples from out-patients were excluded. Detection of ESBL was carried out by double disk diffusion technique. Statistical analysis was performed by SPSS version 10. A total of 289 isolates of Enterobacteriaceae were identified during the study period. Of those 190/289 [65.7%] of the isolates were found to be ESBL producing. ESBL positivity within individual organism group was highest in Klebsiella species 84.16%, followed by Escherichia coli 68.55%, Enterobacter species 36.84%, and Proteus mirabilis 28.55%. Mean age of patients with ESBL producing organisms was 58.69 +/- 18.97 years. ESBL production was almost similar in all age groups. A high frequency of ESBL producing organisms especially Klebsiella species and Escherichia coli amongst the hospital obtained urinary isolates was documented particularly in the older age group. The data points towards an urgent need for regular screening and surveillance for ESBL producing organisms in this region.

#### beta-Thalassemia

## psychology

# Quality of life of Iranian beta-thalassaemia major patients living on the southern coast of the Caspian Sea.

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EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 539-545 (34 ref.)

**Keywords:** Quality of Life; Questionnaires; Cross-Sectional Studies; Severity of Illness Index; Personal Satisfaction; Mental Health

**Abstract:** In the present study, the aim was to explore the quality of life of thalassaemia major [TM] patients according to age, sex, school performance, severity and complications of the disease. A cross-sectional descriptive

study was conducted. Quality of life was evaluated by 4 questionnaires; demographic characteristics, the short form 36 health survey [SF-36], Persian version of symptoms checklist-90-revised [SCL-90-R] and life satisfaction index [LSI]. 687 [41.08%] of the eligible patients with TM completed the questionnaires. With the SF-36 questionnaire, 329 [47.9%] participants had an excellent level of physical functioning. With the SCL-90-R questionnaire, 446 [64.9%] participants had global severity index of > 0.7, considered psychiatric patients, 141 [20.5%] patients had GSI between 0.4 and 0.7, considered suspected psychiatric patients and 100 [14.6%] participants had GSI of < 0.4, considered non-psychiatric patients. The mean score of LSI questionnaire was 20.50 [SD 5.95], range 2-37. Beta-TM patients are at risk of psychiatric symptoms and need appropriate psychiatric counseling.

#### **Bezoars**

#### diagnosis

#### Trichobezoar.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 763-765 (9 ref.)

Keywords: Nausea; Gastrostomy; Endoscopy, Gastrointestinal; Hair; Radiography, Abdominal

**Abstract:** The case report describes a 13 years old girl, who presented with 3 days history of nausea. She had a hard palpable mass in abdomen and anaemia. There was a history of hair ingestion for the past 3 years, which gave the first clue to the diagnosis of trichobezoar. Radiology helped diagnose the condition with basic modalities including ultrasound, plain X-ray abdomen and upper gastrointestinal contrast study. The diagnosis was confirmed by endoscopy and the bezoar was successfully removed by gastrotomy.

#### **Biofuels**

# Examining a hybrid plug-flow pilot reactor for anaerobic digestion of farm-based biodegradable solids.

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International Journal of Environmental Research 2012; 6 (1): 335-344 (28 ref.)

Keywords: Agriculture; Swine; Feces; Gossypium; Methane

Abstract: Plug-flow digesters with periodic loading mechanism are more enthusiastic than fully mechanized digestion plants for the majority of small or medium scale farms according to the costs and operational complexities. A dual-compartment plug-flow reactor equipped with a passive heating system was designed and experimentally operated by purpose of demonstrating a simple and low cost technology for handling the biodegradable agricultural wastes. The reactor was successfully started up with pig feces as feedstock under a quasi-continuous loading and semi-dry condition with an average total solids content of 12.8% inside the digester and an average organic loading rate of 2.06kg-VS/[m[3].d]. The start-up phase was followed by co-digestion of pig feces and pre-treated cotton stalk. Even though the digester actually worked at a temperature range 12 to 30% below the optimal mesophilic level, acceptable rates of methane generation and VS destruction were observed. The biogas and methane yield were measured for single digestion stage as 0.332 and 0.202 m[3] [kg-added VS] and for co-digestion stage as 0.482 and 0.325 m[3] [kg-added VS] respectively. The cumulative biogas production data demonstrated a reasonable correlation [R[2] over 0.99] with a simplified consecutive kinetic model.

## **Birth Weight**

Low birth weight and relationship with maternal dietary habits during third trimester of low risk pregnancies in a hospital based study in Pakistan.

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#### PJPH - Pakistan Journal of Public Health 2011; 1 (1): 11-16 (33 ref.)

**Keywords:** Infant, Low Birth Weight; Food Habits; Pregnancy Trimester, Third; Pregnancy; Maternal Nutritional Physiological Phenomena; Follow-Up Studies; Questionnaires

**Abstract:** The study is conducted to observe the relationship of maternal diet in third trimester of pregnancy with the neonatal birth weight, in the women at a low risk of delivering low birth-weight neonates. This hospital based follow up study was conducted during the months of April-November 2007 at the Gynaecology and Obstetrics Unit of Pakistan Institute of Medical Sciences, Islamabad. Pregnant women with low risk of delivering low birth weight neonates were registered at 26 weeks of pregnancy, by employing consecutive [non-probability] sampling technique. Dietary history was taken by a semi structured Food Frequency questionnaire and 24 hours dietary recall at the time of registration. Written informed consent was obtained. Thirteen percent of women with normal pregnancies delivered low birth weight neonates weighing <2500 grams [including preterm and full term neonates]. The women delivering low birth weight neonates had significantly lower consumption of calories [P= 0.0002], carbohydrate [P=0.008], and lipid [P=0.0005] during the third trimester. In addition the mean maternal weekly weight gain and maternal hemoglobin concentration was also significantly lower in the women who delivered LBW neonates. The frequency of total protein, meat, carbohydrates and fruits consumption per week, calculated from food frequency questionnaire conducted at the start of third trimester was also lower in the women who delivered LBW neonates. The consumption of soft drinks and tea per week was higher in the women who delivered LBW neonates. The consumption of soft drinks and tea per week was higher in the women who delivered LBW neonates. The consumption of soft drinks and tea per week was higher in the women who delivered LBW neonates, although this finding was not statistically significant. This study suggests the importance of good maternal nutrition during pregnancy for the optimal newborn weight.

## **Blastocystis hominis**

#### drug effects

In vitro and in vivo effects of Quillaja saponaria on Blastocystis hominis isolates.

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PUJ - Parasitologists United Journal 2011; 4 (1): 101-108 (49 ref.)

**Keywords:** Quillaja-chemistry; Plant Extracts-therapeutic use; Feces; Rats; Blastocystis hominis-ultrastructure;

Microscopy, Electron; Treatment Outcome

Abstract: Blastocystis hominis is a protozoan parasite that inhabits the human intestinal tract. Various epidemiological surveys have recorded 50-60% prevalence in developing countries. Until now, the most commonly recommended drug is metronidazole [MTZ] which can cause undesirable side effects and failures in treatment. To investigate the in vitro and in viva effects of Quillaja saponaria [QS] against clonal cultures of B. hominis and to demonstrate its implemented ultrastructural changes. Two fresh stool isolates of B. hominis were processed for in vitro cultivation using Jones media. In comparison to MTZ, different concentrations of QS were added to assess its lethal dose; QS [500 micro g] was used to assess programmed cell death for both isolates, using transmission electron microscopy [TEM]. Experimental infection of rats was performed to assess QS induced intestinal histopathological changes as compared to treatment with MTZ. With isolate I. QS [1000 micro g/ml] produced a high significant reduction [P</=0.01] in both hiving cell count [LCC] and hiving cell rate [LCR] on day 1 compared to the control. In isolate II, QS produced mild significant reduction on day I with all concentrations, mild significant reduction [P</=0.05] on day 3 [500 micro g/ml and 1000 micro g/ml] and high significant reduction [P</=0.01] on day 6 [1000 micro g/ml]. A mild significant reduction [P</=0.05] in both LCC amid LCR for both isolates on day 1 was observed using 500 micro g/ml QS. A remarkable improvement in the intestinal histopathological changes in infected rats receiving 500 micro g/ml QS was observed in comparison with those receiving MTZ. TEM showed B. hominis programmed cell death with apoptotic-hike features. QS is a promising new herbal therapeutic agent against B. hominis infection.

#### **Blood Donors**

The causes for lack of interest to blood donation in eligible individuals, Mashhad, northeastern

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IRCMJ - Iranian Red Crescent Medical Journal 2012; 14 (1): 37-40 (16 ref.)

Keywords: Knowledge; Attitude

**Abstract:** Donor recruitment and retention are significant problems in blood collection agencies around the world. The Aim of this study was to determine the causes of lack of interest to blood donation in eligible individuals in Mashhad, Northeast of Iran. This was a descriptive study. Cases were 1130 non-donor individuals. Participants were selected from eligible individuals in different regions of Mashhad. In this study, surveys included information about age groups, gender, residence area, marriage, education; living situation and job as background variables. Less than 30% of the cases had enough knowledge about blood donation. There was a significant relationship between location, age, education, occupation and social status with knowledge of blood donation, but there was not a correlation between gender and marital status. There are some factors which affect the decision for blood donation. There is a need to change the negative attitude by increasing the knowledge considering the individual and the social status.

# **Bone Marrow Transplantation**

# Five-year follow-up of the local autologous transplantation of CD133+ enriched bone marrow cells in patients with myocardial infarction.

Ahmadi, Hossein; Farahani, Maryam Moshkani; Kouhkan, Azam; Moazzami, Kasra; Fazeli, Roghayeh; Sadeghian, Hakimeh; Namiri, Mehrnaz; Madani Civi, Manouchehr; Baharvand, Hossein; Aghdami, Nasser

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**Archives of Iranian Medicine** 2012; 15 (1): 32-35 (22 ref.)

**Keywords:** Transplantation, Autologous; Antigens, CD; Peptides; Glycoproteins; Myocardial Infarction; Follow-Up Studies; Coronary Artery Bypass; Echocardiography; Cohort Studies

Abstract: The implantation of a CD133+ bone marrow cell population into an ischemic myocardium has emerged as a promising therapeutic modality for myocardial regeneration and restoration of ventricular contractility. While previous studies have documented the short-term safety and efficacy of CD133+ cell transplantation in patients with acute myocardial infarction, there are few reports of long-term follow-up results. Here, we present the results of long-term follow-up of our acute myocardial infarction patients who were treated with intra-myocardial injection of CD133+ cells after coronary bypass graft. After five years, 13 patients in the cell transplantation group and 5 patients in the control group underwent safety and efficacy investigations by New York Heart Association classification and two-dimensional echocardiography [2D echo]. During the five-year study period, no major cardiac adverse events were reported among patients who received CD133+ stem cells. Regarding efficiency, we observed no statistically significant treatment effects for the echocardiographic parameters [left ventricular end-diastolic and end-systolic volumes, and resting ejection fraction] measured during the follow-up period. However, detailed analysis of regional wall motion revealed an improvement in the Wall Motion Score Index from baseline to the six month follow-up, which was maintained during the follow-up period. Taken together, the long-term results of the present study indicate that transplantation of CD133+ is a safe and feasible procedure; however, we could not show any major benefits in our patients. Thus, this issue needs to be addressed by conducting other studies with more patients.

# **Breast Neoplasms**

# Does the missing data imputation method affect the composition and performance of prognostic models?

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IRCMJ - Iranian Red Crescent Medical Journal 2012; 14 (1): 31-36 (29 ref.)

Keywords: Logistic Models

Abstract: We already showed the superiority of imputation of missing data [via Multivariable Imputation via Chained Equations [MICE] method] over exclusion of them; however, the methodology of MICE is complicated. Furthermore, easier imputation methods are available. The aim of this study was to compare them in terms of model composition and performance. Three hundreds and ten breast cancer patients were recruited. Four approaches were applied to impute missing data. First we adopted an ad hoc method in which missing data for each variable was replaced by the median of observed values. Then 3 likelihood-based approaches were used. In the regression imputation, a regression model compared the variable with missing data to the rest of the variables. The regression equation was used to fill the missing data. The Expectation Maximum [E-M] algorithm was implemented in which missing data and regression parameters were estimated iteratively until convergence of regression parameters. Finally, the MICE method was applied. Models developed were compared in terms of variables significantly contributed to the multifactorial analysis.

sensitivity and specificity. All candidate variables significantly contributed to the MICE model. However, grade of disease lost its effect in other three models. The MICE model showed the best performance followed by E-M model. Among imputation methods, final models were not the same, in terms of composition and performance. Therefore, modern imputation methods are recommended to recover the information.

#### **Bromosuccinimide**

# Utility of N-bromosuccinimide as an environmental-friendly reagent for sensitive determination of olanzapine in pharmaceuticals.

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Jordan Journal of Pharmaceutical Sciences 2011; 4 (3): 209-221 (43 ref.)

**Keywords:** Spectrophotometry; Titrimetry; Benzodiazepines; Pharmacy

Abstract: One titrimetric and two spectrophotometric methods are described for the determination of olanzapine [OLP] in bulk drug and dosage forms. The methods use N-bromosuccinimide [NBS] and two-dyes, namely quinoline yellow and metanil yellow, as reagents. In titrimetry, an acidified solution of OLP was titrated directly with NBS using methyl orange as indicator. Spectrophotometry involves the addition of a known excess of NBS to OLP in acid medium followed by determination of unreacted NBS by reacting with a fixed amount of either quinoline yellow and measuring the absorbance at 410 nm [method A] or metanil yellow and measuring the absorbance at 530 nm [method B]. Titrimetric method is applicable over a range of 1-10 mg of OLP, and the reaction stoichiometry is found to be 1:6 [OLP: NBS]. In spectrophotometry, Beer's law was obeyed in the concentration ranges of 0.1-1.2 and 0.1-1.5 micro g ml[-1] OLP for method A and method B, respectively. The molar absorptivity, Sandell sensitivity, limits of detection and quantification are also reported for both the spectrophotometric methods. The proposed methods were applied successfully to the determination of OLP in tablets. The reliability and accuracy of the methods were further ascertained by recovery studies. A major advantage of the use of NBS is that the by-product succinimide can be easily recovered and recycled to NBS.

#### **Burns**

#### surgery

#### Keystone design sliding skin flap for the management of small full thickness burns.

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SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 412-414 (7 ref.)

Keywords: Skin Transplantation; Skin-injuries; Skin-surgery; Surgical Flaps; Transplants; Reconstructive Surgical

Procedures; Treatment Outcome

**Abstract:** Deep dermal burns and full thickness burns are generally managed by excision and split thickness skin grafting. The skin graft may lead to unacceptable colour changes and be aesthetically unacceptable. Also, there may be a contour defect and, furthermore, it is followed by varying degrees of contracture. The keystone design sliding flap, first described in 2003, avoids the need for grafting and is not associated with any skin graft problems. We report two cases of the use of this flap as the primary surgery in reconstruction of small full thickness burn defects.

#### **Butterflies**

Perception of visitors' environmental impacts of ecotourism: a case study in the valley of butterflies protected area, Rhodes Island, Greece.

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International Journal of Environmental Research 2012; 6 (1): 245-258 (56 ref.)

Keywords: Perception; Environment; Ecology

**Abstract:** Visitor management is considered important for the sustainable development of protected areas as the presence of visitors may cause negative impacts on wildlife and vegetation. Within this framework, visitor impacts and perceptions are considered critical for decision-making and planning of future management regimes. This paper resumes opinions of visitors of the Valley of Butterflies in Rhodes Island, Greece, a very popular tourist destination in both national and international level, with more than 300,000 visitors per year. These opinions record perceptions on the environmental impacts of eco-tourism in the Valley and are necessary for the formulation and implementation of a visitor management strategy in the area. Descriptive statistics are estimated, as well as a probit model exploring factors affecting visitors' satisfaction. Results call for more information and education of the visitors about the Valley's conservation and ecological value, better facilities and services provided, site hardening and a better policy of prices.

#### Candida

#### drug effects

# Comparison of the effect of non-antifungal and antifungal agents on Candida isolates from the gastrointestinal tract.

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**Archives of Iranian Medicine** 2012; 15 (1): 27-31 (31 ref.)

**Keywords:** Antifungal Agents; Gastrointestinal Tract; Trifluoperazine; Propranolol; 2-Pyridinylmethylsulfinylbenzimidazoles; Ketoconazole; Amphotericin B; Candida albicans; Candida tropicalis

Abstract: Non-antifungal drugs appear promising in treatment of opportunistic infections of Candida spp. that are often resistant to current antifungals. The broth macrodilution method [NCCLS M27-P document] was used to compare the antifungal activity of trifluoperazine, pro-pranolol, and lansoprazole with that of ketoconazole and amphotericin B, using 50 yeast isolates from the GI tract. The minimum fungicidal concentrations [MFCs], resistance rates and the time required for fungicidal activity of the drugs [2 - 48 hours] were determined. The most effective antifungal activity was exhibited by trifluoperazine. Its MFC was 32 microg/mL for Candida albicans [3.3% resistance] and Candida spp. [0% resistance] yeasts, and 64 ug/mL for Candida tropicalis with 10% resistance. The MFC for C. albicans and Candida spp. was comparable to that of ketoconazole. However, the time required for the inhibitory effect [6 hr] was shorter than that of ketoconazole [48 hr] or amphotericin B [24 hr]. The time required for the inhibitory activity on C. tropicalis was 24 hr, which was shorter than that of ketoconazole and amphotericin B [48 hr]. A considerable number [40%] of Candida spp. showed resistance to ketoconazole, and 20% of C. tropicalis showed resistance to amphotericin B. Trifluoperazine, an antipsychotic drug, exhibited effective antifungal activity with the MFC, comparable to ketoconazole [32 microg/mL]. Among the three yeast groups, C. tropicalis showed resistance to trifluoperazine and amphotericin B, and Candida spp. was considerably resistant to ketoconazole. Trifluoperazine could be considered as an alternative antifungal when encountering Candida spp. resistant to current antifungals.

# Carcinoma, Hepatocellular

#### diagnosis

#### Can we use GP73 as a biomarker for the detection of hepatocellular carcinoma?

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**Egyptian Liver Journal** 2011; 1 (1): 43-46 (26 ref.)

**Keywords:** Adaptor Protein Complex 1-blood; Biological Markers; alpha-Fetoproteins-blood; Mass Screening; Sensitivity and Specificity

**Abstract:** Hepatocellular carcinoma [HCC] is one of the top five leading causes of death in Egypt and its prevalence is increasing in the next 10-20 years. We aimed to detect the serum Golgi protein 73 [GP73] in patients with cirrhosis and with HCC, and to determine its sensitivity and specificity as a screening tool for the detection of HCC in this study. Serum GP73 was estimated in 93 participants [patients with HCC, patients with cirrhosis, and healthy controls]. GP73 was elevated in patients with HCC and liver cirrhosis; serum level was very high in HCC patients [P<0.01] when

compared with the other studied groups. GP73 had sensitivity of 76%, specificity of 75%, at a cut-off value of 16.2 ng/ml with area under the receiver operator characteristic of 0.825 when compared with alpha-fetoprotein that showed a sensitivity of 63%, specificity of 43% at a cut-off value of 16.5 ng/ml and area under the receiver operator characteristic of 0.611. By combining alpha-fetoprotein and GP73 for the diagnosis of HCC, sensitivity and specificity were [93 and 25%], respectively. There is a significant positive correlation between diameter of the focal lesion and GP73 [P=0.01 and r=0.071]. Nonsignificant positive correlation was detected as regards serum GP73 and the number of HCC. GP73 can be used as a screening tool for the detection of HCC. Moreover, it shows a higher serum level with larger lesions.

# Evaluation of plasma osteopontin level as a biomarker for hepatocellular carcinoma in Egyptian

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Egyptian Liver Journal 2011; 1 (1): 38-42 (24 ref.)

Keywords: Tumor Markers, Biological; Osteopontior-blood; alpha-Fetoproteins-blood

Abstract: Hepatocellular carcinoma [HCC] is a major health problem worldwide. Up to 80% of HCCs develop against a background of cirrhosis of the liver, and although we believe that surveillance of the at-risk cirrhotic population could aid earlier detection of the disease and decrease the cancer-related mortality rate, our this success is limited by the lack of sensitive biomarkers. To evaluate plasma osteopontin level as a potential marker of HCC compared with alpha fetoprotein. This study was conducted on 80 patients classified into two groups [HCC group n=40] and chronic liver disease group n=40], in addition to 30 age-matched and sexmatched healthy participants as a control group. HCC was diagnosed histologically or by imaging. Plasma alpha fetoprotein and plasma osteopontin levels were quantitatively determined using enzyme-linked immunosorbent assay kits. Plasma osteopontin level was significantly higher in patients with HCC compared with chronic liver disease and control participants [P<0.01]. Osteopontin at the best cutoff value [325.5 micro g/ml] had sensitivity of 87.5%, specificity of 80%, positive predictive value of 85.3%, and negative predictive value of 82.7% for detection of HCC cases [area under the curve=0.876]. Osteopontin level was not correlated to a fetoprotein level. Comparing osteopontin with a fetoprotein for prediction of patients with HCC, alpha fetoprotein at a cut-off value of 200 micro g/ml failed to predict 21 patients [52.5%], of whom 16 patients [76%] would be diagnosed by elevated osteopontin above 325 micro g/ml [cut-off value]. OPN is clearly a potential diagnostic marker for HCC. Osteopontin level of 325 micro g/ml was proposed as a significant cut-off value for the diagnosis of HCC

#### **Cervix Uteri**

#### The use of total cervical occlusion along with Mcdonald cerclage in patients with recurrent miscarriage or preterm deliveries.

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Oman Medical Journal 2012; 27 (1): 63-65 (20 ref.)

Keywords: Cerclage, Cervical; Abortion, Habitual; Obstetric Labor, Premature; Pregnancy Trimester, Second;

Pregnancy; Prospective Studies

Abstract: To study the fetal outcome with the use of McDonald cerclage and total cervical occlusion in women with recurrent mid-trimester miscarriages or preterm deliveries; as well as complications of total cervical occlusion in the women. Prospective descriptive observational study on patients with two or more mid-trimester miscarriages, deliveries before 36 weeks, or patients who have experienced failure of transvaginal cerclage, Twenty-six women were studied. Of these, 92% delivered at term. Two women delivered at 33 and 35 weeks, respectively. There was one neonatal death. Take home baby rate was 96.2%. There was no serious maternal morbidity among the patients. The addition of external cervical OS occlusion to McDonald cerclage could improve fetal outcome in women with recurrent midtrimester miscarriages and preterm deliveries.

#### Cesarean Section

#### Appropriateness of cesarean sections using the RAND appropriateness method criteria.

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Haghollai, Fedyeh; Ardebili, Hasan Eftekhar; Mahmoudi, Mahmoud Yasouj University of Medical Sciences - School of Health - Department of Public Health

Archives of Iranian Medicine 2012; 15 (1): 8-13 (33 ref.)

Keywords: Pregnancy: Program Evaluation

**Abstract:** The aim of this study was to identify the appropriateness of cesarean sections, performed in Tehran hospitals using standardized Rand Appropriateness Method [RAM] criteria. In this study we used the RAM criteria. In order to prepare the list of cesarean scenarios, clinical guidelines were selected, and the Appraisal of Guidelines for Research and Evaluation was used to choose the most appropriate. Two panels were held with the participation of related specialists. The scenarios derived through this method were compared with data existing in the medical records of 250 women who underwent cesarean sections in selected hospitals affiliated with Tehran University of Medical Sciences. The appropriateness rate of the cesarean sections was calculated. Out of 250 cases of cesarean sections performed, 91 [36.4%] were inappropriate, 41 [16.4%] were equivocal and 118 [47.2%] were considered to be appropriate. Appropriateness differed between public and private hospitals, which were statistically significant. This study shows that as with many other health services, cesarean section has many scenarios that there are different opinions about them and no decision about presenting these scenarios as yet. Moreover the result of study showed the rate of inappropriate cesarean sections in this study is one of the highest reported rates from different communities.

#### Growing rate of cesarean section in Iran: dimensions and concerns.

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**Archives of Iranian Medicine** 2012; 15 (1): 2-3 (15 ref.)

**Keywords:** Pregnancy

#### Rise in cesarean section rate over a 30-year period in a public hospital in Tehran, Iran.

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Archives of Iranian Medicine 2012; 15 (1): 4-7 (39 ref.)

Keywords: Hospitals, Public; Pregnancy; Retrospective Studies; Midwifery; Delivery, Obstetric

**Abstract:** Numerous studies show a growing trend in cesarean section rates throughout the world, including Iran. However, existing evidence in our country is scant and previous reports are restricted to short time periods. The aim of the current study is to measure the trend in cesarean sections [CS] rates over the past 30 years in a referral hospital in Tehran. We routinely collected data on the demographic characteristics of all women who gave birth in the hospital during the study period. The mode of delivery and the personnel in charge of delivery has like wise been recorded for each birth during the study period. The data were extracted from medical records and entered into a structured checklist. The rate of CS out of all deliveries increased from 14.3% in 1979 to 22.7% in 1989, 52.5% in 1999, and 85.3% in 2009 [P< 0.001]. The most common reason for CS was a repeated section. The percentage of vaginal deliveries performed by midwives has not changed significantly and the number of both midwives and obstetricians per 1000 births has increased, from 2.8 to 15.4 midwives per 1000 births and from 5.5 to 23.0 obstetricians per 1000 births. Immediate strategies should be adopted to prevent the rising trend and increasing number of unnecessary CS in Iran.

#### Chromium

#### Recycling of chromite waste for concrete: full factorial design approach.

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International Journal of Environmental Research 2012; 6 (1): 145-150 (25 ref.)

Keywords: Recycling; Compressive Strength

**Abstract:** Recently full factorial design approach has been used to assess the recycling potential of a given waste. The objective of this study is to identify the significant factors and interactions involved in maximizing compressive

strength of concrete when chromium waste is used as admixture. In this respect, experimental factors at two levels, which are admixture type [chromite/ chromite+ superplastizer], admixture percentage [5-15%] and cure duration [7-28 days], are selected as possible candidates affecting the compressive strength. The modeling technique presented in this paper is based on 2[3] full factor experimental design and can easily be implemented to see the effect of any input factor on a given response variable. According to the full factorial analysis, at the 5% percentage level when Naphtalene sulfonate is added to concrete with chromite waste, the compressive strength will be good enough after 28 days. The results demonstrate that chromite waste after neutralization can be used in construction industry.

# **Cleft Lip**

#### Orofacial clefts and risk factors in Tehran, Iran: a case control study.

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IRCMJ - Iranian Red Crescent Medical Journal 2012; 14 (1): 25-30 (27 ref.)

**Keywords:** Cleft Palate; Risk Factors; Case-Control Studies; Logistic Models; Folic Acid; Maternal Age; Tobacco Smoke Pollution

**Abstract:** Non-syndromic cleft lip with or without cleft palate [CL/P] or cleft palate only [CPO] are orofacial clefts with multifactorial etiology. These include environmental factors and heterogeneous genetic background. Therefore, studies on different and homogenous populations can be useful in detecting related factors. The aim of the present study was to evaluate the risk factors in patients with non-syndromic cleft in Tehran, Iran. Data from 300 patients and 300 controls were collected between 2005 and 2010. Binary logistic regression analyses were used to calculate relative risk by odds ratio [OR] and%95 confidence interval. Low maternal age [OR=1.06, 95% Cl, 1.011-1.113], low socioeconomic status [OR=0.23, 95% Cl, 0.007-0.074], maternal systemic disease [OR=0.364; 95% Cl, 0.152-0.873] and passive smoking [OR=0.613, 95% Cl, 0.430-0.874] increased the risk for CL/P and CPO. There was a significant difference in iron and folic acid use during pregnancy when the case and control groups were compared. In assessing for orofacial cleft risk, we should consider lack of folic acid supplementation use, maternal age and systemic diseases and passive smoking as risk factors.

#### **Cleft Palate**

#### surgery

#### Cleft palate repair with velopharyngeal sphincter reconstruction modified simple procedure.

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New Egyptian Journal of Medicine [The] 2011; 44 (3): 254-258 (9 ref.)

**Keywords:** Reconstructive Surgical Procedures; Velopharyngeal Sphincter; Treatment Outcome

**Abstract:** Velopharyngeal sphincter reconstruction and oronasal fistula during cleft palat repair is still a matter of challenge to pediatric and ENT surgeons. To improve results of surgical treatment of cleft palate and secondary velopharyngeal incompetence a simple modified procedure for palatoplasty and velopharyngeal sphincter reconstruction is made. Thirty three patients with cleft palate [26 primary and 7 recurrent were corrected by this procedure from April 2005 to April 2010. In this procedure the well mobilized palatal muscles allow good repair for the nasal layer, and its medial rotation give push back and increases the length of well functioning soft palate, with narrowing of the velopharyngeal isthmus. The modifications in the nasal layer repair prevent the oronasal fistula and elongate the nasal posterior which reduces the velopharyngeal isthmus. All corrected patients showed good results, with no recurrence, no post-operative fistulae, with accepted phonation pattern for all Arabic alphabetic and no nasal regurgitation need for further pharyngoplasty.

# Clinical Trials as Topic

Clinical trials in Iran; biannual report of clinical trial committee in Food and Drug Organization, Ministry of Health and Medical Education.

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Ministry of Health and Medical Education - Food and Drug Organization - Office of Clinical Trials

Archives of Iranian Medicine 2012; 15 (1): 52-54 (7 ref.)

**Keywords:** Food; Pharmaceutical Preparations

# Clostridium perfringens

In silico fusion of epsilon and beta toxin genes of Clostridium perfringens types D and B.

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IJB - Iranian Journal of Biotechnology 2012; 10 (1): 54-60 (31 ref.)

Keywords: Bacterial Toxins; Genes

**Abstract:** Fusion protein technology represents the strategy to achieve rapid, efficient, and cost-effective protein expression. Epsilon and Beta toxins are the most potent Clostridial toxins and cause disease in animals. This study describes in silico fusion of Clostridium perfringens types D and B epsilon and beta toxin genes that was used for cloning in E. coli. The etx and cpb genes were retrieved from the GenBank and a fusion gene was designed to produce a chimeric fusion protein. Secondary and tertiary structures and specificities of fusion protein were determined by online software. Results showed that the designed fusion gene construction is suitable for chimeric fusion protein expression.

## **Cochlear Implantation**

#### methods

Intra-operative neural response telemetry and acoustic reflex assessment using an advance-Instylet technique and modiolus-hugging a prospective cohort study.

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SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 369-376 (29 ref.)

**Keywords:** Cochlear Implantation; Telemetry; Neurones-physiology; Auditory Threshold; Prospective Studies; Treatment Outcome

Abstract: The development of cochlear implant [CI] electrode arrays has focused on the use of a minimally invasive technique involving a modiolus-hugging placement of the electrode. The aim of this study was to evaluate the [advance-in-stylet] [AIS] technique compared to the advance-off-stylet [AOS] technique recommended for the current cochlear Nucleus device. In the AIS technique, the stylet is not removed. We evaluated the electrical auditory thresholds measured when the stylet was removed [modiolus-hugging] compared to measurements taken with the stylet in place [lateral wall cochlea electrode placement]. In this prospective cohort study, 30 consecutive patients received unilateral Nucleus Freedom CIs using AIS insertion. Measurement of the acoustic reflex [AR] and neural response telemetry [NRT] were performed with the stylet in place [lateral wall placement of the electrodes] and then removed [perimodiolar placement], and the results compared. The responses were measured in the basal, middle and apical turns in both groups - with and without stylet. The AIS surgery was completed without complication in 30 patients [16 males and 14 females, age range 3-54 years [mean 11]]. Based on neural response telemetry, only apical electrodes showed statistically significant differences in thresholds, but the AR was not significantly different before or after stylet removal in any of the electrode groups tested. Conclusions: The effects of modiolus-hugging do not seem to result in a large difference in electrical stimulation thresholds so, in difficult cases, the stylet may be left in place without significantly changing the thresholds, except perhaps at the apical turn.

# **Community Health Workers**

Enhancing the CHW model for Afghanistan: training students as household or family health workers to increase access to community-based healthcare.

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AFJPH - Afghanistan Journal of Public Health 2012; 1 (1): 7-11 (14 ref.)

**Keywords:** Community Health Services; Family Health-manpower; Health Services Accessibility; Students; Health Policy

Abstract: Despite extensive investments in the health sector in Afghanistan, many Afghan families still do not have access to basic preventive and therapeutic health services. The central role of community health workers [CHWs] is clearly defined in a Basic Package of Health Services [BPHS] developed in 2003, and revised in 2005 and 2010, by the Afghanistan Ministry of Public Health [MoPH]. However, the status quo reliance of health service delivery on unpaid CHWs presents several challenges to a long-term viable strategic plan. To motivate a dialogue about alternative options to the provision of basic health services to communities, we compare three main options in this paper. These include [1] CHW [volunteer model] in which CHWs receive no payment [status quo]; [2] CHW [remuneration model] in which CHWs receive payments for their services; and [3] [Family health worker [FHW] model] in which the demand for CHWs is offset by educating all children in school with progressive components of the CHW training curriculum. We discuss these options in the context of several important attributes of decision making for health policy. These include effectiveness, feasibility, efficiency, community solidarity, legality and ability to implement the strategy. Finally, we present recommendations for policymakers and stakeholders.

## **Complementary Therapies**

Public knowledge, attitude and practice of complementary and alternative medicine in Riyadh region, Saudi Arabia.

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Oman Medical Journal 2012; 27 (1): 20-26 (25 ref.)

Keywords: Health Knowledge, Attitudes, Practice; Cross-Sectional Studies; Questionnaires

Abstract: Complementary and alternative medicine [CAM] is well established worldwide. The present work is aimed at studying the knowledge, attitude and practice of CAM by the people of Riyadh region, Saudi Arabia. A crosssectional descriptive household survey study of the people living in Riyadh city, as well as the surrounding governorates. A multistage random sample was taken from 1[st] January to the end of March 2010, with a total number of 518 participants. Data were collected using a pre-designed questionnaire through direct interview. The data was collected based on socio-demography, as well as knowledge, attitude and practice of CAM. Participants were nearly sex-matched, consisting of approximately 70% Saudi and 30% non-Saudis. About 89% of the participants had some knowledge of CAM. Mass media e.g. [T.V., newspapers and radio] and family, relatives and friends represented the main sources of CAM knowledge, [46.5% and 46.3% respectively]. Nearly 85% of participants or one of their family members has used some form of CAM before, and the most common users of CAM practices were females, housewives, and illiterate subjects [or those who could just read and write], as well as participants aged 60 years and above. Medical herbs [58.89%], prayer [54%], honey and bee products [54%], hijama [35.71%] and cauterization or medical massage therapy [22%] were the commonly used CAM practices. Most participants agreed that there are needs for; CAM practices [93.8%], regulations for CAM [94.9%], health education [96.6%], specialized centers [94.8%] and CAM clinics [92.7%]. While only 8.3% of participants usually discussed CAM with their physicians. There is a high prevalence and increased public interest in CAM use in the Riyadh region. There is a positive attitude towards CAM, yet most participants are reluctant to share and discuss CAM information with their physicians.

# **Composite Resins**

Composite curing units used in academic dental institutions of Karachi.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 784 (6 ref.)

Keywords: Dentistry

#### **Connexins**

#### The anticipation and inheritance pattern of c.487 AG mutation in the GJB2 gene.

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Archives of Iranian Medicine 2012; 15 (1): 49-51 (12 ref.)

Keywords: Gap Junctions; Mutation; Inheritance Patterns; Hearing Loss; Anticipation, Genetic

**Abstract:** Mutations in the GJB2 gene are the most common causes of hereditary hearing loss. This study reveals some facts about the inheritance pattern of M163V in the GJB2 gene. This study was performed on two different families with non-syndromic hearing loss. We screened the GJB2 coding region with direct sequencing. There was a substitution of A to G in exon 2 at nucleotide 487 [M163V]. This mutation was heterozygous in fathers and children while mothers were normal. Fathers of both families showed late onset hearing impairment, but there was early onset hearing loss in the children, which was more severe compared to the fathers. M163V has been reported as an unknown heterozygous mutation that leads to failure of the homotypic junctional channel formation. Another mutation in this codon is M163L, with an autosomal dominant inheritance, which impairs trafficking through the plasma membrane, resulting in cell death. Assessment of the familial pedigree has revealed anticipation in phenotype and autosomal dominant inheritance. These data in addition to the high conservation of methionine residue in mammalian species suggest that M163V is inherited with an autosomal dominant pattern. Therefore, the risk of inheritance will increase. Genetic counselors and otologists should prioritize the evaluation and prevention of this disorder in patients.

#### Coral Reefs

#### Estimating total economic value of coral reefs of Kish Island [Persian Gulf].

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International Journal of Environmental Research 2012; 6 (1): 51-60 (80 ref.)

Keywords: Ecosystem

**Abstract:** This paper is concerned with the economic valuation of the coral reef within Kish Island in Persian Gulf of Iran. For calculating this value, all components of use and non-use values are estimated and then according to each of them, suitable method has applied. Many different evaluation tools such as contingent valuation method, zonal travel cost method, replacement cost, avoided cost method, value at risk method are used. The semi non parametric distribution free estimator for calculating the contingent valuation method is applied. The probability of willingness to pay the same as the probability of accepting bids is estimated by using data based on questioners approach using stated preference method. The result indicates that the total economic value of this unique ecosystem in Kish Island is at least 14.6 million dollar per year, showing the importance of conservation value of the ecosystem. Its largest component of total economic value is about 62 percent attributed to the recreational value. This is followed by conservation value which is about 23 percent of the economic value. Since coastal protection and waste assimilation functions of coral reef are 10 percent, it is also suitable factor in illustrating total economic value. The economic value for each hectare of this ecosystem in Kish Island is US\$ 237,000 in 2009.

#### Cornea

#### physiology

Evaluation of the effect of tetracaine 1% on central corneal thickness obtained by ultrasound and SP-3000P.

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New Egyptian Journal of Medicine [The] 2011; 44 (3): 212-219 (39 ref.)

Keywords: Cornea-ultrasonography; Tetracaine; Anesthetics, Local

Abstract: To study the effect of tetracaine 1% on central corneal thickness measurements obtained by the ultrasound pachymetry and Topcon SP-3000P specular microscope. In the following sequence, SP-3000P before anaesthesia, Ultrasound pachymetry before anaesthesia, SP-3000P 10 minutes after anaesthesia, Ultrasound pachymetry 10 minutes after anaesthesia, central corneal thickness measurements were obtained from 100 randomly selected eyes of 50 oculovisually young adults in two measurement sessions. The central corneal thickness before instilling anaesthesia did not vary significantly in each technique within-session [p>0.05] and between sessions [p>0.05]. Baseline central corneal thickness measurements obtained by Ultrasound pachymeter was significantly [P<0.0001] higher than that of SP-3000P by about 28 micro m and 29 micro m in sessions one and two respectively. A small but statistically insignificant decrease in CCT [P>0.05] was observed 10 minutes after instilling one drop of 1% tetracaine in sessions 1 whereas a statistically insignificant increase [P>0.05] in CCT in session two measurements of SP-3000P was observed. There was a statistically significant increase in CCT [p<0.05] obtained by ultrasound pachymeter 10 minutes after instilling one drop of 1% tetracaine in sessions I and an increase that was not quite significant [P>0.05] also observed in the second measurement session of ultrasound pachymetry. The precision of the effects of anaesthesia in ultrasound pachymeter for sessions 1 and 2 were+l5 micro m and+31 micro m, and in SP-3000P sessions 1 and 2 respectively were+16 micro m and+/-13 micro m. Topical anaesthesia might have an effect on CCT measurements made with the ultrasound pachymeter. Such an effect could be due to instability of the tear film caused by the anaesthetic, and this effect was not measurably with the SP-3000P suggesting that the difference in the principles of operation of both pachymeters might play a significant role in the detection of changes in CCT induced by topical anaesthesia.

# **Coronary Artery Bypass**

[Comparison of bleeding and transfusion in patients who undergo coronary artery bypass grafting with and without cardiopulmonary bypass].

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Payavard - Salamat 2011; 5 (1): 32-39 (32 ref.)

**Keywords:** Coronary Artery Bypass, Off-Pump; Cardiopulmonary Bypass; Hemorrhage; Blood Transfusion; Double-

Blind Method; Prospective Studies

**Abstract:** Excessive Bleeding continues to play a key role and an important cause of morbidity and mortality after cardiopulmonary bypass [CPB]. The goal of this study was to determine the differences in bleeding and transfusion between OPCAB and on -pump CABG patients. In a randomized, double blinded prospective study 300 patient's undergoing coronary revascularization surgery were enrolled, 150 CABG patients were compared with 150 OPCAB patients. The patients were assessed during the first 72 hours to determine the postoperative side effects. The 2 groups were compared using the chi-square test or fisher's exact test and the rank sum test. CABG patients received more intraoperative red blood cells [P<0.0001], more albumin and more freshfrozen plasma [P<0.0001]. Postoperatively, CABG patients were more likely to receive more platelets [29.3% ? 70.7%, P<0.007]. During the operative and the initial 4-hour postoperative period OPCAB patients exhibited greater blood loss [P<0.0001]; however, at 12,24and 72 hours postoperatively, CABG patients exhibited greater blood loss. There were4 death in CABG patients [P<0.05]. Despite not reversing the heparin at the end of the OPCAB surgery, OPCAB surgery was associated with an overall reduction in platelets, fresh-frozen plasma, Albumin and transfusion requirements.

#### Cosmetics

Innovative non-invasive techniques in skin pharmaceutics as valid complements in cosmetic dermatology practice.

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Jordan Journal of Pharmaceutical Sciences 2011; 4 (3): 174-180 (11 ref.)

**Keywords:** Dermatology; Melanosis-therapy; Chemexfoliation; Skin-drug effects

**Abstract:** Non-invasive tools for measuring various skin parameters are widely used as research tools in the area of skin pharmaceutics to evaluate the cutaneous effects of topically applied skin care products. They provide objective and quantitative data of various skin attributes as compared with subjective clinical grading and allow detection of differences that are not apparent to the eye. On the other hand, typical dermatological practice is based on the skills and trained eyes of dermatologists to evaluate the skin conditions of patients and their response to various treatments. This study aims at showing the feasibility of using three non-invasive instruments as complementary tools in dermatology practice to evaluate and monitor quantitatively relevant cutaneous treatment effects. Mexameter[registered sign], Corneometer[registered sign], and Tewameter [registered sign] were used to evaluate quantitatively the degree of pigmentation, hydration, and barrier integrity, respectively, at baseline and 1, 7, 14, and 30 days after one session of superficial TCA peel treatment of melasma on the face of a female patient. The results show the ability of these devices to aid the dermatologist in quantifying and comparing the changes in skin attributes over time.

## Cough

# Clinical and laboratory diagnosis of the patients with sputum smear-negative pulmonary tuberculosis

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**Archives of Iranian Medicine** 2012; 15 (1): 22-26 (16 ref.)

Keywords: Tuberculosis, Pulmonary; Sputum; Chronic Disease; Retrospective Studies

**Abstract:** The objective of this study is to describe the proportion of patients with chronic cough and negative smear microscopy appropriately diagnosed as tuberculosis [TB] and to identify clinical features that could be used in developing a diagnostic scoring system for smear-negative patients. Records of patients with chronic cough and > 3 negative sputum smears for acid fast bacilli who attended a reference University hospital in south-eastern Iran and screened by culture were retrospectively reviewed. We compared confirmed smear-negative pulmonary TB [PTB; culture-positive] and unconfirmed smear-negative patients [culture-negative] to describe the appropriateness of treatment and their characteristics. Features independently predictive of smear-negative PTB [SNPTB] were entered into a logistic regression to create a diagnostic rule. This study enrolled 350 patients, of which 52 [14.8%] were culture-positive and 298 [85.2%] culture-negative. Of these, 38 out of 52 [sensitivity 73%] confirmed SNPTB were diagnosed as TB and 283 out of 298 [specificity 95%] unconfirmed sputum-negative patients were diagnosed as non-PTB. Variables associated with confirmed SNPTB were the presence of night sweats, family history of TB, typical chest radiography, erythrocyte sedimentation rate > 45 mm and white blood cell count < 11000/mL. The score constructed with these variables had a sensitivity of 94% and specificity of 74% with an area under the curve of 0.90. The clinical differences between SNPTB and control patients could be used to develop a clinical scoring system to identify patients with SNPTB.

#### Creatine Kinase, MB Form

#### drug effects

Reducing creatine kinase-MB levels following oxytocin administration during ischemiareperfusion periods in isolated rat heart.

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**Tehran University Medical Journal [TUMJ]** 2012; 69 (11): 663-670 (30 ref.)

**Keywords:** Oxytocin; Reperfusion Injury; Rats, Wistar; Heart; Receptors, Oxytocin; Nitric Oxide; Epoprostenol; Vasotocin-analogs and derivatives; NG-Nitroarginine Methyl Ester; Indomethacin

Abstract: Creatine kinase is a cardiac biomarker that is used for the assessment of ischemic injuries and myocardial infarction. The present study was designed to evaluate effects of oxytocin administration during ischemia and reperfusion periods on CK-MB levels in the coronary effluent of isolated rat heart and the possible role of oxytocin receptor, nitric oxide [NO], prostacyclin and mitochondrial ATP-dependent potassium channels in this regard. Male wistar rats [n=8] were anesthetized with sodium thiopental and their hearts were transferred to a Langendorff perfusion apparatus. All animals were randomly divided into nine groups as follow; in the ischemia-reperfusion group, hearts underwent 30 min of regional ischemia followed by 120 min of reperfusion. In oxytocin group, hearts were perfused with oxytocin 5 min after ischemia induction for 25 min. In other groups, 35 min prior to oxytocin perfusion, atosiban [a non-specific oxytocin receptor blocker], L-NAME [an NO synthase inhibitor], indomethacin [a non-specific cyclooxygenase blocker] and 5-HD [a specific mKATP channel blocker] were perfused for 10 min. In all groups, we measured CK-MB levels in the coronary effluent at the end of reperfusion. Moreover, coronary flow [mL/min] was measured at baseline, during ischemia period and 60 and 120 min after reperfusion. Oxytocin administration significantly reduced CK-MB level in oxytocin group as compared to ischemia-reperfusion group. Administration of atosiban, L-NAME, indomethacin and 5-HD prior to oxytocin perfusion abolished the effects of oxytocin on CK-MB levels. Administration of oxytocin during ischemia and reperfusion periods deceased CK-MB levels but infusion of atosiban, L-NAME, 5-HD and indomethacin inhibited oxytocin from exerting its effects.

### **Cross Infection**

## microbiology

#### Current status of nosocomial infections in the Lebanese Hospital Center, Beirut.

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EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 495-500 (25 ref.)

**Keywords:** Cross Infection-drug therapy; Microbial Sensitivity Tests; Cross Infection-prevention and control; Drug Resistance, Bacterial; Retrospective Studies

**Abstract:** Nosocomial infections are a significant problem and hospitals need to be aware of their nosocomial infection status. This retrospective study aimed to identify nosocomial bacterial infections in patients admitted to the Lebanese Hospital Center from January 2006 to January 2008 and determine the causative micro-organisms, the antibiotic sensitivity of the micro-organisms and evaluate the hospital treatment. In total 96 patients with nosocomial infection were included. Urinary infections were the commonest nosocomial infections [42%] followed by pulmonary infections [28%]. Gram-negative bacteria were responsible for 89% of nosocomial infections and staphylococci for 7%, with Esherichia coli and Pseudomonos alrogenosa being the most common [46% and 26% respectively] The organisms were resistant to multiples antibiotics and 18% of the patients were treated with imipenem, 7% with vancomycin, 42% with third-generation cephalosporins and 24% with amikacin. Hospital hygiene measures and antibiotic prescription policies are required to fight nosocomial infections and reduce antibiotic resistance among organisms.

#### **Culture Media, Conditioned**

Effects of fibroblasts conditioned media on differentiation of programmable cells of monocytic origin to insulin-producing cells.

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Tehran University Medical Journal [TUMJ] 2012; 69 (11): 695-702 (18 ref.)

**Keywords:** Fibroblasts; Insulin; Cell Differentiation; Monocytes; Rats; Macrophage Colony-Stimulating Factor; Interleukin-3; Mercaptoethanol

Abstract: The characteristic of stem cells in self renewal and differentiation to different types of cells has stimulated the interests for using stem cells as a starting material for generating insulin secreting cells. We've evaluated the differentiation potential of Programmable cells of monocytic origin [PCMOs] into insulin producing cells effected from the growth factors and fibroblasts conditioned media [FCM]. Peripheral blood monocytes of rat were cultured for 6 days in RPMI with 15% FBS, beta- mercaptoethanol, MCSF and interleukin-3. Then, these cells were incubated in differentiation media with HGF, EGF, Nicotinamide, 15% fibroblasts conditioned media and glucose for 15days. Morphological differences of cells were studied by invert microscope. In several stages, the amounts of insulin in supernatant of cells were measured by radioimmunoassay kit. Also productions of insulin from differentiated cells were studied with DTZ special staining. In response to MCSF and IL-3, monocytes dedifferentiated. These programmable cells of monocytic origin [PCMOs] were capable of differentiating into insulin producing cells in differentiation media. The morphology of differentiated cells was similar to Beta cells and the amount of insulin in supernatant of differentiated cells was much higher than PCMOs [P<0.05]. HGF, EGF, Nicotinamide and fibroblasts conditioned media are differentiation factors of PCMOs into insulin producing cells. According to the results insulin producing cells can be differentiated from programmable cells of monocytic origin in presence of fibroblasts conditioned media.

#### Curcumin

## therapeutic use

#### Protective effect of dendrosomal curcumin combination on colon cancer in rat.

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Tehran University Medical Journal [TUMJ] 2012; 69 (11): 678-685 (32 ref.)

Keywords: Colonic Neoplasms; Protective Agents; Rats; Azoxymethane; Immunohistochemistry

Abstract: Cancer is a multistep process that develops very rapidly after its onset. Previous studies have confirmed antitumor effects of curcumin [1,7-bis [4-hydroxy-3-methoxyphenyl] -l,6-heptadiene-3,5-dione; diferuloylmethane] that can potentially prevent colon cancer development with low side-effects. Different methods have been performed to increase the efficiency and effectiveness of curcumin among which dendrosome, a nanoparticle created by Sarbolouki et al. was used in this study. The present study was undertaken to evaluate the effects of dendrosomal curcumin on rat colon cancer. In this study which was performed in Cancer Research Center of Tehran University of Medical Sciences in 2010 year, forty rats were equally divided into control, curcumin and curcumin-dendrosome groups. Animals received azoxymethane [15 mg/kg s.c.], a carcinogen, once a week for two weeks. Curcumin [0.2%] and curcumindendrosome were administered to the respective animals 2 weeks before the first and 14 weeks after the last azoxymethane injections. Eventually, colorectal specimens from tumoral and adjacent non-tumoral mucosal tissues were fixed in 10% formaldehyde, and passaged and embedded in paraffin. Histopathological and immunohistochemical studies were performed on the specimens. The mean number of lesions, nuclear/cytoplasmic ratio, epithelial stratification, loss of nuclear polarity, goblet depletion, structural abnormality and beta-catenin expression were higher in the control group compared to curcumin and curcumin-dendrosome groups. These parameters had significantly decreased in the dendrosomal curcumin group [P<0.05]. The present study shows that dendrosome can be used as a suitable nanoparticle to increase curcumin efficiency in the prevention or treatment of colon cancer.

# **Decision Making**

Use of evidence for decision making: a qualitative exploratory study on MNCH program, Pakistan.

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PJPH - Pakistan Journal of Public Health 2011; 1 (1): 6-10 (7 ref.)

Keywords: Evidence-Based Practice; Maternal-Child Health Centers; Research

Abstract: Research and evidence are getting more important for organizing and delivering the health services. Quality research has an important part to play in strengthening the health systems. There is a concern that evidence is not utilized to the extent it should be. The purpose of this study was to find out whether the Maternal, Neonatal and Child Health [MNCH] Program is an evidence based initiative in Pakistan. A qualitative exploratory study was conducted in June toAugust 2011 in Islamabad, with key stakeholders of health system, using a semi-structured indepth interview. The study participants feel that the basis of decision-making in Pakistan's health sector including national MNCH program is indeed evidence based; however other factors such as personal interest, donor interest and political factors have influenced as well. They quote national surveys, research studies and HMIS as credible sources of evidence. There is consensus on the importance and use of local, regional and global evidence. National as well as international best practices have been considered at the conceptualization, designing and planning phases of MNCH program; while execution and M and E stages have not benefitted at all from the available evidence. Lack of funding for research, time limitations and absence of culture of evidence utilization are some of the challenges. Astrong linkage between researches, policy makers and managers is most emphasized strategy for ensuring evidence based decisionmaking. This study has informed the stakeholders about the extent, type and scope of evidence utilization for decisionmaking of national MNCH program. Moreover, an improved use of evidence in future country wide programs will help in resource saving, ensuring better performance, ownership and sustainability of the program.

# **Delivery of Health Care**

# Do we need to be skeptical about millennium development goals?

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PJPH - Pakistan Journal of Public Health 2011; 1 (1): 56-58 (7 ref.)

Keywords: Goals; Primary Health Care; Health; Poverty

Abstract: Pakistan still presents huge gaps in catering to the massive health needs of the large segment of its population living in rural and remote areas. High maternal mortality, neonatal, infant and child mortality, the population pressure on meager resources and ever increasing differentials in urban and rural, rich and poor and among genders is becoming noticeable. Poverty has compounded the toll of preventable illnesses, preventable malnutrition and preventable deaths. Where are gone the primary health care pledges? Poverty and hunger has been increasing the toll of morbidity and mortality in Pakistan. The dearth of political commitment compounded by current economic crisis does not allow a respectable allocation to health, education and other social sector projects. The international economic trends and their repercussions on the national agendas are having serious implications for common man's day to day living and public grievances are on the rise. Access to quality health care and education has become even more difficult. The efforts to revitalize the whole political economy in the country seem invisible or feeble at both government and development partners' end. Having gone through devastated crisis of population displacement because of terrorism, earthquake and floods, government has shown minimal interest in seeking external debt relief which appears to be a pre-condition for at least keeping the hopes up for meeting the targets of MDGs. The pledges and assistance of the international community has not been sufficient to support the economy of Pakistan and in this scenario, the social sector has suffered the most. Local and national level efforts must continue to safeguard all the determinants of health, particularly in the developing and under-developed countries. There is an intense need of meaningful inter-sectoral collaboration and political and economic reforms in both government and within private sector to achieve the millennium goals directly related to health. What would be the post-MDGs new roadmap, given all the human rights violations and social exclusion across the developing countries? The picture becomes even more skeptic because the MDGs need not only to be attained, but also sustained for a longer term-post 2015.

#### **Dendritic Cells**

Inducing maturation of monocyte-derived dendritic cells on human epithelial cell feeder layer.

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Tehran University Medical Journal [TUMJ] 2012; 69 (11): 686-694 (26 ref.)

**Keywords:** Monocytes; Epithelial Cells; Feeder Cells; Granulocyte-Macrophage Colony-Stimulating Factor; Interleukin-4; Culture Media, Conditioned; Tumor Necrosis Factor-alpha; Antigens, CD14; Antigens, CD80; Antigens, CD86; Antibodies, Monoclonal; HLA-DR Antigens; Phagocytosis; T-Lymphocytes; Interleukin-12; Cytokines; Immunotherapy

Abstract: Nowadays, dendritic cells [DCs] have a special place in cancer treatment strategies and they have been used for tumor immunotherapy as they can induce immune response against tumor cells. Researchers have been trying to generate efficient dendritic cells in vitro; therefore, this research was done to generate them for use in research and tumor immunotherapy. This study took place at Urmia University in 2010-2011 years. In this study plastic adherent monocytes were incubated with granulocyte-macrophage colony stimulating factor [GM-CSF] and interleukin-4 [IL-4] for five days. Finally, fully matured and stable DCs were generated by 48 hours of incubation in a monocyte conditioned medium [MCM] containing tumor necrosis factor-alpha [TNF-alpha] and epithelial cells. Phenotypic and functional analysis were carried out by using anti-CD 14, anti-CD80, anti-CD86, and anti-CD83 monoclonal antibodies, and by determining their phagocytic activity, mixed lymphocyte reaction [MLR] and cytokine production, respectively. Dendritic cells were produced with high levels of surface molecule, i.e. of CD80, CD83, CD86, HLA-DR, expression and low levels of CD14 expression. Dendritic cells showed efficient phagocytosis and ability to stimulate T-lymphocytes. Moreover, dendritic cells could secrete high levels of interleukin-12 [IL-12] cytokine which was depictive of their full maturation. Measurement of the produced cytokines showed the generation of type-1 dendritic cells [DC1]. Our study showed that skin epithelial cells could induce maturation of monocyte-derived dendritic cells [DC5]. This feeder layer led to the production of efficient dendritic cells with the ability to be used for tumor immunotherapy.

#### **Dental Care**

## nursing

#### Development of process dental nursing care standards.

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New Egyptian Journal of Medicine [The] 2011; 44 (3): 191-199 (15 ref.)

**Keywords:** Knowledge; Questionnaires; Health Education

Abstract: Assessing the needs and determining health priorities are essential to focus the attention in the right direction and use the scarce resources in the most efficient way that would positively affect the oral health status of the population, and help in maximizing the oral health results and enforcing equity. The present study was aimed at developing process dental nursing care standards based on literature review and eliciting participant's opinions regarding the importance of proposed standards. A methodological research design was used to determine the importance of proposed standards from point view of participants. The study was conducted in [34] governmental and nongovernmental dental clinics in Jenin district West Bank in Palestine. Subjects of the study included two groups consisted of [128] participants. Nursing group divided into two categories included [53] dental nurses, and [22] nurse managers, while dentistry group included [53]dentists. Data collection included Arabic questionnaire sheet aimed at determining the importance of tasks by eliciting participant's opinions. Results showed that majority of participant agreed upon importance of most proposed standards related to process dental nursing care, followed by development of these standards. As a conclusion, the developed standards are ready for application in study settings where they are urgently needed. It is recommended to apply developed standards in study settings and also in similar settings in other districts in Palestine. Training sessions about dental nursing care plan steps should be conducted for dental nurses to increase their knowledge.

# **Depression**

Knowledge of depression among community members and health care providers in two selected areas of district Rawalpindi.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 756-759 (24 ref.)

**Keywords:** Depressive Disorder; Mental Health; Knowledge; Health Knowledge, Attitudes, Practice; Community-Institutional Relations; Health Personnel; Cross-Sectional Studies; Questionnaires

**Abstract:** To determine the level of knowledge about depression in two selected areas of district Rawalpindi. Cross-sectional survey report. Union council Rehmatabad and mohalla Sultanpura, Rawalpindi, from June to December 2007. Strata of community were interviewed regarding the knowledge about depression using an indigenously developed questionnaire. To determine any association between difference of level of knowledge and different strata of community Chi-square [X][2] tests was applied at 5% level of significance and p-value less than 0.05 was considered significant. Most of the respondents [63%] thought that diabetes was the major health problem in our country. Most of participants thought that drug abuse and addiction [74.3%], adolescent emotional and behavioral problems [66.8%] followed by alcohol abuse [50.3%] and personality disorders [49.2%] were the common mental illnesses. Chi-square [X][2] statistics showed a highly significant association between difference of level of knowledge and the two strata of community i.e. health care providers and community members [p < 0.001]. People in the selected areas of district Rawalpindi had a poor knowledge about depression.

## diagnosis

General practitioners' awareness and management of common psychiatric disorders: a community-based survey from Karachi, Pakistan.

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EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 446-453 (17 ref.)

**Keywords:** Anxiety Disorders-diagnosis; Awareness; General Practitioners; Health Surveys; Benzodiazepines-therapeutic use; Antidepressive Agents, Tricyclic-therapeutic use; Questionnaires

**Abstract:** This study assessed the knowledge and management of common psychiatric disorders by general practitioners [GPs] in Karachi, Pakistan, Structured interviews were carried out in 2009 with 360 GPs selected by cluster random sampling. Patients with psychiatric disorders were estimated to be up to 10% of the daily caseload according to 71.8% of doctors. Two-thirds of GPs were unaware of the ICD-10 diagnostic criteria for depression and anxiety disorders. Benzodiazepines were the most recognized category of medication [75.3%] and were the most commonly used medication for all mental health conditions. Fewer GPs were familiar with selective serotonin reuptake inhibitors [35.1%] or tricyclic antidepressants [20.2%]. Lack of time and patients financial constraints were reported to be barriers to care. Most GPs [69.2%] had not received any recent medical education about mental health problems. Gaps in GPs' knowledge about the management of mental disorders have implications for the rational use of psychotropic medications in primary care.

## **Depression, Postpartum**

# epidemiology

Postnatal depression among Bahraini women: prevalence of symptoms and psychosocial risk factors.

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EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 439-445 (28 ref.)

**Keywords:** Depression, Postpartum-etiology; Depression, Postpartum-diagnosis; Depression, Postpartum-psychology; Risk Factors; Prevalence; Signs and Symptoms; Cross-Sectional Studies; Questionnaires

**Abstract:** The prevalence of postnatal depression in Bahrain is unknown and screening for known risk factors does not take place. This study estimated the prevalence of postnatal depressive symptoms and the associated risk factors among a random sample of Bahraini women attending primary health care centres with their babies for the 8-week child check-up. The Arabic version of the Edinburgh Postnatal Depression Scale [EPDS] was used with a cut-off score of >/=12 for depression. The prevalence of postnatal depressive symptoms among 237 mothers was 37.1%. No significant relationships were identified between depression symptoms and any of demographic variables or pregnancy/birth characteristics studied. However, several psychosocial risk factors were significantly associated with postnatal depression and, after multiple regression analysis, a history of depressive symptoms and perceived lack of support from the husband remained significant factors. Further studies that include diagnostic assessments are needed to confirm these findings.

## **Diabetes Mellitus**

## therapy

#### Diabetes care in Oman obstacles and solutions.

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SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 343-348 (25 ref.)

**Keywords:** Diabetes Mellitus-prevention and control; Primary Health Care-standards; Process Assessment Health Care; Quality of Health Care; Patient Education as Topic-standards

**Abstract:** Diabetes has become one of the most challenging chronic diseases with its prevalence increasing in most countries worldwide. The Arabian Gulf countries face a similar increasing prevalence of diabetes. Diabetes care requires not only the support of the health authorities, but the contribution of all the sectors of the community and requires good financial support. In Oman, there are many factors which affect the care of diabetes. In this article, these factors are addressed and recommended solutions discussed.

## Diazinon

#### toxicity

### Toxic effects of acute exposure of diazinon in turbot [Psetta maxima] early life stage [ELS].

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International Journal of Environmental Research 2012; 6 (1): 139-144 (22 ref.)

Keywords: Flatfishes; Environmental Exposure; Embryonic Structures; Larva; Toxicity Tests, Acute

**Abstract:** In the present study, the toxic effects on the embryos and larvae of the turbot were used as a model to investigate the diazinon, which contaminates aquatic ecosystems. The number of dead embryos significantly increased in response to diazinon concentrations 0.2, 0.4, 0.8, 1.6, 3.2, and 7.4 mg/L. The 48h LC[50] value of diazinon for turbot embryos was estimated at 1.85 mg/L. Dose-response decreases in hatching success were recorded as 97, 92.4, 80.3, 60.3, 38.7 and 27.1%, respectively. The number of dead larvae significantly increased with increasing diazinon concentrations exposed for 24-96 h [p < 0.05]. The 24, 48, 72 and 96h LC[50] values of diazinon for turbot larvae were estimated at 4.8 [6.4-5.12], 3.3 [4.73-2.52], 2.1 [3.29-1.65] and 1.23 [0.87-2.38] mg/L, respectively. There were significant differences in the LC[50] values obtained at different exposure times [p <0.05]. Diazinon caused lethal toxicity as well as nonlethal malformations during embryo-larvae development.

## Dientamoebiasis

## diagnosis

Molecular diagnosis and genotyping of Dienlamoeba fragilis by polymerase chain reaction compared to microscopy and culture.

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PUJ - Parasitologists United Journal 2011; 4 (1): 39-46 (31 ref.)

**Keywords:** Dientamoeba-genetics; Genotype; Polymerase Chain Reaction-methods; Microscopy; Culture Media; Comparative Study

**Abstract:** The diagnosis of D. fragilis by microscopic identification of the parasite in stool is time consuming and relatively insensitive. To evaluate microscopy, culture and PCR for detection of D. fragilis in stool samples and to identify the genotypes of D. fragilis isolates among the study population. A total of 82 fresh human fecal samples were examined by microscopy using Wheatley's trichrome permanent staining, culture using the modified Boeck and Drbohlav medium and PCR targeting the small subunit [SSU] rRNA gene. Additionally, the existence of genetic variation among D. fragilis isolates [proved positive by PCR] was examined by restriction fragment length polymorphism analysis. PCR detected 25 isolates [30.5%], MBD culture detected 24 isolates [29.3%], while microscopy detected 8 isolates [9.8%]. Sensitivities of PCR, culture and microscopy were 92.6%, 88.9% and 29.6%, respectively. The agreement between PCR and culture results was substantial [KA=0.86]. PCR followed by RFLP analysis revealed the existence of two genetic variants among 25 D. fragilis isolates. Genotype I predominated in 23 [92%] samples, while the remaining two isolates corresponded to genotype II. It is recommended to use culture for routine diagnosis of D. fragilis in suspected gastrointestinal cases. Two genetic variants of D. fragilis existed in the Egyptian isolates.

#### Diet

Low adherence of Kuwaiti adults to fruit and vegetable dietary guidelines.

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EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 461-467 (24 ref.)

Keywords: Fruit; Vegetables; Cross-Sectional Studies; Life Style; Anthropometry; Body Mass Index

**Abstract:** The study aimed to assess the adherence of Kuwaiti adults to dietary guidelines for daily fruit and vegetable intake. Data were compiled from national cross-sectional studies from 2006 to 2008 including 9350 adults. Demographic data, frequency of fruit and vegetable consumption and anthropometric and lifestyle indicators were collected. Approximately 11% of people reported consuming 5 or more fruits and vegetables daily with a mean consumption of 3.04 times per day. Consumption increased with age and body mass index but decreased with smoking and non-exercising. Minimal change in compliance with 5-per-day fruit and vegetable consumption was observed between 2006 and 2008. However, the average daily consumption of total vegetables and green salads decreased and of total fruits, fruit juices and cooked and fried potatoes increased. The low frequency of fruit and vegetable consumption among Kuwaiti adults indicates the need to adopt more healthy eating patterns to control chronic diseases.

#### **Documentation**

#### standards

Nursing documentation in maternity clinical practice: reflection of actual nurse work load, problems and barriers.

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New Egyptian Journal of Medicine [The] 2011; 44 (3): 200-211 (24 ref.)

Keywords: Hospitals, Maternity; Nurses; Patient Care-standards; Questionnaires; Nursing Care; Attitude

Abstract: Reporting and recording are the major communication techniques used by health care worker in directing client based decision making and continuity of care. The medical records serve as a legal document for recording all client activities initiated by all health practitioners its may be paper documents or electronic documents. Documentation allows nurses and other care providers to communicate about the care provided, and promote good nursing care and supports nurses to meet professional and legal standards. However, nursing documentation continues to draw criticism from professional community, and regulatory organizations because of incomplete, substandard charting practices. Studies focused on time indicate that nurses spend a significant amount of time in record keeping. Nurses regularly copied data from the medical record and other documents to create personal records that guided their activities. The purpose of this paper: is to evaluate nurses' attitudes toward documentation for endorsing patient care and its value as mean of communication. Also to identify the problems and barriers in the nursing documentation for reflecting actual nurse work Load from nurses' perspective. An exploratory descriptive study design was used. The study was conducted over three months [March-May 2010] in pre natal, post natal and nursery departments, at Al aziziah Maternity and children hospital, in Jeddah. A total of [160] female nurses working at the wards of the study settings, 60 of them of different nationality were recruited thought simple random sampling 4. Tools; A questionnaire sheet was developed by researchers for data collection, also Likert rating scale consisting of 10 items divided into two sections: documentation barrier [5 items], and Documentation-tension [5 items]. The research tools was generated through review of the literature and consultation with nursing experts. The descriptive statistics of mean was use to analyze the data with a criterion mean at 2.50. The present study findings revealed significant percentages of nurses' agreement upon the benefit of documentation to patient care ,[48.7%] reported that nursing notes always facilitate the movement toward the nursing goals, documentation leads to improve patient care recorded [30%]. Furthermore, the majority had reported that documentation is always related to nursing care that provided to patient [61.7%]. On the other hand, 41.7% were thinking that documentation is often an accurate reflection of patient nursing care. Concerning the value of documentation to the nurses, [51.7%] agreed that use of documentation are often more of help for nurses than load, while [3 8.3%] reported that nursing notes are often important to every health provider and documentation is not wasting of time. Regarding documentation barriers, [30%] had agreed upon that documentation is too heavily structured by quality assurance, and Workload demands hinder the completing of patient documentation, while [35%] agreed upon the statement that Shortage of staff work hinder completing of patient documentation. While only [16.7%] agreed upon the statement that Language barrier decrease quality of nursing documentation, and [21.7%] reported that documentation consist a lot of double-charting and repetition. It is concluded that nurses have a positive attitude to ward documentation in the mean of patient care, communication and value. However, nurses are not certain upon documentation barriers and tension. There is also significant relation ship between barriers, tension and Saudi nurses. Therefore, it is recommended for further examination of nurses opinion regarding barriers and tension among Saudi nurses. It is also necessary for hospitals to adopt formal nurses' documentation forms on their charts.

### **Echinococcosis**

## genetics

Identification of the diagnostic and epidemiological potential of camel strain G6 in human cystic echinococcosis.

El Shennawy, Shahinaz F.; Abdel Aaty, Heba E.; Abdel Hameed, Dina M.M.; Aminou, Heba A.; Alam Eldin, Yosra H.; Maklad, Soheir S.

Ain Shams University - Faculty of Medicine - Department of Parasitology

PUJ - Parasitologists United Journal 2011; 4 (1): 69-76 (43 ref.)

**Keywords:** Genotype; Polymerase Chain Reaction-methods; Hemagglutination Tests-methods; Random Amplified Polymorphic DNA Technique-methods; Sensitivity and Specificity

**Abstract:** Recent molecular studies detected the presence of camel G6 genotype in human samples in different countries including Egypt. However, none of them studied the diagnostic and epidemiological role of camel G6 genotype in patients' sera with cystic echinococcosis [CE]. Detection of camel G6 strain in patients' sera by polymerase chain reaction [PCR] and determination of changes in the genotype profile that might be influenced by the predominant transmission cycle during a certain time. Eighty subjects were divided into 2 main groups with 3 subgroups in each: Group I [31 CE cases with positive G6 PCR in parasite material obtained from their cysts] subdivided into Group IA [21 hepatic CE], Group IB [5 pulmonary CE], Group IC [5 multiple organ CE], Group II [49 control subjects] including Group IIA [29 patients with other parasitic diseases], Group IIB [10 patients with space occupying lesions] and Group IIC [10 healthy individuals]. DNA was extracted from CE patients' sera for amplification

and sequencing. Hot-start specific G6 PCR for patients' sera [PCRs] revealed that all CE cases [100%] were of G6 genotype, with 100% sensitivity and 100% specificity and a specific band at 254 bp. Indirect hemagglutination test [IHAT] showed 61.29% sensitivity and 95.92% specificity. DNA sequencing of the amplified DNA fragments of patient's sera showed 100% homology with extracts from parasite materials taken from their own cysts [Gen Bank under the accession no. from GQ476732 to GQ476735], as well as with that of an Argentinean reference strain [provided from WHO reference laboratory].

# Echinococcosis, Hepatic

### surgery

Hepatic hydatid disease: laparoscopic versus percutaneous treatment.

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Egyptian Liver Journal 2011; 1 (1): 25-32 (36 ref.)

Keywords: Laparoscopy; Catheter Ablation-methods; Ultrasonography; Treatment Outcome; Comparative Study

Abstract: Selection of the most appropriate treatment to obtain the best results with the lowest rate of recurrence and minimal morbidity and mortality is mandatory for the management of hepatic hydatid disease. The surgical approach is the mainstay of treatment, and there has been a tendency toward laparoscopic surgery [LS], and more recently, percutaneous treatment [PT], which has become increasingly popular with revolutions in techniques. The aim of this study was to evaluate the results of the laparoscopic treatment and PT combined with medical treatment in noncomplicated hydatid cyst in the liver with regard to the technique, postoperative morbidity, safety, effectiveness, and recurrence during the 18-month follow-up period. During the study period September 2005-October 2009, a total of 50 patients diagnosed with uncomplicated hydatid cyst in the liver were prospectively assigned to either LS [n=15] or PT [n=35]; albendazole was given at a dose of 10 mg/kg twice per day starting 1 week and continuing for 4 weeks after the procedure. Patients were followed for any complication, hospital stay, or recurrence. Moreover, compliance for medical treatment and appearance of any side effect related to the drug were noted during the follow-up period. Fifteen patients underwent LS and 35 patients underwent PT. There was no statistically significant difference between both groups as regards age, sex, or mean diameter of the cysts. There was only one patient with biliary fistula after LS, whereas biliary fistula occurred in two patients after the PT procedure. Postoperative infection and abscess in the cyst cavity occurred in one patient in the laparoscopic group and in three patients in the PT group. The mean hospital stay for the LS group was significantly longer than the PT group [7.3 days vs. 1 day, respectively], P value was less than 0.001. During the follow-up period, local recurrence was seen in one patient [6.7%] in the LS group and in twp patients [5.7%] in the PT group. LS seems to be effective and safe with low morbidity and recurrence rates in uncomplicated hydatid cysts of the liver in accessible locations, but the procedure has its own disadvantages, such as limited area of surgical manipulation. PT combined with oral albendazole should be the method of choice, being safe, effective, and inexpensive, especially in the treatment of types 1, 2, and some type 3 cysts in patients who are contraindicated for surgery or general anesthesia and who do not accept surgery.

#### **Ectromelia**

## diagnosis

Fetal amelia: a case report.

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Oman Medical Journal 2012; 27 (1): 54-55 (15 ref.)

Keywords: Ectromelia-ultrasonography; Limb Deformities, Congenital; Stillbirth; Fetus

**Abstract:** Congenital limb defects are rare fetal anomalies with a birth prevalence of 0.55 per 1,000. Amelia is an extremely rare birth defect marked by the complete absence of one or more limbs. We report a case of fetal amelia, ultrasound findings, manifestations and the fetal outcome.

# **Education, Medical**

The establishment and roles of the medical education department in the faculty of medicine, King Abdul Aziz university, Jeddah Saudi Arabia.

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Oman Medical Journal 2012; 27 (1): 4-9 (38 ref.)

Keywords: Faculty, Medical; Schools, Medical; Research

Abstract: Medical Education departments oversee the process of medical education in medical schools and provide many educational services to support, evaluate and thus enhance the educational role of the medical school. Its roles revolve around research, teaching and providing educational support in areas of curriculum development and assessment. This paper provides a brief summary on the emergence of different medical education centers/units/ departments around the world from a historical perspective. Special attention will be given to the process followed in establishing the Medical Education Department [MED] in King Abdul Aziz University [KAU]. This paper also explores the roles that are currently played within the department with a reflection on documented roles of the medical education departments worldwide. Special emphasis will be given to explore the current challenges faced by KAU MED and proposed suggestions to improve these challenges will also be addressed.

#### **Environment**

#### Evaluating the developed countries policy making toward environmental cases.

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International Journal of Environmental Research 2012; 6 (1): 71-80 (24 ref.)

Keywords: Developed Countries; Policy Making; Ecosystem; Economic Development

**Abstract:** Today, Economic and environmental performance are tightly closed to each other. The natural environment plays an important role in supporting economic activity, directly, by providing resources and raw materials such as water, timber and minerals that are required as inputs for the production of goods and services; and indirectly, through services provided by ecosystems including carbon sequestration, water purification, managing flood risks, and nutrient cycling. Natural resources are, therefore, vital for securing economic growth and development, not just today but for future generations. Economic growth has also provided developing countries the opportunity to improve the quality of life of their citizens, and to balance the environmental challenges they face. Investment, aid and demand for imports from advanced economies all have an important role in supporting economic growth and development through the world The main objective of this paper is to highlight the role of the natural environment in supporting and contributing to economic growth, and the role of environmental policy in achieving improved environmental outcomes in ways that are compatable with the long-term health and stability of the economy. It does not try to answer the question of what the sustainable level of economic growth might be, but instead reviews the evidence and sets out an approach for securing environmentally sustainable economic growth for current and future generations.

### Knowledge analytical approach on promoting environmental management.

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International Journal of Environmental Research 2012; 6 (1): 353-360 (33 ref.)

Keywords: Knowledge; Knowledge Management; Organizations; Questionnaires

**Abstract:** Aim of the present research was to design a proper model for management of knowledge in environmental organizations of country. In study of the model, suitability of the proposed model was researched by asking views of directors, deputies, managers of groups and scientific board members of environmental organizations of country. For this purpose, with review of research literature, insight process, independent technology process and alteration technology process, knowledge solution process, knowledge spiral process and knowledge management conceptual process, principal elements of model and components were determined by examination of models and theories of joint process in the learner organizations. Later, the model was proposed using questionnaire. Reliability of questionnaire was calculated 94.75% and 93.73% by means of re-testing method and Crown Bach's method, respectively. Admissibility of questionnaire was also determined by admissibility of content thereof and primary implementation

[asking views of 30 of directors, deputies, managers of groups in environmental organizations of country]. Determination of admissibility, durability and amendments were followed by implementation of the proposed model in random selected statistical sample consisting of 360 individuals from 4 groups of directors, deputies, managers of groups and scientific board members in environmental organizations of country. The inputs were collected by means of descriptive statistics [frequency distribution tables and diagrams], conclusive statistics methods including Pearson correlation co-efficient matrix for the relation between components. Then, Anova [analysis of variance] the four groups under study, extraction and operative analysis and principal component analysis were performed using the SPSS software and the proposed model, with scale of 6.1 5 out of 7, was confirmed. Principal finding of present research was introduction of a proper model for knowledge management to be used in environmental organizations of country that consists of philosophy and aims, theoretical fundaments, and model implementation steps.

#### Structural equation model for environmentally conscious purchasing behavior.

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International Journal of Environmental Research 2012; 6 (1): 323-334 (40 ref.)

Keywords: Attitude; Behavior; Awareness; Students; Universities

**Abstract:** In This study, the effect of environmental concern, attitudes and behaviors of the university students on the environmentally conscious purchasing behavior was investigated with the help of Structural Equation Model [SEM]. SEM is an effective data analysis tool that expresses the complicated causative relations between the latent variables. In this study, we collected the data from 400 university students by means of a survey. The results of this research showed that environmental attitudes, environmental behavior and green product awareness have a positive effect on environmentally conscious purchasing behavior. The developed model showed that, environmental concern explains 48% of the variation in the environmental attitudes and 28% of the product recovery awareness; environmental attitudes and product recovery awareness explain 55% of green product awareness; environmental attitudes explains 44% of the variation in the environmental behavior; environmental attitudes, green product awareness and environmental behavior explain 74% of the variation in the environmentally conscious purchasing behavior.

# **Erectile Dysfunction**

#### drug therapy

# Comparative study between the effects of yohimbine and sildenafil on erectile dysfunction in stressed male rats.

Moawad, H.; Eid, Nihad. I.; Abdel Latif, M.; Abdel Latif, Hekma A.

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New Egyptian Journal of Medicine [The] 2011; 44 (3): 268-278 (41 ref.)

**Keywords:** Yohimbine-therapeutic use; Piperazines-therapeutic use; Comparative Study; Stress, Psychological-complications; Rats; Male; Immersion-adverse effects

Abstract: The incidence of erectile dysfunction increases as a result of stressful conditions such as industrialized lifestyles. Both physical and psychological stress may interfere with the reproductive capacity of several species. In this work stress was induced by immersion of rats in cold water [15 minutes/day] for 14 consecutive days. The effects of yohimbine [0.2mg/Kg, i.p.] and sildenafil [20mg/Kg, i.p.] on erectile dysfunction of stressed rats were assessed in comparison with control group. Furthermore the levels of testosterone, LH and FSH in blood were evaluated. Results revealed that, immersion of rats in cold water significantly increased mount, intromission, ejaculation latencies and intercopulatory interval indicating a decrease in sexual arousal and motivation, and also decreased ejaculation frequency indicating a decrease in copulatory performance and potency. In addition immersion of rats in cold water for prolonged period could decrease the copulatory activity as evidenced by mating test and decreased testosterone, LH and FSH levels. Results revealed that treatment with yohimbine or sildenafil significantly increased the sexual arousal and potency and corrected the effects induced by stress on the mating behavior of male rats. On the contrary they did not significantly alter testosterone, follicle stimulating hormone [FSH] and luteinizing hormone [LH] levels.

## Escherichia coli

## growth and development

# Inhibition of E.coli growth by extremely low frequency amplitude modulated electromagnetic waves

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New Egyptian Journal of Medicine [The] 2011; 44 (3): 259-267 (27 ref.)

Keywords: Magnetic Field Therapy-utilization; Microbial Sensitivity Tests

Abstract: The emergence of pathogens in today's world has increased the need for new technologies. The main focus of this work was to study the biological effect of magnetic fields, as a component of the non-ionizing radiation on the Pathogenic microorganism Escherichia coli. Antibiotic resistant E. coli were isolated and cultured. Equal volumes of E.coli suspension were exposed to Isotopes Applications Division, square amplitude modulated waves [SAMW] from generators Atomic Energy Authority with constant carrier frequency of 10 MHz and amplitude 0.5 Vpp. The results indicated that exposure of E.coli samples to 0.5 Hz magnetic field caused suppressive effect on the growth and the number of cells. Further changes in the antibiotic sensitivity were observed after exposure where E. coli cells became more sensitive to certain antibiotics as netilmycin, amikacin and cefepime. Meanwhile, no change in the size of DNA fragments was observed. According to the accumulated data. The exposure to extremely low frequency electromagnetic field induced change in the antibiotic sensitivity and inhibition of E. coli growth, suggesting its potential for application as a method for controlling microbial population growth within a variety of environments.

# **Esophageal Neoplasms**

# Modeling the risk of esophageal squamous cell carcinoma and squamous dysplasia in a high risk area in Iran.

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Archives of Iranian Medicine 2012; 15 (1): 18-21 (24 ref.) Keywords: Carcinoma, Squamous Cell; Logistic Models; Risk

Abstract: Identifying people at higher risk of having squamous dysplasia, the precursor lesion for esophageal squamous cell carcinoma [ESCC], would allow targeted endoscopic screening. We used multivariate logistic regression models to predict ESCC and dysplasia as outcomes. The ESCC model was based on data from the Golestan Case-Control Study [total n = 871; cases = 300], and the dysplasia model was based on data from a cohort of subjects from a gastroenterology clinic in Northeast Iran [total n = 724; cases = 26]. In each of these analyses, we fit a model including all risk factors known in this region to be associated with ESCC. Individual risks were calculated using the linear combination of estimated regression coefficients and individual-specific values for covariates. We used cross-validation to determine the area under the curve [AUC] and to find the optimal cut points for each of the models. The model had an area under the curve of 0.77 [95% CI: 0.74-0.80] to predict ESCC with 74% sensitivity and 70.4% specificity for the optimum cut point. The area under the curve was 0.71 [95% CI: 0.64-0.79] for dysplasia diagnosis, and the classification table optimized at 61.5% sensitivity and 69.5% specificity. In this population, the positive and negative predictive values for diagnosis of dysplasia were 6.8% and 97.8%, respectively. Our models were able to discriminate between ESCC cases and controls in about 77%, and between individuals with and without squamous dysplasia in about 70% of the cases. Using risk factors to predict individual risk of ESCC or squamous dysplasia still has limited application in clinical practice, but such models may be suitable for selecting high risk individuals in research studies, or increasing the pretest probability for other screening strategies.

#### **Evidence-Based Medicine**

## Evidence based surgery: how difficult is the implication in routine practice?

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Oman Medical Journal 2012; 27 (1): 72-74 (16 ref.) Keywords: General Surgery; Evidence-Based Practice

**Abstract:** Surgery as a discipline has perhaps been slower than other specialties to embrace evidence based principles. Today, surgeons all over Asia are prepared to challenge the dogma of yesterday. Surgical science which rests on a strong foundation of laboratory and clinical research can now be broadened to include the armamentarium of evidence based practice to advance surgical knowledge. The sheer volume of easily accessed information creates a new challenge. This article discusses keeping up with new information and rinding the best available answers to specific questions amidst all the other information.

# **Family Planning Services**

Determining the factors associated with unmet need for family planning: a cross-sectional survey in 49 districts of Pakistan.

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PJPH - Pakistan Journal of Public Health 2011; 1 (1): 21-27 (27 ref.)

Keywords: Cross-Sectional Studies; Contraception; Questionnaires; Prevalence

Abstract: Around 137 million women in the developing world who would like to avoid childbearing are unable to do so, despite a huge increase in contraceptive access and use globally. Ironically, the prevalence of unmet need in Pakistan is among the highest in the world despite being one of the first countries in South Asia to launch national family planning program. The aim of this paper is to estimate the prevalence of unmet need for contraception and to indentify the factors associated with it Across-sectional survey was conducted in forty nine districts of Pakistan across all four provinces from September 2008 to March 2009. Using an adapted version of PDHS questionnaire, interviews were conducted with approximately 10,000 married women of reproductive age in each district. Sample was later weighted according to district population at the time of analysis to control over and under representation. Logistic regression analysis was used to assess the association between risk factors and unmet need. The total unmet need for contraception was 23.5%. Muinvariable analysis showed that unmet need was found significantly higher in Balochistan and Sindh province compare to Punjab. The unmet need was quite prevalent among the specific groups that include older age women, low or uneducated women, those who have higher number of living children, had no history of miscarriage or abortion, those who are not exposed to mass media once a week, and among the women in lowest wealth quintiles. Despite all the efforts made to increase in uptake of contraceptive method the contraceptive prevalence rate has hardly changed over the last decade. However, several groups of women continue to have high unmet need for family planning. Thus, the family planning programmes may need to shift their focus from increasing uptake of contraceptives to satisfying unmet need for contraception with special focus on those underserved marginalized groups and areas with highest levels of unmet need.

# The value of family planning for improving maternal health in rural Afghanistan: the example of Kandahar.

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Harvard School of Public Health - Center for Health Decision Science

AFJPH - Afghanistan Journal of Public Health 2012; 1 (1): 12-19 (54 ref.)

**Keywords:** Maternal Welfare; Maternal-Child Health Centers; Maternal Mortality; Contraception; Cost-Benefit Analysis; Rural Population; Fertility; Family Planning Policy

Abstract: Women in Afghanistan face some of the highest risks of maternal mortality and morbidity globally. The situation in rural parts of the country is particularly troubling, with women and girls residing in these areas suffering from much higher rates of death due to pregnancy-and delivery-related complications compared to urban areas. With a goal of increasing the contraceptive prevalence rate, particularly to assist in birth spacing, the Basic Package of Health Services seeks to provide access to family planning services equitably, regardless of ability to pay and with a special focus on rural and hard-to-reach populations. Using Maywand district in Kandahar province as a representative example of rural areas, we evaluate the benefits and assess the value [i.e., cost-effectiveness] of family planning for birth spacing and limiting, and to prevent pregnancy-related deaths. We synthesize the best available data to adapt a previously validated maternal mortality model to the situation of maternal health in Kandahar. Outcomes include total fertility rate [TFR], pregnancy-related complications, unsafe abortions, pregnancy-related deaths, maternal mortality ratio [MMR], lifetime risk of maternal death, and proportionate mortality ratio [proportion of deaths among women 15-49 years that are pregnancy-related]. We also estimate the life expectancy gains, years of life saved [YLS], and lifetime costs in order to assess the cost-effectiveness of family planning interventions. We compute the reduction in total

fertility rate and pregnancy-related deaths and estimate the economic impact and cost-effectiveness of family planning interventions. Model-generated estimates of maternal mortality indicators, total fertility rate, and distribution of maternal death by cause closely approximated empiric data. Increasing family planning coverage from a baseline of 8% in rural Kandahar to 30% and 50%, would be expected to reduce the total fertility rate from 6.6 to 5.1 and 3.9, respectively, reduce maternal deaths by 21% and 40%, respectively, and reduce the proportionate mortality ratio from 45% to 38% and 31%, respectively. Incremental cost-effectiveness ratios of family planning strategies were below \$145 per YLS, representing just a fraction of the per capita gross domestic product [GDP]. Extrapolating our results in rural Kandahar to the country as a whole, these strategies would prevent between 166,000 and 210,000 maternal deaths for a very modest investment and in the context of the current infrastructure. Of importance, further gains will require improvements in skilled birth attendants, care during labor and delivery, and access to emergency obstetrical care. Increasing access to family planning will improve the health of Afghan women, save lives and provide high value for the resources invested. Through the efficient use of public health resources, enhanced family planning efforts will improve the public health sector capacity to make necessary investments in skilled attendants, care during labor and delivery, and emergency obstetric care. These results provide strong support for the high value of family planning investments included in the Basic Package of Health Services.

## **Fetal Death**

## etiology

Predictors of fetal demise after traume in pregnant Saudi Arabian women.

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EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 432-438 (25 ref.)

**Keywords:** Accidents, Traffic-statistics and numerical data; Retrospective Studies; Case-Control Studies; Pregnant Women; Wounds and Injuries; Pregnancy Outcome

**Abstract:** In Saudi Arabia, road traffic crashes are becoming a serious public health problem and there are no recent, large-scale, published reports discussing maternal and fetal injuries. We aimed to explore the predictors of fetal death/abortion after maternal trauma. A retrospective case-control study was performed exploring cases of maternal trauma. The study group included 118 women with pregnancy loss while 308 women without loss represented the control group. All data were compared using univariate analysis followed by multivariate regression analysis. Only 3 predictors were associated with significant effect on pregnancy loss after trauma [P < 0.05]: second trimester of pregnancy [OR 2.77, 95% CI: 1.66-4.63, placental abruption [OR 3.69, 95% CI: 2.01-6.79] and severe injury score [OR 6.78, 95% CI: 4.04-11.37].

#### **Fibroma**

## diagnosis

## Bilateral elastofibroma dorsi.

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SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 415-416 (5 ref.)

**Keywords:** Neoplasms, Multiple Primary-diagnosis; Soft Tissue Neoplasms-diagnosis; Thoracic Neoplasms-diagnosis

# **Fibrosarcoma**

# diagnosis

#### Intraosseous fibrosarcoma of maxilla in an HIV patient.

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Archives of Iranian Medicine 2012; 15 (1): 59-62 (22 ref.)

Keywords: Maxilla; Maxillary Neoplasms; HIV; HIV Infections; Acquired Immunodeficiency Syndrome

Abstract: Fibrosarcoma is a malignant mesenchymal neoplasm of fibroblasts that rarely affects the oral cavity and can cause local recurrences or metastasis. Fibrosarcomas account for 15% of all soft tissue sarcomas, which represent only 1% of all malignant tumors of the head and neck region. The clinical behavior of the fibrosarcoma is characterized by a high local recurrence rate, and low incidence of loco regional lymph node and/or distant hematogenous metastasis. The etiology for fibrosarcoma has no definite cause but is thought to occur from preexisting lesions or in previously irradiated areas of bone lesions. Immunosuppression associated with HIV infection and acquired immune deficiency syndrome [AIDS] has been consistently linked to various cancers, including Kaposi's sarcoma, non-Hodgkin's lymphoma, and invasive cervical cancer. Rare neoplasms like Hodgkin's disease, anal cancer, leukemia, basal cell carcinoma, and squamous cell carcinoma have also been demonstrated. This paper presents one such a rare incidence of an intraosseous fibrosarcoma occurring in an HIV-positive patient.

### **Flatfishes**

# Bioaccumulation of metals in tissues of Solea vulgaris from the outer coast and Ria de Vigo, Ne atlantic [Spain].

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International Journal of Environmental Research 2012; 6 (1): 19-24 (17 ref.)

**Keywords:** Metals, Heavy; Metals; Cadmium; Lead; Mercury; Copper; Zinc; Arsenic; Selenium; Manganese; Liver; Kidney

**Abstract:** Ria and coastal zone are, in particular, vulnerable to heavy metals pollution. Concentrations of 10 metals in liver, muscle and kidney of the sole [Solea vulgaris] from Ria of Vigo and its coastal zone [Spain] were measured from April 2006 to February 2007 and the relationships between fish size age and metal concentrations in the tissues was investigated. Concentrations of the heavy metals in examined fish ranged as follows: Cd [0.01 - 0.7], Pb [0.1 - 2.5], Hg [0.01 - 0.7], Cu [3.3- 46.7], Zn [15- 274], As [3-151], Se [0.9- 18.2], Mn [0.9- 9.76] microg/g dryweight. Kidney and liver showed the highest levels of Cd, Cu, Pb and Zn. The concentration of metals was significantly affected by the sampling site and fish tissues. Our results indicated that all heavy metals were found the highest in muscle tissue. A comparison of metals concentration in fishes from both sites showed higher bioaccumulation in the examplars captured in Ria. This indicates that there is a trend of higher metal pollution level in the estuarine environment. Although, metals levels in the tissues in the area do not exceed contamination levels, measures are recommended for lowering heavy metals inputs into Ria of Vigo. Heavy metals in the edible parts of the investigated fish were in the permissible safety levels for human uses.

## **Food-Drug Interactions**

# [Opinions of clinicians towards use of computer applications for detecting drug-food interactions].

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Tehran University of Medical Sciences - School of Public Health - Nutrition and Biochemistry Department

Payavard - Salamat 2011; 5 (1): 58-68 (18 ref.)

Keywords: Drug Interactions; Diagnosis, Computer-Assisted; Medical Errors; Questionnaires

**Abstract:** Adverse events in hospitals are found to be a major problem of all health systems in the world. In fact, drug interaction side effects are now the fourth leading cause of death in the U.S. The aim of the current study was to identify the opinions of clinicians working in Shariati and Emam hospitals towards the use of computer applications for detecting drug-food interactions. Ninety clinicians including physicians, pharmacists and nurses were selected randomly in the current descriptive- analytical study. The opinions of clinicians toward using computer application systems for detecting drug-food interactions were assessed by a questionnaire. The questionnaire's validity and repeatability was examined in a pilot study. Cronbach's alpha was 0.85 which indicated an acceptable level of repeatability of the questionnaire. The questionnaire was distributed among the academic staffs in order to determine its validity. 95.4% of clinicians had positive attitudes towards the requirement of computer application to detect drug-food interactions. Around 94% of them showed their willingness towards using the computer application systems. Therefore, use of computer application seems to be necessary in health system. The collection and analysis of data encourages further investments in computerized system to prevent drug-food interaction. Such built-in warning systems in hospitals alert doctors to drug-food interaction and improvement in patient care. Screening each patient's medication plan for drug-food interactions can reduce medical error and improve the quality of health care.

# **General Surgery**

### Moving paradigm towards scarless surgery [less is more].

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 721-722 (12 ref.)

Keywords: Surgical Procedures, Operative; Laparoscopy; History of Medicine

#### Under representation of women in surgery in Nigeria: by choice or by design?

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Oman Medical Journal 2012; 27 (1): 66-69 (20 ref.)

Keywords: Women; Cross-Sectional Studies; Consultants; Internship and Residency; Questionnaires

**Abstract:** Female Doctors' lack of interest in surgical careers has raised much concern in recent times. An understanding of the factors responsible for this lack of interest and evolving attitude is needed. The aim of this report was to determine the local factors that may be responsible and the most likely surgical specialty female doctors would prefer, This is a cross sectional study involving all female [consultant and resident] doctors in one teaching hospital. Information was obtained using a structured questionnaire which determined what formed the respondent's choice of present specialty. It also included the likely local factors that might have some bearings on the interest of female doctors in surgery. Data obtained were analyzed using SPSS version 11.5. There were a total of 105 respondents. The age range was 26 - 63 years [mean: 26.88+2.19]. The factors that were considered as deterrents to female doctor choice of surgical career were: a) the impact on their time for family and other social engagements 29 [27.6%]; b] heavy work load 22 [21%]; c] involvement of a lot of physical effort 18 [17.1%]; d] lack of women in surgery 9 [8.6%]; and e] lack of role models 4 [3.8%]. Twenty three [21.9%] considered all the above factors. The subspecialty preferred by most female was plastic and reconstructive surgery, followed by Pediatric surgery. The rigorous requirements of the training and practice of surgery deterred female doctors' interest in choosing and sustaining a surgical career. To maintain surgery as a premier career choice, female doctors should find surgery to be professionally and personally rewarding.

# **Giardiasis**

#### diagnosis

Diagnosis of giardiasis in asymptomatic and symptomatic patients using G. lamblia antigen[s] and IgA antibody in saliva.

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#### PUJ - Parasitologists United Journal 2011; 4 (1): 29-38 (64 ref.)

**Keywords:** Giardia Lamblia; Antigens, Protozoan; Immunoglobulin A, Secretory; Saliva; Immunodiffusion-methods; Immunoblottin G-methods

Abstract: Giardiasis may be asymptomatic or symptomatic with possible extra-intestinal complications such as maculopapular rashes, polyarthritis and urticaria. Diagnosis by stool examination may give false negative results. Accurate exclusion of giardiasis is important to differentiate it from other causes of these manifestations. To assess the employment of saliva for diagnosing G. lamblia infections. The study attempted to determine the presence of G. lamblia antigen in human saliva by immunodiffusion technique and the associated specific secretory IqA [sIqA] immune response by immunoblot technique. Samples of saliva were collected from 80 subjects; 40 Giardia-infected individuals [symptomatic and asymptomatic], 20 subjects infected with other intestinal parasites and 20 healthy individuals as control groups of similar age and sex. Giardia cysts were collected from stools of heavily infected individuals, excysted and the harvested forms were cultivated on TYI-S-33 medium to prepare trophozoite antigen. The latter was used to produce hyperimmune serum in rabbits that was employed to detect the presence of specific antigen [s] in saliva by double gel immunodiffusion technique. Cysts were also used for antigen preparation which was fractionated by SDS-PAGE and tested to detect sIgA by immunoblotting of saliva samples. G. lamblia antigen was not detected in the saliva of any of the individuals enrolled in the study. Secretory IgA was detected in 75% of all infected individuals with 75% sensitivity and 90% specificity and in 90% of symptomatic and 60% of asymptomatic infected individuals. Molecular weight [MW] bands of 170 and 133 kDa were recognized by specific salivary slgA by immunoblot analysis. Sensitivity and specificity of the 170 kDa band recognition were 75% and 90%, respectively with 88.2% and 78.2% positive [PPV] and negative [NPV] predictive values, respectively. The 133 kDa band gave 42.5% sensitivity, 100% specificity with 100% PPV and 62.3% NPV. Absence of specific antigen in the saliva refutes the assumption that G. lamblia antigens may reach the blood and guestions the possibility of tissue invasion. The 170 and 133 kDa of Giardia cysts antigens form together useful molecules for diagnosis of giardiasis by IgA immunoblotting.

# drug therapy

## A study on the effect of Myrtus communis and Olibanum on Giardia lamblia infection in Egypt.

Abdalla, Shahinaz F.; Ramadan, Nashwa I.; Mohamed, Anhar A.; El Deeb, Hala K.; Al Khadrawy, Faisal M.; Badawy, Abeer F.

Ain Shams University - Faculty of Medicine - Department of Parasitology

PUJ - Parasitologists United Journal 2011; 4 (1): 89-100 (37 ref.)

**Keywords:** Giardia Lamblia; Myrtus-chemistry; Boswellia-chemistry; Plant Extracts-therapeutic use; Duodenum-pathology; Histology; Duodenum-ultrastructure; Microscopy, Electron; Treatment Outcome

Abstract: Giardia lamblia is one of the most common protozoal infections in humans. Although metronidazole [MTZ] is the drug of choice for treatment of giardiasis, yet its chemical composition poses major threats. The search for new alternative therapeutic approaches for this parasitic disease in replacement of MTZ. The effect of Myrtus Communis [MC; called Aas plant in Arabic] and Olibanum [OL; called Leban in Arabic] on G. lamblia were studied. Extracts of MC [methyl alcohol, petroleum ether, chloroform, ethyl acetate and aqueous extracts] amid ethanol extract of OL were used. In vitro culture of G. lamblia trophozoites on TYI-S-33 medium was done, followed by inoculation of the plants' extracts in three different concentrations. This was evaluated by trophiozoite multiplication, adherence assay and electron microscopic study. The in viva effect was evaluated by histopathological study of the duodenum of experimentally infected mice after treatment by each herb. All plant extracts affected G. lamblia trophozoites in manner dependent on concentration and time of exposure. In low concentration, both herbs significantly decreased the in vitro adherence of tropliozoites when compared to infection control group, while there was no statistical difference when compared to MTZ control group. Extensive ultrastructural changes of Giardia trophozoites were evident after 48 hours exposure to each medical herb. Histopathological examination of duodenum of G. lamblia infected mice showed epithelial microvillus abnormalities, which improved after administration of MC and OL extracts. Results confirm the antiparasitic effect of MC and OL on G. lamblia as an alternative to MTZ, to overcome its resistance and hazards.

#### Glaucoma

The influence of glaucoma on quality of life among elderly patients.

Safaan, Nahla A.; Mohsen, Magda M.; Attia, Amal; Elhgry, Ghada M. Menofia University - Faculty of Nursing - Community Health Nursing

New Egyptian Journal of Medicine [The] 2011; 44 (3): 177-190 (29 ref.)

Keywords: Aged; Quality of Life; Questionnaires; Health Education

Abstract: Glaucoma is a major public health problem, causing visual impairment which hampers day to day work. This study was conducted to identify the influence of glaucoma on quality of life among elderly patient. a descriptive design was utilized. Setting: This study was conducted at the, outpatient clinic of University Hospital, outpatient clinic of ophthalmology hospital at Shebin-Elkom and private ophthalmology clinics at Tala. Sampling: all elderly patients who were diagnosed as glaucoma patient that attending the three selected setting in the period of in the period of time started from November 2008 to January 2009 were included in the sample [100 patients]. Tools used were [1] an interviewing questionnaire, and [2] Modified form of National Eye Institute Visual Functioning Questionnaire NEI VFQ-25. illustrated that 22% of the subject were blind in one eye while 6% of the subject were completely blind in both eyes. The great portion of the subject reported poor quality of life. The most affected domain was glare, peripheral vision activities, financial, dependency and general vision domain. There was a relation between medical, ocular history [Time elapsed since diagnosis, visual field loss, Ocular involvement] and global QOL score of the subject. Also a negative correlation was found between numbers of glaucoma surgeries and global QOL score. Glaucoma mainly affects quality of life of elderly people by stealing their vision, impaired independency; interfere with role function, social activities, daily living activities and economically burden for the patient. Increasing the awareness of the community regarding; regular check up program for glaucoma, risk factors of glaucoma and importance of early detection and early management.

# Glucosephosphate Dehydrogenase Deficiency

# epidemiology

Glucose-6-phosphate dehydrogenase deficiency among male blood donors in Sana'a City,

Al Nood, Hafiz A.; Bazara, Fakiha A.; Al Absi, Rashad; Al Habori, Molham

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Oman Medical Journal 2012; 27 (1): 46-49 (14 ref.)

Keywords: Blood Donors; Prevalence; Cross-Sectional Studies; Spectrophotometry; Electrophoresis; Phenotype

Abstract: To determine the prevalence of Glucose-6-phosphate dehydrogenase [G-6-PD] deficiency among Yemeni people from different regions of the country living in the capital city, Sana'a, giving an indication of its overall prevalence in Yemen. A cross-sectional study was conducted among Yemeni male blood donors attending the Department of Blood Bank at the National Centre of the Public Health Laboratories in the capital city, Sana'a, Yemen. Fluorescent spot method was used for screening, spectrophotometeric estimation of G-6-PD activity and separation by electrophoresis was done to determine the G-6-PD phenotype. Of the total 508 male blood donors recruited into the study, 36 were G-6-PD deficient, giving a likely G-6-PD deficiency prevalence of 7.1%. None of these deficient donors had history of anemia or jaundice. Thirty-five of these deficient cases [97.2%] showed severe G-6-PD deficiency class showed a significant presence of G-6-PD deficiency with predominance of a severe G-6-PD deficiency type in these blood donors in Sana'a City, which could represent an important health problem through occurrence of hemolytic anemia under oxidative stress. A larger sample size is needed to determine the overall prevalence of G-6-PD deficiency, and should be extended to include DNA analysis to identify its variants in Yemen.

## **Glycolates**

Removal of glycolic acid from aqueous solution using bagasse fly ash.

Soni, A.B.; Keshav, A.; Verma, V.; Suresh, S.

National Institute of Technology [NIT] Raipur - Department of Chemical Engineering

International Journal of Environmental Research 2012; 6 (1): 297-308 (20 ref.)

Keywords: Cellulose; Coal Ash; Adsorption; Kinetics

**Abstract:** Present study deals with the adsorption of glycolic acid [GA] from aqueous solutions by using bagasse fly ash [BFA]. BFA is a solid waste generated from bagasse fired boilers and can be used as an adsorbent. Batch adsorption studies were carried out to evaluate the effect of various parameters like adsorbent dose, contact time, initial concentration and temperature on the removal of GA from aqueous solutions. For the selected dosage, it was found that the adsorption increases with increase in BFA doses and decreases with increase in acid concentration. The effect of contact time on removal shows that the adsorption of glycolic acid on BFA is very fast. The kinetics of the

sorption of GA was well represented by Elovich model, first order, pseudo-second order and Weber and Morris infraparticle diffusion model. The adsorption isotherm analyses were also carried out by using Langmuir and Freundlich isotherm equations. Freundlich equation was found satisfactory to represent the equilibrium data. Thermodynamic studies revealed that the adsorption of GA on BFA is exothermic in nature.

#### **Habits**

#### The seven habits of highly effective people.

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University of Toronto - Oman Medical Specialty Board - Department of Family and Community Medicine

SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 426-427

Keywords: Personality; Human Characteristics; Awareness; Imagination; Conscience; Leadership

#### Health

## Megacities and health.

Pappas, Gregory

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PJPH - Pakistan Journal of Public Health 2011; 1 (1): 4-5 (9 ref.)

Keywords: Cities; Urban Population; Urban Health

## **Health Care Costs**

#### Health Care Market Deviations from the Ideal Market.

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SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 328-337 (24 ref.)

**Keywords:** Health Care Reform; Economic Competition; Health Policy; Economics, Hospital; Public Sector-economics; Efficiency, Organizational

**Abstract:** A common argument in the health policy debate is that market forces allocate resources efficiently in health care, and that government intervention distorts such allocation. Rarely do those making such claims state explicitly that the market they refer to is an ideal in economic theory which can only exist under very strict conditions. This paper explores the strict conditions necessary for that ideal market in the context of health care as a means of examining the claim that market forces do allocate resources efficiently in health care.

### **Health Care Sector**

### Prioritized targeting or mile wide, inch thin: time to strategize public sector health investments.

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Research and Development Solutions

PJPH - Pakistan Journal of Public Health 2011; 1 (1): 59-60 (9 ref.)

Keywords: Public Sector; Investments; Delivery of Health Care; Health; Private Sector

#### **Health Education**

[The content analysis of theses in the field of health education in Tehran university of medical sciences, Tarbiat Modares university and Iran university of medical sciences during 1970-2010].

Moghadam, H. Rezakhani; Shojaeizadeh, D.; Nabiolahi, A.; Moez, S. Tehran University of Medical Sciences - School of Public Health

Payavard - Salamat 2011; 5 (1): 80-90 (14 ref.)

Keywords: Research

Abstract: Theses are considered as one of the sources for research in the field of education. The aim of this study was to determine the popular topics during 1349-1389 [1970-2010] and to examine the amount of educational interference and the type of such interference in different theses. This research study was done using the descriptive-analytic method and employing the content analysis technique. The choice of topics was based on the categories derived from the Medical Headings of the American National Library. All related theses [336 in this field] were reviewed and the data were analyzed by SPSS software. In this review, most finished theses belonged to Tehran University of Medical Sciences [62.5%], Tarbiat Modares University [25.3%], and Iran University of Medical Sciences [12.2%]. MSc theses were mainly about diseases [23.8%]; however, doctoral dissertations were mostly about the prevention of diseases [26.2%]. Although in the recent decade, there has been an increase in new topics and educational interference in theses, some important issues like the training of patients are still neglected. It seems that some strategies like preparing a suitable information bank of thesis in the field of health education can be a good guide for selecting new topics and ignoring old ones.

#### [The effect of health education on elderly women life quality].

Nanbakhsh, F.; Mohaddesi, H.; Amirabi, A.; Hajshafiha, M.; Broomand, F.; Bahadori, F.; Mohamadlo, S. Urmia University of Medical Sciences - School of Medicine - Obstetrics and gynecology Department

Payavard - Salamat 2011; 5 (1): 47-57 (33 ref.)

Keywords: Aged; Quality of Life; Life Style; Health Knowledge, Attitudes, Practice; Questionnaires

**Abstract:** Elderly is a physiological phenomenon with many inevitable complications, which their effects significantly can be reduced by individual's life style. Therefore in this study we have evaluated the impact of subjects' knowledge on their lifestyle. This study was a semi experimental and interventional one that has been conducted in Urmia University of Medical Science. Thus 200 women between 54 to 80 years old were enrolled in this study and their knowledge, attitude and behavior toward a healthy lifestyle was surveyed before and 6 months after giving them a proper education. Subsequently the required information gathered from questionnaires and the data analyzed by mcmanaman paired and t paired tests. In this study all data analyzed by SPSS software and the P value less than 0.05 recognized to be statistically significant. The scores of before 5.86 vs. +/- and 6 months after subjects get the required education were 29.16 6.32 respectively [P +/- 34.26<0.001]. This significant difference demonstrates the positive impact of life style education on attitude, behavior and knowledge of individuals in respect to their lifestyle. These results were even more magnificent comparing the literate and illiterate subjects. Based on our study we conclude that education has an important positive role in all elder groups improving their lifestyle.

# **Health Manpower**

#### Planning and reform of human resources for health in Afghanistan.

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Ministry of Public Health - Acting General Director of Human Resources

AFJPH - Afghanistan Journal of Public Health 2012; 1 (1): 34-41 (13 ref.)

Keywords: Human Development; Health Priorities; Health Planning

**Abstract:** Afghanistan is ranked 155 out of 169 countries on the human development index [HDI], a composite measure of three basic dimensions of human development, one of which is health. While some progress has been made, many of the key indicators of health status have not improved in the last decade. Many factors contribute to the lack of progress, but central to improving the situation is strengthening the national health system, particularly in the arena of human resources. The Ministry of Public Health [MoPH] has prioritized the issue of human resources, viewing this as a fundamental necessity to the provision of healthcare. To bring together a number of distinct planning efforts, the General Directorate of Human Resources [GDHR], MoPH organized a process to develop a comprehensive plan. In this paper, we summarize the process that was established by the GDHR to lay a foundation for developing the strategic plan to address human resources for health [HRH] in Afghanistan. This plan includes the synthesis and

harmonization of data and the involvement of all key stakeholders. We document both success and shortcomings, discuss the remedial action initiated to continue to advance the HRH agenda, and conclude with several recommendations.

#### **Health Status**

Reproductive and non-reproductive health status of women aged 15 years and above in southern Jordan.

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EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 417-425 (24 ref.)

**Keywords:** Health Surveys; Needs Assessment; Reproductive Behavior; Overweight-epidemiology; Obesity-epidemiology; Urinary Tract Infections; Body Mass Index; Anemia-epidemiology; Hypertension-epidemiology

**Abstract:** Failure to address women's health, including their reproductive health needs, increases health care costs and social inequity. This descriptive study assessed the reproductive and non-reproductive health status of women over 15 years old in poverty pockets in the southern region of Jordan. Two villages were selected using purposive sampling and all women in the villages were invited to participate in a [healthy family week]: 259 responded to the invitation. Although 49.4% of the surveyed women were overweight or obese, only 8.5% had high blood pressure. Reproductive health concerns included the high proportions of women married at an early age [15-20 years] [76,8%], having 5+ children [43.1%] and with haemoglobin level < 12 g/dL, indicating anaemia [55.5%]. Urinary tract infection was the most common health problem [29.0%], Health care providers should be sensitized to the health needs of Jordanian women in general and those living in disadvantaged areas in particular.

# **Health Systems Plans**

Strengthening Afghanistan's health system: challenges, progress, and opportunities.

Goldie, Sue J.

Harvard University - Harvard School of Public Health

AFJPH - Afghanistan Journal of Public Health 2012; 1 (1): 3-4 (19 ref.)

Keywords: Delivery of Health Care; Health Priorities; Health Policy

### **Heat Stroke**

Electrocardiographic findings in heat stroke and exhaustion: a study on Makkah pilgrims.

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Journal of the Saudi Heart Association 2012; 24 (1): 35-39 (17 ref.)

Keywords: Heat Exhaustion; Electrocardiography; Heart Rate; Tachycardia, Sinus; Islam

Abstract: Over two million pilgrims perform annual rituals in Makkah region, which when coincides with summer months, exposes them to outdoor temperatures exceeding 45 °C and humidity approaching 80%. Accordingly, heat illnesses are common including explicit heat strokes and heat exhaustion. No previous studies elaborated on electrocardiographic changes among this unique cohort. To compare electrocardiographic changes in three groups exposed to high outdoor temperatures, namely, patients with heat stroke compared to patients with heat exhaustion and a control group exposed to the same outdoor temperatures without clinical manifestations. Through case control design, two case groups of patients were selected. The first group [GI] was 34 patients admitted to the cooling units with clinical picture of heat stroke and the second group [G2] comprised 28 patients admitted with heat exhaustion. The control group [G3] included 31 patients selected from relatives of patients and outdoor workers. The outcome for comparison was 12-lead electrocardiographic changes done for all selected individuals. For [GI], the ECG was done while they were prepared for cooling or immediately when cooling was started. In GI, 18 were females and 16 males with ages of 20-76 years [59 +/- 11 years]. Their heart rates ranged from 64 to 160 beats per minute [mean 120 +/- 24 per minute]. Only 5/34 ECGs were completely normal. Sinus tachycardia was present in 27/34 patients [79%], with ischemic changes in 9/34 ECGs. In G2, 24 were males and four females with ages of 25-80 [mean 47 +/- 15 years], the heart rate ranged from 64 to 170 per minute [mean 97 +/- 16 per minute]. Seven out of 28 ECGs were normal

[25%] while 21/28 had some abnormalities. None had ischemic changes. Control group [G3], was five females and 26 males ages 18-80 years [mean 38 +/- 15 years], 22/31 had normal ECGs [71%]. All had normal sinus rhythm, 56-98 beats per minute [74 +/- 11]. Nine patients had some electrocardiographic abnormalities but none had ischemic changes. We conclude that electrocardiographic abnormalities occur with a high frequency in patients with heat stroke and heat exhaustion, with sinus tachycardia and ischemic changes occurring more frequently in patients with heat stroke.

#### **Helminthiasis**

### immunology

### Characteristics and consequences of the immune response to helminthes.

Khalifa, Khalifa El Sayed

Ain Shams University - Faculty of Medicine - Department of Parasitology

PUJ - Parasitologists United Journal 2011; 4 (1): 15-28 (148 ref.)

**Keywords:** Immunity, Innate-physiology; Immunity, Cellular; Adoptive Immunity; Hypersensitivity, Immediate; Hypersensitivity, Delayed; Review Literature as Topic

# Hematoma, Epidural, Spinal

## diagnosis

# Spontaneous resolution of paraparesis because of acute spontaneous thoracolumbar epidural

Gundag, M.; Seyithanoglu, M.H.; Dogan, K.; Kitis, S.; Ozkan, N.

Bezmialem Vakif University - Faculty of Medicine - Department of Neurosurgery

IRCMJ - Iranian Red Crescent Medical Journal 2012; 14 (1): 45-48 (16 ref.)

**Keywords:** Paraparesis; Spinal Cord Compression; Back Pain; Hypesthesia; Magnetic Resonance Imaging; Thoracic Vertebrae; Lumbar Vertebrae

**Abstract:** Symptomatic spontaneous spinal epidural hematoma [SSEH] is an uncommon cause of cord compression that commonly is considered as an indication for emergent surgical decompression. We aimed to investigate a patient with a SSEH that completely resolved clinically and radiographically, without surgical treatment. The patient presented three days after the sudden onset of back pain, numbness, and weakness. Magnetic Resonance Imaging [MRI] revealed a posterior thoracolumbar epidural hematoma extending from the level of T10 to L2 with significant cord compression. Decompression was recommended but he refused surgery and was managed conservatively. One month later, weakness totally recovered and hematoma was absent on MRI.

#### Hemobilia

## diagnosis

#### Haemobilia: a rare cause of gastrointestinal bleeding.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 766-768 (10 ref.)

**Keywords:** Gastrointestinal Hemorrhage; Hepatic Duct, Common-injuries; Aneurysm, False; Cholecystectomy, Laparoscopic; Hematemesis; Hepatic Artery-abnormalities; Angiography; Embolization, Therapeutic; Postoperative Complications

**Abstract:** latrogenic injury to hepatic duct leading to pseudoaneurysm and haemobilia can occur following laparoscopic cholecystectomy. We report a case of a 60 years old man presenting with haematemesis found to have pseudoaneurysm of accessory hepatic artery 4 months after laparoscopic cholecystectomy. Diagnosis was made by

computed tomography [CT] scan followed by celiac and mesenteric artery angiogram. The bleeding was successfully treated with coil embolization

# Hemorrhagic Fever, Crimean

# epidemiology

Crimean-Congo haemorrhagic fever outbreak investigation in the Western Region of Afghanistan in 2008.

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Ministry of Public Health - Afghan Public Health Institute - Disease Early Warning System

EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 522-526 (12 ref.)

**Keywords:** Hemorrhagic Fever, Crimean-transmission; Contact Tracing; Prognosis; Hemorrhagic Fever, Crimean-drug therapy; Hemorrhagic Fever, Crimean-diagnosis

**Abstract:** Crimean-Congo haemorrhagic fever [CCHF] is a life-threatening viral haemorrhagic fever. This paper reports on the first multifocal outbreak recorded in the Afghanistan. The outbreak was detected in 2008 in the Western Region of the country and 30 cases [17 males and 13 females] were detected between 10 July and 22 October 2008. Standard case definitions based on World Health Organization sources were used. Most of the cases [27] occurred in Herat province; 25 were aged between 18-55,1 was > 55 years and 4 were12-18 years [median age was 27 years]. The case fatality rate was 33%; 41% among males and 23% among females [P - 0.29]. Significantly more patients infected by contact with meat and body fluids died that those whose contact was through animal husbandry or ticks [P = 0.0048]. Of the 30 cases, 33 close contacts were traced; 3 were positive for CCHF IgM with no symptomatic evidence of the disease.

# Heparin

#### therapeutic use

Efficacy of a single dose intravenous heparin in reducing sheath-thrombus formation during diagnostic angiography: a randomized controlled trial.

Alamri, Hussein S.; Almoghairi, Abdulrahman M.; Alghamdi, Abdullah A.; Almasood, Ali S.; Alotaiby, Mohamed A.; Kazim, Hameedullah M.; Almutairi, Meshal; Alanazi, Aziz

The Military Hospital - Prince Sultan Cardiac Center

Journal of the Saudi Heart Association 2012; 24 (1): 3-7 (15 ref.)

**Keywords:** Injections, Intravenous; Thrombosis; Angiography; Femoral Artery; Coronary Angiography; Placebos; Heart Catheterization; Double-Blind Method

Abstract: Femoral arterial sheath thrombosis and distal embolization are well-recognized complications of cardiac catheterization but the occlusion is extremely rare. Heparinized saline flushes are used during diagnostic coronary angiography to prevent thrombus formation within the sheath lumen. However, the use of prophylactic intravenous heparin following the femoral arterial sheath insertion is controversial. The aim of this study is to evaluate the effectiveness of 2000 units of intravenous heparin bolus in comparison to a saline placebo on the thrombus formation within the arterial sheath during the diagnostic coronary angiography. Eligible patients were randomized to receive either a study drug or placebo at the time of femoral sheath insertion. The sheath was aspirated and flushed for any presence of thrombus after each catheter exchange and at the end of the procedure. Five milliliters of blood were extracted and visualized on clean gauze followed by a saline flush. The primary end-point was the effectiveness of the study drug on reducing the incidence of sheath-thrombus formation. Three hundred and twenty patients were randomized into two arms. Three hundred and four patients were analyzed: 147 patients in heparin arm and 157 patients in placebo arm after exclusion of 13 patients in heparin arm and three in placebo arm because of incomplete reports. The baseline characteristics were similar and sheath-thrombi formation was observed in 20% of the total cohort. Of the heparin arm, 12% [19 patients] developed sheath-thrombus formation, whereas 26% [42 patients] in the placebo arm, p-value = 0.002. An adjusted logistic regression model showed that the only predictor for the sheaththrombus formation was the study drug [i.e. heparin]. The odds ratio of developing a thrombus in the control arm was 2.5 [95% CI: 1.4-4.5, p = 0.003]. There were no bleeding events observed. The risk of thrombus formation is significant

and intravenous heparin significantly reduced thrombus formation during diagnostic coronary angiography, with no excess bleeding events.

# **Hepatitis C**

# Dermatologic manifestations of hepatitis C infection and the effect of interferon therapy: a literature review.

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Tehran University of Medical Sciences - School of Public Health - Department of Immunology

Archives of Iranian Medicine 2012; 15 (1): 43-48 (99 ref.)

**Keywords:** Interferons; Skin; Hepacivirus; Lichen Planus; Cryoglobulinemia; Porphyria Cutanea Tarda; Psoriasis; Vitiligo; Alopecia; Sarcoidosis; Polyarteritis Nodosa; Pruritus

**Abstract:** The skin could be a main target organ for extrahepatic manifestations in hepatitis C virus- [HCV] infected patients and research data suggest that interferon treatment may be associated with immune-mediated skin lesions. However, case reports propose that the response of dermatologic extrahepatic manifestations to interferon in patients with chronic HCV is greatly different. The objective of this study is to summarize currently available data on dermatologic conditions associated with chronic HCV infection. In addition, we investigate the incidence of the development of immune mediated dermatologic disorders during interferon therapy in these patients.

## epidemiology

# Frequency of hepatitis C viral RNA in anti-hepatitis C virus non-reactive blood donors with raised alanine aminotransferase.

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Armed Forces Institute of Pathology [AFIP] - Department of Haematology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 782-783 (6 ref.)

**Keywords:** Hepacivirus; Hepatitis C Antibodies; RNA; Blood Donors; Alanine Transaminase; Hepatitis B Surface Antigens; Reverse Transcriptase Polymerase Chain Reaction

**Abstract:** The objective of this study was to find out the frequency of HCV RNA in anti-HCV non-reactive blood donors with raised alanine amino transferase [ALT]. The study was conducted at Baqai Institute of Haematology, Baqai Medical University, Karachi, in collaboration with Combined Military Hospital, Malir Cantt, Karachi. The demographic data of blood donors was recorded, and anti-HCV, HBsAg and HIV were screened. Four hundred consecutive donors with raised ALT above the reference range were included in study. HCV RNA RT-PCR was performed on 5 sample minipools using Bio-Rad Real time PCR equipment. HCV RNA was detected in 1/400 [0.25%] blood donors. Finding of raised ALT in blood donors warrants further investigations. In case, if raised ALT is unexplained presence of HCV RNA may be suspected.

## Hepatitis C, Chronic

#### drug therapy

# Gamma-glutamyl transpeptidase and alpha-fetoprotein: are they predictors of treatment response in patients with chronic hepatitis C?

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Egyptian Liver Journal 2011; 1 (1): 18-24 (25 ref.)

Keywords: gamma-Glutamyltransferase-blood; alpha-Fetoproteins-blood; Treatment Outcome

**Abstract:** Hepatitis C virus is a leading cause of chronic liver disease. Elevated serum alpha-fetoprotein [AFP] has been used as a marker for hepatic regeneration after the destruction of hepatocyte in viral hepatitis. Recently, gamma-glutamyl transpeptidase [GGT] has also been taken into account in the evaluation of patients with chronic hepatitis C

[CHC]. This study aimed to examine the association between serum AFP and serum GGT levels, and treatment outcome in patients with CHC treated with pegylated interferon and ribavirin. We examined the association between AFP and GGT levels and sustained virological response [SVR] in 150 patients with CHC in whom antiviral therapy was initiated. Serum AFP, GGT, and hepatitis C virus RNA were tested for patients completing 48 weeks of treatment and patients who responded to treatment after 6 months. AFP and GGT levels were lesser in patients who achieved SVR than in those who did not achieve a response. The logistic regression model [univariate analysis] of factors associated with SVR showed a significant increase in SVR when AFP ranged from 2.8 to 9.9 micro g/ml, GGT less than or equal to 50 U/l, and Ishak fibrosis score less than or equal to F2. Serum AFP and GGTwere strongly correlated in multivariate analysis; only GGT less than or equal to 50 U/l and AFP from 2.8 to 9.9 micro g/ml were independent predictors of SVR, whereas Ishak score of fibrosis was a dependent predictor for SVR. AFP and GGT can be used as independent predictors of treatment response in patients with CHC receiving pegylated interferon and ribavirin.

#### Management of obesity and outcomes of hepatitis C treatment.

Alwakeel, Hany R.; Zaghla, Hasan E.; Omar, Nabeel A.; Alshinnawy, Hasan A.; Rewisha, Eman A.; Taha, Azza A.; Kandil. Hossam M.

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National Liver Institute - Department of Hepatology

Egyptian Liver Journal 2011; 1 (1): 11-17 (25 ref.)

**Keywords:** Ribavirin-therapeutic use; Interferons-therapeutic use; Body Mass Index; Obesity; Weight Loss; Treatment Outcome

Abstract: Obesity is a modifiable risk factor for nonresponse to chronic hepatitis C [CHC] treatment. We examined whether weight loss during pegylated interferon [IFN] plus Ribavirin therapy is associated with improved response. Rapid virological response, early virological response, end of treatment response, and sustained virological response [SVR] were compared among patients with or without weight loss [>/=0.5 body mass index [BMI]] during therapy for hepatitis C virus. Among 324, who provided consent, 280 were treatment-naive patients and 200 started pegylated-IFN/Ribavirin therapy and were included in the study. Median pretreatment BMI was 28.8+/-5.7 [19.9-48.9] with 42.6% overweight and 31.6% obese [BMI 25-30 and>/=30, respectively]. Hepatitis C virus genotype 1 was the prevalent genotype among the candidates of this study, affecting 99 cases of 136 [72.7%], whereas genotypes 2/3 affected 37 cases [27.3%]. For genotype 1, weight loss at 1 and 3 months was associated with higher SVR rates [59.5 vs. 36.8% at 1 month and 55.2 vs. 34.1% at 3 months, respectively, P values=0.02 and 0.03, respectively]. Hepatitis fibrosis, elevation of high-density lipoprotein, and decline of homeostasis model of assessment-insulin resistance at 6-months follow-up were proven to be independent predictors for SVR. Weight loss during the first 6 months of IFN therapy was associated with improved SVR in patients with CHC genotype 1 rather than genotypes 2/3. Molecular changes associated with weight loss during CHC and its relation with treatment response need to be prospectively examined.

## immunology

#### Study of natural killer and natural killer T cells in chronic hepatitis C infection.

Abou Ali, Fawzeia H.; Farres, Mohamed Nazmy; Shehata, Iman H.

Ain Shams University - Faculty of Medicine - Department of Internal Medicine

Egyptian Liver Journal 2011; 1 (1): 47-50 (19 ref.)

**Keywords:** Killer Cells, Natural-cytology; Natural Killer T-Cells-cytology; Flow Cytometry-methods; Liver Function Tests-blood

**Abstract:** Natural killer [NK] and natural killer T [NKT] cells are components of the innate immune system, and participate in the inflammatory processes during hepatic diseases. Impaired activity of these cells is suggested to contribute to viral persistence and chronic infection in hepatitis C virus [HCV] infection. However, the exact mechanisms are not yet fully understood. To investigate the frequency of peripheral NK and NKT cells in patients with chronic HCV infection, as compared with healthy controls. Thirty patients with chronic hepatitis due to HCV infection were included. Patients with liver cirrhosis, HCV and hepatitis B virus co-infection, diabetes mellitus, or who received interferon therapy were excluded. In addition, 20 normal healthy individuals were included as controls. Assessment of the frequency of peripheral NK and NKT cells by flow cytometry was carried out for all individuals. Compared with controls, patients with HCV had significantly lower percentages of NK and NKT cells in peripheral blood. Among patients with HCV, NK and NKT cell percentages did not correlate significantly with serum transaminase levels. Defective innate immunity, as evidenced by reduced peripheral NK and NKT cell frequency, is observed in patients with chronic hepatitis C infection.

# **Hepatolenticular Degeneration**

## genetics

A novel splice-site allelic variant is responsible for wilson disease in an Omani family.

Al Tobi, Mohammed; Kashoob, Masoud; Joshi, Surendranath; Bayoumi, Riad

Sultan Qaboos University - College of Medicine and Health Sciences - Department of Biochemistry

SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 357-362 (21 ref.)

Keywords: Mutation; Adenosine Triphosphatases-genetics; RNA Splicing; Family; Polymerase Chain Reaction

Abstract: The objective of this study was to characterise Wilson's Disease [WD] [OMIM 277900] genetically and test for allelic variants in the copper transport gene [ATPase, Cu[++] transporting, beta polypeptide, ATP7B] responsible for the disease in an Omani family. Three index patients from an Omani family had been previously diagnosed with WD. All three patients suffered neurological symptoms and signs. Forty-six relatives in the family were screened for WD. Eleven more individuals were positive, but asymptomatic. Thirteen non-disease-causing allelic gene variants, described previously, were identified in the ATP7B gene from 46 family members. A putative novel disease-causing splice-site variant [c.2866-2A>G], which has not been reported previously, was detected in this family. It is located upstream of exon 13 which encodes part of transmembrane copper channel [Ch/Tm6]. Reverse transcription polymerase chain reaction was used to amplify a complementary DNA [cDNA] fragment containing exons 12, 13 and 14. Exon 13 was entirely skipped from the transcript which probably would result in a defective ATP7B protein. A new ATP7B splice-site allelic variant, found among the 14 WD patients segregated with the disease in a recessive manner, suggests it is a disease-causing variant.

# History, Ancient

#### Alexandrian medicine.

Taha, Hossam A.; El Azab, Gasser I. Menoufiya University - National Liver Institute **Egyptian Liver Journal** 2011; 1 (1): 3-7 (13 ref.)

## **HIV Infections**

# HIV knowledge, attitude, and risk perception among healthcare workers in Afghanistan Hospitals.

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Ministry of Public Health

AFJPH - Afghanistan Journal of Public Health 2012; 1 (1): 47-51 (18 ref.)

**Keywords:** Health Knowledge, Attitudes, Practice; Risk Assessment; Health Personnel; Cross-Sectional Studies; Questionnaires; Health Surveys; Hospitals

Abstract: The knowledge and attitudes of healthcare workers regarding HIV infection are important factors influencing the readiness of people living with HIV to access care, and the quality of the care they receive. In addition to factors such as stigma and bias, how healthcare workers perceive their own risks in relation to caring for HIV-positive patients may potentially influence their willingness to provide care and their attitudes towards HIV-infected patients. In Afghanistan, there is a lack of information on the prevalence of HIV in general population. The country, however, has many risk factors that could facilitate HIV transmission. To assess HIV-related knowledge, attitudes, and risk perception amongst healthcare workers in Afghanistan national and regional hospitals. A cross-sectional survey among healthcare workers was conducted in five large hospitals selected in Afghanistan. Approval was obtained from the Institutional Review Board of the Ministry of Public Health of Afghanistan and interviews were voluntary. Data analysis was conducted using STATA 11.0 to calculate frequencies and to perform cross-tabulation and logistic regressions with adjusted odd ratio and 95% confidence interval in order to detect statistical significance on differences in knowledge and attitude among healthcare workers in the targeted hospitals. Among 741 healthcare workers who participated in the study, 34.4% [255] correctly identified all correct modes of HIV transmission and 32.1% [238] correctly identified all incorrect modes of HIV transmission. Nurses 12.3% [27] were most knowledgeable by correctly identifying all correct

and incorrect modes of HIV transmission. The majority of healthcare workers expressed a willingness to care for people living with HIV. While 88% of healthcare workers believed that it is necessary to take extra infection precautions for people living with HIV, 76% presumed that people living with HIV should be nursed separately from other patients. Nearly 2 of every 3 Afghan healthcare workers in this sample lacked basic knowledge about the routes of transmission of HIV. These findings provide support for both improving the education of current healthcare workers, and integrating teaching modules that include the topics of disease transmission, clinical care, and universal precautions into curricula of health educational institutions.

#### HIV-1

### drug effects

## Drug resistance profile and subtyping of HIV-1 RT gene in Iranian patients under treatment.

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Tarbiat Modares University - Faculty of Medical Sciences - Department of Virology

IJB - Iranian Journal of Biotechnology 2012; 10 (1): 1-7 (30 ref.)

**Keywords:** Drug Resistance; Reverse Transcriptase Polymerase Chain Reaction; Phylogeny; Reverse Transcriptase Inhibitors; Nucleosides; DNA, Complementary; RNA; Sequence Analysis, DNA

**Abstract:** Identification of drug resistant mutations is important in the management of HIV-1 infected patients. The aim of the current study was to evaluate drug resistance profile of RT gene and assess subtypes among the HIV-1 circulating strains and intensification of physician's options for the best therapy. HIV-1 RNA of 25 samples was extracted from plasma and RT Nested- PCR was performed and the final products were sequenced and phylogenetically analyzed. Stanford HIV drug resistance sequence database was used for interpretation of the data. The results of phylogenetic analysis showed subtypes A1 and B in 14 [58%] and 10 [42%] patients respectively. Of the 24 patients, 16 [66.6%] had resistance to NRTIs, 8 individuals [32%] to NNRTIs and one patient was susceptible to NRTIs as well as NNRTIs. The drug resistance interpretation in this study showed: 87.7% susceptible for AZT, 70.8% susceptible, and 25% high-level resistance for 3TC, 87.7% susceptible for TDF, 29.1% high-level resistance for NVP and 70.8% susceptible and 25% high-level resistance for EFV. Our data suggests that probably, the use of 2 NRTIs plus 1 protease inhibitor [PI] regimen is more effective than 2 NRTIs plus 1 NNRTI regimen in Iranian patients that use 2 NRTI plus NNRTI regimen and also continuous surveillance should be perform to evaluate resistance patterns for more effective therapeutic approaches.

#### **HLA-DRB1 Chains**

#### HLA DR beta1 alleles in Pakistani patients with rheumatoid arthritis.

Naqi, Nighat; Ahmed, Tahir Aziz; Malik, Javaid Mehmood; Ahmed, Mushtaq; Bashir, Muhammad Mukarram Armed Forces Institute of Pathology - Department of Immunology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 727-730 (21 ref.)

**Keywords:** Arthritis, Rheumatoid-immunology; Arthritis, Rheumatoid-genetics; Cross-Sectional Studies; Chi-Square Distribution; Polymerase Chain Reaction

Abstract: To determine frequencies of HLA DR beta1 alleles in rheumatoid arthritis in Pakistani patients. Cross sectional / analytical study. Department of Immunology, Armed Forces Institute of Pathology, Rawalpindi in collaboration with Rheumatology departments of Military Hospital, Rawalpindi and Fauji Foundation Hospital, Rawalpindi, from January 2009 to January 2010. HLA DR beta 1 genotyping of one hundred Pakistani patients, diagnosed as having RA as per American College of Rheumatology revised criteria 1987, was done. HLA DR beta 1 genotyping was carried out at allele group level [DR beta1[asterisk]01-DR beta1[asterisk]16] by sequence specific primers in RA patients. Comparison of HLA DR beta1 allele frequencies between patients and control groups was made using Pearson's chi-square test to find possible association of HLA DR beta1 alleles with RA in Pakistani rheumatoid patients. HLA DR beta1[asterisk]01 was expressed with significantly increased frequency in patients with rheumatoid arthritis [p <0.05]. HLA DR beta1[asterisk]11 was expressed statistically significantly more in control group as compared to rheumatoid patients indicating a possible protective effect. There was no statistically significant difference observed in frequencies of HLA DR beta1 allele [asterisk]01, DR beta1 allele [asterisk]03, DR beta1 allele [asterisk]07, DR beta1 allele [asterisk]10, DR beta1 allele [asterisk]10, DR beta1 allele [asterisk]10, DR beta1 allele [asterisk]11, DR beta1 allele [asterisk]12, DR beta1 allele [asterisk]13, DR beta1 allele [asterisk]14, DR beta1 allele [asterisk]15 and DR beta1 allele [asterisk]16 between patients and control groups. The identification of susceptible HLA DR beta1 alleles in Pakistani

RA patients may help physicians to make early decisions regarding initiation of early intensive therapy with disease modifying anti rheumatic medicines and biological agents decreasing disability in RA patients.

# **Hodgkin Disease**

### therapy

Post transplant lymphoproliferative disorder after autologous hematopoietic cell transplantation for hodgkin's lymphoma.

Al Maghrabi, Jaudah A.; Sayadi, Hassan H.; Al Baz, Nabela; Bayoumy, Mohammed

King Abdul-Aziz University - Department of Pathology

New Egyptian Journal of Medicine [The] 2011; 44 (3): 279-284 (26 ref.)

**Keywords:** Bone Marrow Transplantation-adverse effects; Lymphoproliferative Disorders; Transplantation, Autologous; Immunohistochemistry

Abstract: Post-transplant lymphoproliferative disorder [PTLD] is a very rare complication post autologous bone marrow transplant with few cases reported so far. We report a case of a child with history of classic Hodgkin's lymphoma, nodular sclerosis type, who was treated with autologous stem cell transplantation Three mounths after the transplant, he developed bilateral cervical lymphadenopathy splenomegaly, neutropenia and thrombocytopenia Excisional biopsy of a left cervical lymph node revealed PTLD. The morphological pattern of the PTLD was combined monomorphic and polymorphic with plasmacytoid/plasmablastic differentiation expressing CD20 and CD79a. Kappa and lambda light chain stains show clear evidence of lambda light chain restriction. Immunohistochemistry stain and in situ hybridization for EBV [LMP-1] were positive for EBV. PCR study reveals a monoclonal B-cell proliferation with immunoglobulin heavy chain gene rearrangement. The patient was treated with predinsolone as 2 mg/kg/day over 2 weeks with tapering over the following 3 months. The white cell count recovered with regression of splenomegaly and cervical lymphadenopathy on his last visit to outpatient clinic he was in good health with normal laboratory parameters 2 years after the diagnosis of PTLD.

# **Hydrocarbons**

# Hydrocarbon degrading microflora in a tropical fuel-contaminated aquifer: assessing the feasibility of PAH bioremediation.

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University of Costa Rica [UCR] - Faculty of Microbiology and Research Center of Environmental Pollution [CICA] - Laboratory of Food and Water Microbiology

International Journal of Environmental Research 2012; 6 (1): 345-352 (35 ref.)

**Keywords:** Biodegradation, Environmental; Petroleum; Environmental Pollution; Polycyclic Hydrocarbons, Aromatic; Groundwater; Naphthalenes; Phenanthrenes; Fluorenes; Pyrenes; Pseudomonas; Comamonas; Sphingomonas; Stenotrophomonas; Delftia

Abstract: An aquifer located within a petroleum processing plant in Moin, Costa Rica, suffers hydrocarbon pollution. This study aimed to determine the ability of indigenous microorganisms from this site to degrade polycyclic aromatic hydrocarbons [PAHs] to evaluate the feasibility of an eventual bioremediation process. Aerobic conditions were found in the aquifer, while microbial analyses of the groundwater indicated the presence of important hydrocarbon-degrading populations. Sixteen PAH-degrading strains were isolated with the ability to grow on naphthalene [5 strains], phenanthrene [3], fluorene [6] and pyrene [2]. Most of the identified isolates belonged to the genus Pseudomonas, although, Comamonas, Sphingomonas Stenotrophomonas and Delftia were also found. A mixture of selected strains was evaluated by its performance of PAH degradation in soil-slurry systems, where efficiency of removal was naphthalene > fluorene > phenanthrene > pyrene. This study is an initial approach to evaluate the feasibility of applying a bioremediation process in the contaminated site.

# **Hymen**

## injuries

Study on hymen: morphology, injuries of neonate and knowledge among students of faculty of nursing and education.

Hassen, Shaimaa G.; Moustafa, Manal F.; Mohamed, Sahar N.; Sayed, Gamal H. Assiut University - Faculty of Nursing - Obstetrics and Gynecology Nursing Department

New Egyptian Journal of Medicine [The] 2011; 44 (3): 220-237 (41 ref.)

**Keywords:** Hymen-physiology; Infant, Newborn; Knowledge; Students, Nursing; Questionnaires; Hymen-anatomy and histology

Abstract: Hymen is a thin membrane that surrounds the opening to a young Woman's Vagina, can present in different shapes. The most common hymen is shaped like a half moon. This shape allows menstrual blood flow out of girl's vagina [Adams, 2002]. Most Women are born with hymen, a thin piece of skin that partially covers the opening of the vagina [or introitus]. Hymen morphology has a medico-legal importance. Pediatricians are some times confronted with the challenge of documenting evidence of acute or chronic accidental or non accidental trauma to the hymen [Ann Saudi Med, 2001]. Identification of different types and percentage of hymen. Assess Knowledge of students about hymen in both Faculties Nursing and Education in Assiut University and Comparison between student's Knowledge indifferent years the [1st and 4th] years Faculty of Nursing to assess the improvements in their knowledge with program of study. A descriptive, analytic and retrospective design was used for this study The sample of this study was divided into three categories: A total of 220 consecutive girls [210 At birth 36 to 42 weeks of gestation and 10 from 8 to 12 month] were examined at labor ward, to observe hymnal configuration. A total of 20 defloration injuries who were recorded in statistical records from 3 December 2004 up to 3 December 2005. A total of 800 students were recruited for the study included [300 students from 1st year of faculty of Educations] and [500 students include 300 from the 1st year and 200 students from 4th year of faculty of Nursing]. Structured interviewing questionnaires Examination sheet of the hymen [At birth and one year of age] which include Gestational age Age of infant. Shape of hymen. The study result showed that annular configuration is the most common shape [79%] followed by posterior rim [12.7%], sleevelike, fimbriated and cribiform hymen.-Distribution of defloration injuries who are recorded in statistical record 20 defloration injuries. Results of these students indicated that their mean age was [18.73+/-1.42] years. [64%, 55.5% ,50%] of the [1st and 4th grade]students Faculty of Nursing and the students Faculty of Education were residents in rural areas respectively-Regarding to the student's knowledge about the female genital organs, it was found that more than three quarters of the students [83.1%] had correct answer about female genital organs. The source of knowledge about female genital organs and hymen, it was found that [91. 4%] of the students had their knowledge from study books, mass media and teachers few students got their from house and relatives family. The student's knowledge about hymen, it was found that more than three quarters of the students [79.8%] know hymen. Beliefs about hymen, it was found that [72%] of the students defined it a thin membrane allows menstrual blood, [93.4%] that a sign of virginity and more than half of the students [55.5%] that has a different shapes of hymen. The causes of hymen tearing before marriage, it was found that [80.8%] of students mentioned that the main cause of hymen tearing before marriage was masturbation followed by illegal sexual relation, hard sports and [39.4%] by horse riding. Regarding to use of traditional method to rupture hymen in the wedding day, it was found that [100%] of the students didn't agree on use of traditional method to rupture hymen.-Regarding to relation between student's knowledge and parent's education, it was found that when parents were more educated, their daughters were bad information, it seems that education of the parents creates more barriers between their and their daughters, it also indicates that the education of the parents didn't necessarily to improve their knowledge. The comparison between class 1 and 4 of Faculty of Nursing, it was found highly percentage of knowledge about hymen in class 4 more than class 1 of Faculty of Nursing Finally the students need to know more information about hymen [definition, site, morphology, causes of hymen tearing before marriag.

# **Hypertension**

#### epidemiology

Prevalence of uncontrolled hypertension in primary care settings in al seeb wilayat, Oman.

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Ministry of Health - College of Medicine and Health Sciences

SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 349-356 (33 ref.)

**Keywords:** Prevalence; Severity of Illness Index; Primary Health Care; Retrospective Studies; Risk Factors; Hypertension-drug therapy; Hypertension-prevention and control

**Abstract:** This study aimed to estimate the prevalence of uncontrolled hypertension [HTN] among Omani hypertensive patients, on treatment and under primary health care [PHC] follow-up in Al Seeb Wilayat, Oman. Socio-demographic and clinical factors were explored for possible influence on blood pressure [BP] control. Based on an assumption of 50% prevalence of uncontrolled HTN, a retrospective data collection was conducted on the last three follow-up visits of 411 randomly selected Omani adults [>/=18 years] from 3,459 hypertensive patients. Adequate BP control was defined using criteria from 7[th] Report of the Joint National Committee on Prevention Detection Evaluation and Treatment of High Blood Pressure [JNC-7]. A P value of <0.05 and odds ratios with 95% confidence interval were used to assess for association. The targets for adequate BP control were achieved in 39% of the studied patients [95% confidence interval [CI]: 34-44%]. Lower BP control was found among hypertensives with diabetes [6.4%, P = <0.001] and renal disease [18.5%, P = 0.02]; those with cardiovascular disease [CVD] showed relatively better control [58%]. Age and gender had no impact on BP control. Most patients were only on one [24%] or two [47%] antihypertensive medications, the most frequently used being [3-blockers [58.2%] and diuretics [56.3%]. HTN is not adequately controlled in over 60% of treated patients; the presence of co-morbidity and less than aggressive treatment are significant contributors. Improving the quality of HTN care is a priority; effective efforts should be undertaken to improve BP control.

# Hypertension, Pulmonary

Early recognition and management of pulmonary arterial hypertension: a case for profiling.

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Oman Medical Journal 2012; 27 (1): 1-2 (12 ref.)

Keywords: Disease Management

# **Immunoglobulin Light Chains**

Light chain deposition disease presenting as cholestatic jaundice: a case report.

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Oman Medical College

Oman Medical Journal 2012; 27 (1): 56-59 (9 ref.)

Keywords: Jaundice, Obstructive; Liver Failure; Congo Red; Liver Function Tests; Amyloid; Bone Marrow

**Abstract:** Light-chain deposition disease [LCDD] is characterized by tissue deposition of the immunoglobulin light chains in multiple organs. These deposits appear similar to amyloid on routine sections, but differ in their staining properties and ultrastructural appearance. The deposits of LCCD are non -Congophilic and do not exhibit a fibrillar ultrastructure; while, the proteinaceous substance seen in primary amyloidosis is Congo red positive and fibrillar. One of the most common organs to be involved in LCDD is the kidney. Earlier reports on cases of LCDD have mostly shown simultaneous liver and renal involvement, there are very few cases in the literature describing LCDD of the liver without renal involvement. This report describes a patient who presented with severe cholestatic jaundice and liver cell failure with normal renal function.

#### Indinavir

Consequences of formulation variables on physicochemical properties of indinavir sulfate microspheres.

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Jordan Journal of Pharmaceutical Sciences 2011; 4 (3): 251-260 (15 ref.)

**Keywords:** Cellulose-analogs and derivatives; Solvents; Microspheres

**Abstract:** Indinavir sulfate with ethyl cellulose microspheres was successfully prepared by an oil-in-oil emulsion solvent evaporation technique using acetonitrile: dichloromethane [1:1] and light liquid paraffin as primary and secondary oil phases respectively with span 80 as a droplet stabilizer. In present study the effect of formulation variable e.g., polymer to drug ratio, viscosity of ethyl cellulose, volume of light liquid paraffin and effect of processing temperature on yield, encapsulation efficiency, particle size and in vitro drug release characteristics of the Indinavir microspheres were investigated. The prepared microspheres were spherical with stable nature of drug within the formulations confirmed by Fourier transform infrared spectra. The mean sphere diameter and encapsulation efficiencies depended strongly on the drug to polymer ratio, viscosity of polymer, volume of processing medium and processing temperature. The release of indinavir sulfate was diffusion controlled and influenced by the drug to polymer ratio, viscosity of polymeric phase, volume of light liquid paraffin used and processing temperature condition.

# **Infant Mortality**

#### Neonatal deaths in Pakistan: managing the challenge.

Khan, Amna; Mazhar, Arslan

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PJPH - Pakistan Journal of Public Health 2011; 1 (1): 42-47 (30 ref.)

**Keywords:** Health Care Sector; Private Sector; Public Sector; Delivery of Health Care; Socioeconomic Factors; Community Health Workers; Developing Countries

Abstract: Every hour 450 neonatal deaths occur worldwide and approximately 4 million babies die during first week of their life. The middle and low income countries bear most of the neonatal mortality where more than half of these deaths occur in households. Pakistan is among six countries which account for 50% of all child deaths worldwide. Most of these deaths occurring in households are preventable. This review attempts to determine gaps either in our health system and practices for neonatal care to present a roadmap for the effective neonatal health programming in resource limited settings. The review methodology used three pronged approach. Firstly, we searched data bases such as PubMed, Cochrane, WHO regional database to catalogue international experiences. Secondly, a detailed document review for sorting the local evidence regarding neonatal health was performed. The third step of the review methodology used open search for indexing the neonatal care specific programmes both in the public and the private health sector. Neonatal death entails a multitude of socio-economic and health system related factors. Health system related factors are substandard care, inadequate training, low staff competence and inefficient resources including equipment and medication while illiteracy, cultural practices and low socio-economic status also contribute to soaring neonatal deaths. The success of community based programmes specific to neonatal health is primarily dependent on socio-economic and political factors, health infrastructure and health system factors. Devising short, medium and long term strategies to bring down high neonatal mortality rates are critically needed at this point in time. Improvements in service delivery of neonatal health specific programmes and capacity development of community health workforce are short and medium term strategies in order to augment home based care. Long term strategies include empowerment of communities and relocation of health budgets towards betterment of primary health care services.

## Infant, Newborn

## Maternal triglycerides underestimated predictors of neonatal birth weight.

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SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 317 (5 ref.)

Keywords: Birth Weight; Triglycerides-blood; Blood Glucose; Pregnancy

# Influenza A Virus, H1N1 Subtype

#### H1N1 influenza infection complicated with diabetic ketoacidosis.

Moghadami, Mohsen; Honarvar, Behnam; Sabaeian, Behnam; Zamiri, Nima; Pourshahid, Omid; Rismanchi, Mojtaba; Lankarani, Kamran Bagheri

Shiraz University of Medical Sciences - HIV/AIDS Research Center

Archives of Iranian Medicine 2012; 15 (1): 55-58 (16 ref.)

**Keywords:** Influenza, Human; Diabetic Ketoacidosis; Real-Time Polymerase Chain Reaction; Oseltamivir; Tachypnea; Tomography, X-Ray Computed

Abstract: The 2009 H1N1 Influenza virus was the first infectious pandemic of the 21[st] century which spread rapidly throughout the world. High-risk groups, such as diabetics, suffered more and showed higher hospital admission and death rates due to this virus. Patients with diabetes mellitus [DM] may develop the fulminant picture of their disease after being infected with influenza. From June to December 2009 at Nemazee Hospital, affiliated with Shiraz University of Medical Sciences, two patients with diabetic ketoacidosis [DKA] were admitted. The H1N1 influenza virus triggered DKA and its complications in these patients. Both patients were female, of ages 16 and 40 years. When admitted, they had signs of influenza-like illness [ILI], tachypnea, laboratory confirmation of acidosis, and high blood sugar levels. The 2009 H1N1 influenza viral RNAwas detected in their nasopharyngeal specimens by real time polymerase chain reaction [RT-PCR]. Both patients received oseltamivir, but eventually both died. This was the first report of an association between DKA and H1N1 influenza in Iran. Conclusively, rapid diagnosis of influenza by RT-PCR and early treatment with oseltamivir should be considered in diabetics and/or DKA patients with flu-like symptoms.

# Interferon-alpha

### therapeutic use

Interferon- alpha treatment of children and young adults with chronic hepatitis delta virus [HDV] infection.

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Dow University of Health Sciences - Department of Paediatrics

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 735-740 (25 ref.)

Keywords: Hepatitis D, Chronic-drug therapy; Child; Treatment Outcome; Young Adult; Hepatitis Delta Virus

Abstract: To determine the response of one-year interferon-alpha therapy in hepatitis delta virus [HDV] infection in children and young adults at a tertiary care hospital, Karachi, Pakistan. An observational study. Sarwar Zuberi Liver Centre [SZLC], Medical Unit IV, Civil Hospital, Karachi / Dow University of Health Sciences [DUHS], from June 2009 to July 2010. Paediatric patients [< 18 years age] and young adults [18-35 years] presenting were screened for hepatitis B virus [HBV] and HDV sero-markers. HDV anti-body positive by ELISA were further screened for hepatitis D ribonucleic acid [HDV-RNA] by real time PCR. HDV RNA PCR positive patients were treated with INF- alpha [children 6 MIU/m2/day and adults 5 MIU/day] for a period of one year. Patients were assessed monthly. Haematological parameters and ALT were monitored during treatment. Clinical progress [side effects] and negative HDV RNA were used as response criteria. Overall 49 patients were HDV RNA positive [children: n=15, mean age 15 +/- 2.92 years adults: n=34, mean age 27 +/- 4 years]. Eighty percent were male. Treatment was given to 25 patients [children: n=11, adults: n=14]. HBV genotype D was the predominant in all HDV RNA positive patients [73%]. Eighty percent [20/25] were HDV-RNA negative after one year of treatment, and remaining patients are still under treatment. Side effects were tolerated well and children continued regular activity. Haematological parameters were unremarkable. Children maintained their pre-treatment centile for height and weight [growth parameters]. ALT levels were significantly decreased post-treatment. Conventional INF- was safe in children with HDV infection in terms of side effects and growth parameters. Eighty percent were HDV-RNA negative one year after treatment. Further follow-up 2 years posttreatment will give conclusive results.

### **Isosorbide Dinitrate**

## pharmacology

The effects of isosorbide dinitrate on in vitro proliferation of WEHI-164 cells and peripheral blood mononuclear cells.

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Tehran University Medical Journal [TUMJ] 2012; 69 (11): 671-677 (23 ref.)

**Keywords:** Leukocytes, Mononuclear-drug effects; Cell Proliferation-drug effects; Fibrosarcoma; Cell Line-drug effects; Trypan Blue

Abstract: Isosorbide dinitrate has been broadly used in the treatment of various ischemic heart diseases. Isosorbide is a nitric oxide donor which increases blood flow to tumors through vasodilatation and consequently accelerates the access of chemo-drugs to them. Furthermore, this drug has inhibitory effects on angiogenesis, tumor growth and metastasis in vivo. Moreover, its antinflammatory effects have also been reported. In the present study we evaluated the effects of isosorbide on the proliferative activity of fibrosarcoma WEHI-164 cell line and peripheral blood mononuclear cells [PBMCs]. WEHI-164 fibrosarcoma cells and human PBMCs were cultured in complete Roswell Park Memorial Institute [RPMI] 1640 medium with 10% fetal bovine serum and 2x104 cells/mL for WEHI-164 and 2x105 cells/mL for PBMCs. The cells were then incubated at the exponential growth phase with different concentrations of isosorbide [4x10[-6]-1.6x10[-3] M] for 24, 48 and 72 hours. Subsequently, isosorbide effects on proliferation of the cells were evaluated by trypan blue dye exclusion [TB] test and MTT assay. Statistical comparisons between groups were made by analysis of variance. The proliferative activity of WEHI-164 fibrosarcoma cells and human PBMCs treated with different concentrations of isosorbide, did not show any significant difference with untreated control cells. The results of this study showed that isosorbide neither had any significant effects on the proliferative activity of fibrosarcoma WEHI-164 cells nor on human PBMCs. Our findings suggest that anti-tumoral effects of isosorbide reported by other investigators may be mediated through non-cytotoxic mechanisms.

# Learning

The study of effectiveness of blended learning approach for medical training courses.

Karamizadeh, Z.; Zarifsanayei, N.; Faghihi, A.A.; Mohammadi, H.; Habibi, M. Shiraz University of Medical Sciences - Department of Pediatric Endocrine

IRCMJ - Iranian Red Crescent Medical Journal 2012; 14 (1): 41-44 (14 ref.)

Keywords: Education, Medical; Questionnaires; Students, Medical

Abstract: Blended learning as a method of learning that includes face to face learning, pure E-learning and didactic learning. This study aims to investigate the efficacy of medical education by this approach. This interventional study was performed in 130 students at different clinical levels participating in class sessions on [congenital adrenal hyperplasia and ambiguous genitalia]. Sampling was done gradually during 6 months and all of them filled a pretest questionnaire and received an educational compact disk. One week later, a presence class session was held in a question and answer and problem solving method. Two to four weeks later, they filled a posttest questionnaire. There was a significant correlation between pretest and posttest scores and the posttest scores were significantly more than the pretest ones. Sub-specialized residents had the most and the students had the least attitude towards blended learning approach. There was a significant correlation between the research samples' accessibility to computer and their attitude and satisfaction to blended learning approach. Findings generally showed that the blended learning was an effective approach in making a profound learning of academic subjects.

## Leishmaniasis, Cutaneous

## diagnosis

Evaluation of oligochromatography dipstick as a simplified molecular diagnostic tool for the diagnosis of cutaneous leishmaniasis.

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Ain Shams University - Faculty of Medicine - Parasitology Department

PUJ - Parasitologists United Journal 2011; 4 (1): 47-54 (37 ref.)

Keywords: Polymerase Chain Reaction-methods; Sensitivity and Specificity

**Abstract:** The demonstration of Leishmania parasite by microscopic examination of samples taken from skin lesions is of low sensitivity and requires expert parasitologists. On the other hand, molecular methods to detect Leishinania parasites are considered specific and sensitive. However, detection of amplicons by the classical methods is complex, expensive and needs equipments and highly trained personnel. This raises the demand for a simplified method of amplification and product detection. To evaluate the diagnostic accuracy of PCR Leishmania Oligo C-test for diagnosis of cutaneous leishmaniasis. The diagnostic accuracy of the Leishniania Oligo C-test was estimated in 30 skin scraping samples from patients presented at El Quorea specialized hospital, Taif, KSA. On the basis of parasitological detection

of amastigotes by direct microscopic examination of Geimsa stained smears from skin lesions, patients were classified into confirmed cutaneous leishmaniasis [group A] and negative cases [group B]. Twenty patients were proved positive for Leishmania amastigotes by microscopic examination of stained smears. The sensitivity, specificity, positive predictive value, negative predictive value and diagnostic efficacy of the Leishmania Oligo C-test were 90%, 90%, 95%, 82%, 90%, respectively. These results indicate that this simple molecular technique may be employed for rapid diagnosis of cutaneous leishmaniasis. The Leishmania Oligo C-test showed high specificity and sensitivity when compared to results obtained by microscopic examination of skin scraping samples. The assay is a promising tool for simplified molecular detection of Leishmania parasites.

## therapy

# Evaluation of thermotherapy for the treatment of cutaneous leishmaniasis in Kabul, afghanistan: a randomized controlled trial.

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World Health Organization Country Office - Primary Healthcare Department

AFJPH - Afghanistan Journal of Public Health 2012; 1 (1): 27-33 (22 ref.)

Keywords: Hyperthermia, Induced; Leishmaniasis, Cutaneous-drug therapy; Treatment Outcome

**Abstract:** Anthroponotic Cutaneous Leishmaniasis is a common cause of ulcerative lesions and disfiguring scarring among children in Afghanistan. Most lesions occur on the face, and are commonly caused by the trypanosome protozoan parasite Leishmania Tropica, transmitted by the bite of an infected sandfly [Phlebotomus Sergenti]. This study compares the effectiveness of a single localized treatment with thermotherapy to five days of intra-lesional administration of Glucantime for the treatment of cutaneous leishmaniasis. Three hundred and eighty two patients with cutaneous leishmaniasis were randomly assigned to the two treatment groups and followed for six months. The cure rate for the thermotherapy group was 82.5%, compared to 74% in the Glucantime group. The authors conclude that a single localized treatment with thermotherapy was more effective than five days of intra-lesional administration of Glucantime. Additionally, thermotherapy was more cost effective, with fewer side effects, of shorter duration, and with better patient compliance than intra-lesional Glucantime.

#### **Liver Cirrhosis**

# Frequency of portal hypertensive gastropathy and its relationship with biochemical, haematological and endoscopic features in cirrhosis.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 723-726 (21 ref.)

**Keywords:** Hypertension, Portal; Stomach Diseases; Endoscopy, Digestive System; Endoscopy, Gastrointestinal; Esophageal and Gastric Varices; Hypersplenism; Cross-Sectional Studies

**Abstract:** To determine the frequency of portal hypertensive gastropathy [PHG] and its relation with biochemical, haematological and endoscopic findings in cirrhotic patients. Cross-sectional analytical study. Jinnah Postgraduate Medical Centre, Karachi, Medical Unit-III, Ward-7, from June 2009 to December 2010. Patients with diagnosis of cirrhosis and either undergoing screening upper gastrointestinal [GI] endoscopy or presented with acute upper GI bleeding were included in the study. Portal hypertensive gastropathy and oesophageal varices were classified using Baveno scoring system. The severity of cirrhosis was classified according to the Child-Pugh criteria. Hypersplenism was assessed by the reduction of haemoglobin, leucocytes and platelets. Out of 217 patients, 148 were males [68.2%] and 69 were females [31.8%] with ages ranging from 15-85 years, [mean 48.06 years]. There were 144 HCV +ve patients [66.4%], 36 HBV +ve patients [16.6%], 15 HCV/HBV co-infected patients [6.9%] and only 1 [0.5%] had co-infection of HBV/HDV. Twenty-one patients [9.7%] were classified as having cryptogenic cirrhosis. Out of 172 patients [79.27%], 56 patients [25.8%] had mild and 116 patients [53.5%] were suffering from severe PHG. Significant positive correlation was found between esophageal variceal grade and PHG [r=0.46, p < 0.001] but not with etiology [r=0.05, p=0.41] or hypersplenism [r=0.08, p=0.22]. The frequency of PHG was 79.27% in the studied group. The grade of oesophageal varices had significant relation with PHG that is the severity of PHG increased with the grade of oesophageal varices, suggesting common pathophysiology of both entities.

### etiology

#### Do serum CA 19-9 and CA 125 levels predict the severity of HCV-related liver fibrosis?

El Bokl, Mohammed Abdel Hamid; Mabrouk, Shadia; Abdel Mageed, Nanees Ahmed Adel; Mahmoud, Nermine Helmy; Shabana. Sherif Sadek

Ain Shams University - Department of Internal Medicine **Egyptian Liver Journal** 2011; 1 (1): 33-37 (12 ref.)

**Keywords:** Hepacivirus; CA-125 Antigen-blood; CA-19-9 Antigen-blood; Tumor Markers, Biological; Severity of Illness Index

Abstract: To study the value of measurement of serum tumor markers CA 19-9 and CA 125 as predictors of severity of liver fibrosis in patients with chronic hepatitis C. Fifty patients with chronic hepatitis C were recruited from the Hepatology and Gastroenterology Department at Ain Shams University Hospital. They were 31 men and 19 women, with ages ranging from 18 to 50 years. Participants were subjected to full clinical examination, liver function tests, viral markers [hepatitis B surface antigen, hepatitis C virus antibody], a fetoprotein, autoimmune markers, assay of serum levels of CA 19-9 and CA 125, abdominal ultrasonography, and ultrasound-guided liver biopsy. Histopathological examination for staging of liver fibrosis was performed using the Ishak scoring system. There was a highly significant positive correlation between serum levels of CA 19-9 and CA 125 and the stage of liver fibrosis [P<0.01]. There was also a difference in the mean values of serum CA 19-9 among different stages of liver fibrosis. Similar differences were seen for CA 125. The best cut-off value for CA 19-9 in predicting severe liver fibrosis and cirrhosis [stages 5, 6] was found to be 33.87 U/ml with sensitivity of 93.8% and specificity of 88.2%, whereas the best cut-off value for CA 125 in predicting severe liver fibrosis and cirrhosis [stages 5, 6] was found to be 25 U/ml with sensitivity of 93.8% and specificity of 82.4%. Combined elevation of CA 19-9 and CA 125 above the cut-off value showed less sensitivity [87.5%] than that of each of CA 19-9 [93.8%] and CA 125 [93.8%], and a better specificity [88.24%] than that of CA 19-9 [88.2%] and CA 125 [82.4%] . Serum CA 19-9 and CA 125 may be used as noninvasive markers of severe hepatitis C virus-related liver fibrosis. This needs to be validated by more studies.

#### Liver Diseases

## complications

#### Hepatic osteodystrophy.

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Egyptian Liver Journal 2011; 1 (1): 8-10 (19 ref.)

**Keywords:** Bone Diseases; Osteoporosis-epidemiology; Osteomalacia-epidemiology; Treatment Outcome; Review Literature as Topic

**Abstract:** The reported prevalence of osteoporosis among patients with cirrhosis ranges from 20-50%. Prevalence of fractures ranges from 5-20%. Potential inciting factors include insulin growth factor-I [IGF-I] deficiency, hyperbilirubinemia, hypogonadism, alcoholism, excess tissue iron deposition, subnormal vitamin D levels, vitamin D receptor genotype and osteprotegerin deficiency. Furthermore, medications, such as corticosteroids and the antiviral agents; interferon and ribavirin may affect bone metabolism. The classical biochemical changes of osteomalacia are hypocalcaemia, hypophosphataemia, increased parathyroid hormone, and elevated bone alkaline phosphatase although serum calcium and phosphate are often normal. The intestinal absorption of cholecalciferol and 25-hydroxycholecalciferol is affected only in the presence of severe cholestasis, at which time patients are jaundiced. Subsequent hepatic 25-hydroxylation of vitamin D3 has not been studied in humans, but in cirrhotic rats, this process is not impaired. Accordingly osteomalacia is very rare in chronic liver disease [CLD]. Preventive measures for osteoporosis and osteomalacia that address inciting factors should be implemented in all children with CLD. Treatment with bisphosphonates should be reserved for those who have sustained osteoporotic fractures.

# Lupus Erythematosus, Systemic

Extent of subclinical pulmonary involvement in childhood onset systemic lupus erythematosus in the Sultanate of Oman.

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Oman Medical Journal 2012; 27 (1): 36-39 (22 ref.)

**Keywords:** Child; Respiratory Function Tests; Lung Diseases; Vital Capacity; Forced Expiratory Volume; Carbon Monoxide

Abstract: The aim of this study was to investigate the frequency of pulmonary function abnormalities in clinically asymptomatic children with Systemic Lupus Erythematosus and to determine the relationship of these abnormalities to clinical, laboratory, and immunological parameters as well as to disease activity. Forty-two children with childhood onset Systemic Lupus Erythematosus were included in this study Demographic, clinical, laboratory and immunological parameters, as well as disease activity were assessed. Pulmonary function tests [PFT] were performed routinely to screen for subclinical lung disease. Out of the 42 children, 19% [n=8] had clinical evidence of pulmonary involvement The patients with no clinical evidence of pulmonary involvement [n=34] represent the study cohort From our cohort of patients with no clinical evidence of pulmonary involvement 79% [n=27] had PFT abnormality; including 62% [n=21] had reduced FVC, 71% [n=24] had reduced FEV1, and 67% [n=12] had reduced DLCO Similarly, 56% [n=15] had a restrictive PFT pattern, and 2.6% [n=2] had an obstructive PFT pattern, while 33% [n=7] had an isolated impairment of diffusion capacity. Due to small sample size; it was not possible to find a statistically significant difference between the cohort of asymptomatic SLE patients with abnormal PFT findings [n=27] and those with normal PFT findings [n=7] in terms of clinical, laboratory, immunological or disease activity index score Subclinical lung disease, as demonstrated by abnormal PFT in patients with normal radiographs, may be common but should be interpreted with caution as an early sign of lung disease. Although PFT studies do not correlate well with pulmonary symptoms in patients with childhood onset SLE, they nevertheless provide objective quantification of the type and severity of the functional lesions.

# Lymphoma, Extranodal NK-T-Cell

# pathology

## Primary intestinal NK/T cell lymphoma: a clinicopathologic study of 25 Chinese cases.

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**Archives of Iranian Medicine** 2012; 15 (1): 36-42 (28 ref.)

**Keywords:** Intestinal Neoplasms; Immunophenotyping; Gene Rearrangement, gamma-Chain T-Cell Antigen Receptor; Immunohistochemistry; In Situ Hybridization; Polymerase Chain Reaction; Herpesvirus 4, Human; Lymphoma

Abstract: Primary intestinal NK/T cell lymphoma is extremely rare and early diagnosis is frequently difficult. The aim of this study is to investigate the clinicopathological findings, immunophenotype, and T cell receptor [TCR] gamma gene rearrangement of primary intestinal NK/T cell lymphomas in 25 Chinese cases. Clinical data of the 25 cases were analyzed. Immunohistochemistry for immunophenotype, in situ hybridization for EBER, and polymerase chain reaction for TCR y gene rearrangement were investigated. Survival curves according to clinical characteristics were analyzed. The median age was 33 years and the median survival was 7 months. The common symptoms consisted of abdominal pain, fever, marasmus, diarrhea, and hematochezia. Endoscopically, the tumors were mainly featured by focal, multifocal or diffuse irregular ulcers, which most frequently emerged in the ascending colon. Histologically, the tumors were characterized by the proliferation of pleomorphic atypical lymphoid cells [ALCs], necrosis, lympho-epithelial lesions, and mixed inflammatory infiltration. The positive frequency of CDepsilon was 88.2%, of CD56 was 84%, granzyme B was 90%, and EBER was 84.2%. A total of 12 out of 14 cases [85.7%] highly expressed Ki67. The negative prognostic factors for survival were Ann Arbor stage HIE or IVE [P = 0.039] and more than one extranodal site of disease [P = 0.019]. Primary intestinal NK/T cell lymphomas most frequently favor young people and have a poor prognosis. Due to the nonspecific clinical and endoscopic findings, it is difficult to distinguish intestinal NK/T cell lymphomas from inflammatory and infectious disorders. Histopathology, immunophenotype, and DNA study play key roles in differential diagnosis.

# Lymphoma, Non-Hodgkin

## diagnosis

Primary thyroid lymphoma: a rare thyroid malignancy.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 775-777 (10 ref.)

**Keywords:** Thyroid Neoplasms; Lymphoma; Biopsy, Fine-Needle; Treatment Outcome

**Abstract:** Incidence of thyroidal masses is very high with predominance in females. Most of these masses are benign. Malignancy can be of thyroid or non-thyroid origin. Surgery is treatment of choice in the former but not in latter. Primary thyroid lymphoma [PTL] is a rare cause of thyroid malignancy of non-thyroid origin which is highly treatable without surgery but early diagnosis is important requisite to have better outcome. Fine needle aspiration cytology [FNAC] is an important tool in early diagnosis of PTL, which enables doctors to treat patient better without major surgery and its morbidity. Two cases of primary thyroid lymphoma are hereby presented. The patient diagnosed on FNAC had better outcome than the one who had major surgery.

# Magnetics

Rock magnetic investigations of surface and sub-surface soil samples from five lake catchments in tropical southern India.

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International Journal of Environmental Research 2012; 6 (1): 1-18 (57 ref.)

Keywords: Soil; Lakes

Abstract: Iron oxide minerals in soils provide valuable insights into pedogenic processes. A wealth of such information has been obtained by rock magnetic investigations on temperate soils but similar studies on tropical soils are rare. Here, we report rock magnetic data on pristine soil profiles and surficial soils from five catchments in the tropical southern India and throw light on the pedogenic processes. We ruled out contributions from greigite, bacterial magnetite and anthropogenic sources; hence, the magnetic signal is mainly from the catchment, principally pedogenic and, thus, has a climatic signature embedded in it. The Pookot profile from a high rainfall [~4000 mm/year] region does not exhibit any magnetic enhancement at the surface. In fact, there is hardly any difference between surface and subsurface samples, which reflects on its deeply weathered nature as a result of the high rainfall. The Shantisagara profile exhibits lessivage of magnetic minerals, resulting in a thick magnetically enhanced zone. It shows the highest chi[if] values among the five profiles studied. The Thimmannanayakanakere [TK] and Ayyanakere [AK] soil profiles do not exhibit any magnetic enhancement of top-soil. In fact, chi[if] values increase towards the profile-bottom, suggesting top-soil erosion, besides contribution of magnetic minerals from parent rocks. In the TK profile, there is a clear distinction between surface and sub-surface samples, the former being magnetically coarser grained. The Kurburukere profile exhibits moderate to strong chi[if] values and a mild magnetic enhancement at the surface. The data would be useful for establishing soil-sediment linkages for paleoclimatic studies of lake sediments.

#### Malaria

# diagnosis

Comparison of the clinical profile and complications of mixed malarial infections of plasmodium falciparum and plasmodium vivax versus plasmodium falciparum mono-infection.

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SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 377-382 (20 ref.)

**Keywords:** Malaria-complications; Malaria-parasitology; Plasmodium falciparum-parasitology; Plasmodium vivax-parasitology; Thrombocytopenia-etiology; Anemia-etiology; Retrospective Studies

**Abstract:** This study aimed to compare the clinical presentations and complications in patients having mixed malaria infection of Plasmodium falciparum and Plasmodium vivax with those of patients with malaria due to a P. falciparum mono-infection. The medical records of malaria patients admitted to Kasturba Medical College, Manipal, India, during the years 2008-10 were analysed. Inclusion criteria were patients in whom P. falciparum and P vivax coinfection or P. falciparum mono-infection alone was confirmed on peripheral smear examination. Exclusion criteria were patients in whom P vivax infection alone was diagnosed on peripheral smear examination. The sample size was twenty patients diagnosed with mixed infection of P. falciparum and P vivax and 60 patients diagnosed with P falciparum mono-infection. 35% of mixed infections had thrombocytopenia as compared to 51.7% of P falciparum mono-infections. A total of 5% of the mixed infections had renal failure as compared to 16.7% of the falciparum mono-infections. Total bilirubin was raised in 15.8% of mixed infections and in 46.6% of falciparum mono-infections. Abnormal liver enzymes were seen in 36.8% of mixed infections and in 66.6% of falciparum mono-infections. Patients with mixed infections were found to have a lower incidence of severe complications such as anaemia, thrombocytopenia, liver and renal dysfunction and a lower parasite index. Thus mixed malaria tends to have a more benign course as compared to malaria due to P. falciparum mono-infection.

### Malnutrition

# [Determination of slimness, low weight and low growth rates in rural and urban schoolboys in Golpayegan].

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Tehran University of Medical Sciences - School of Allied Medical Sciences - Medical Laboratory Sciences Department **Payavard - Salamat** 2011; 5 (1): 40-46 (18 ref.)

**Keywords:** Child Nutrition Disorders; Body Weight; Ideal Body Weight; Growth and Development; Rural Population; Rural Health; Urban Population; Urban Health; Schools; Students; Questionnaires; Body Height

**Abstract:** Malnutrition is one of the causative agents of death in children. So, this study was done for assessment of anthropometric indices of students and malnutrition status in Golpayegan, Iran. This research was done as a descriptive - analytical [inferential] study. Sampling was done as clusters and multistage. In order to collect data, the standard questionnaire of anthropometric indicators standards [ANIS] pattern was used. Low and low height was used based on Z score. Collected data was analyzed by Epi-info and SPSS software. Of 1062 schoolboys, 550 were male and 512 were female. Anthropometric indicators including age [month], weight [kg] and height [Cm] showed significant differences [P < 0.05]. The mean of malnutrition index was 5.4% [WAZ<-2] and 3% [WAZ<-2] in our study. The significant difference between prevalence of slimness, low weighting and low growth in rural and urban Schoolboys is an indicator of the undesirable situation in rural areas. Therefore, nutritional planning should be considered in rural children.

# **Maternal Mortality**

# Maternal mortality rate in Fars province: trends and associated factors in a community-based survey.

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**Archives of Iranian Medicine** 2012; 15 (1): 14-17 (21 ref.)

**Keywords:** Cross-Sectional Studies; Postpartum Period; Uterine Hemorrhage; Influenza A Virus, H1N1 Subtype; Hemorrhage

**Abstract:** The high rate of maternal mortality [MM] remains a challenge, especially in developing countries. In 2000, the World Health Organization [WHO] targeted a 75% reduction by the end of 2015. In this survey, we determine trends in MM rates and associated factors in Pars Province, southwestern Iran. All MM in Pars Province from March 2003 to March 2010 were considered in this cross-sectional study. Data were recorded for demographic characteristics, autopsy findings, medical and obstetric histories. The data were then analyzed with a z-test to identify differ- ences in the rate of MM during the study period. The mean MM rate was 22.18 per 100 000 live births [95% CI, 17.55-26.8] during the seven year study period, and was highest [32.3/100 000] in the first year. Most deaths [71.3%] occurred in the postpartum period, and the lowest proportion occurred during delivery [5%]. High-risk mothers

accounted for 79.2% of maternal deaths. Among the mothers who died, 62% received satisfactory prenatal care, and at least two years elapsed between successive pregnancies in 78%. Hemorrhage was the main cause of death [35.6%] and the least frequent cause was H1N1 virus infection [2%]. This study provides evidence of serious deficiencies in postpartum care that need urgent action. Priority should be given to vaginal bleeding and high-risk status mothers.

#### Maternal mortality in Jordan: role of substandard care and delays.

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EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 426-431 (23 ref.)

**Keywords:** Health Care Quality, Access, and Evaluation; Health Surveys; Cross-Sectional Studies; Retrospective Studies; Questionnaires; Delivery of Health Care; Health Services Accessibility

**Abstract:** Understanding the factors that operate during pregnancy, delivery and postpartum is the key to success in the prevention of maternal mortality. This cross-sectional survey in Jordan for the years 2007-2008 aimed to identify the role of substandard care and delays in maternal deaths. All maternal deaths among women aged 15-49 years over this period [n = 76] were investigated retrospectively through file review and household interviews in all hospitals [n =102] and forensic medicine departments in Jordan; elements of substandard care and delays at hospital, home and transport levels were evaluated. Substandard care accounted for 52.6% of deaths, delay in seeking care 55.3%, delay in transport 15,8% and delay in hospital care 17.1%. Women who did not recognize the danger signs of pregnancy [OR 6.32], refused medical advice to terminate the pregnancy [OR 1.78] or at a gestational age > 37 weeks [OR 1.85] were significantly more likely to delay seeking care, as were those with larger mean family size.

## Matrix Metalloproteinase 3

#### blood

#### Serum level of matrix metalloproteinase-3 in patients with oral Lichen planus.

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IRCMJ - Iranian Red Crescent Medical Journal 2012; 14 (1): 10-13 (22 ref.)

Keywords: Lichen Planus, Oral-blood

**Abstract:** Oral Lichen planus [OLP] is a chronic lesion of the oral mucosa with unknown origin. Basement membrane changes are common in OLP and may be mediated by proteases such as matrix metalloproteinase [MMPs] and mast cell chymase. The aim of our study was to evaluate the level of serum MMP-3 in OLP compared to normal individuals and assess its clinical significance. Thirty four serum samples from patients diagnosed with OLP [12 males, 22 females, age: 42.2 +/- 10.8 years] and 34 serum samples from healthy control subjects [11 males, 23 females, age: 42.5 +/- 13.3 years] were collected and MMP-3 concentration was measured by ELISA. The serum MMP-3 level in OLP patients was higher [21.64 +/- 24.31 ng/ml] compared with healthy controls [16.52 +/- 23.63 ng/ml], but showed no statistically significant difference. A statistically significant difference was demonstrated between the two types of OLP, being more pronounced in the erosive/atrophic form 6]. The different clinical appearances of OLP are associated with significant differences in MMP-3 serum level.

#### Medical Informatics

# [Human factors affecting the application of information technology by TUMS middle managers in 2010].

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Tehran University of Medical Sciences - School of Allied Medical Sciences - Health Information Management Department

Payavard - Salamat 2011; 5 (1): 24-31 (20 ref.)

**Keywords:** Administrative Personnel; Information Science; Cross-Sectional Studies; Questionnaires; Organizations; Organization and Administration; Hospitals, Teaching

**Abstract:** One of the most important reasons why organizations are distinguished from one another is the degree of application and implementation of information technology in their organizational activities. In this regard, individual

factors contribute considerably to the application of information technology [IT]. Such factors include employees' perceptions and attitudes towards information technology and their demographic characteristics which affect the level of information technology acceptance and implementation. In this cross-sectional study, 110 middle managers from teaching hospitals of Tehran University of Medical Sciences [TUMS] were chosen. A structured questionnaire was used as the data collection device and its validity and reliability were confirmed by a pilot study. Of the participants, 62.9% were males and 37.1% were females. The findings show that there is a statistically significant relationship between perception and making decisions based on the implementation of information technology. However, there was no significant relationship between work experience, education and training on the one hand and IT implementation on the other. The results show that human factors [perception and decision] have a considerable impact on the implementation of information technology. Top managers and experts should consider the important aspects of human factors and also the factors affecting them.

## Mesenchymal Stem Cells

# [The effect of zoledronic acid on BSP expression and methylation during osteoblastic differentation of mesenchymal stem cells].

Hagh, M.Farsh Dusty; Niya, M.Nowrozi; Mortazavi, Y.; Soleymani, M.; Kaviyany, S.; Meymand, M.Mahmodi Niya Tarbiat Modares University - School of Medical Sciences - Hematology Department

Payavard - Salamat 2011; 5 (1): 69-79 (30 ref.)

**Keywords:** Integrin-Binding Sialoprotein; Methylation; Osteoblasts; Biological Markers; Diphosphonates; Imidazoles **Abstract:** Bone sialoprotein [BSP] is a specific marker of osteoblastic differentiation. In this research, the effect of Zoledronic Acid on BSP expression and methylation status during osteoblastic differentiation of mesenchymal stem cells [MSCs] was evaluated. In this experimental study, MSCs were isolated from human bone marrow. For osteogenic differentiation, hMSCs were pulse treated with zoledronic acid, and were incubated in osteogenic differentiation medium for 3 weeks. The DNA and RNA were extracted after the first, second and third weeks of culture and also from undifferentiated MSCs. After Sodium bisulfate [SBS] treatment, gene specific methylation analysis for BSP was carried out using Methylation Specific PCR technique. BSP expression was observed in osteoblastic differentiated cells whereas it was not seen in MSCs. MSP showed that BSP was unmethylated during osteoblastic differentiation. BSP expressed from the first week of differentiation. This confirms that zoledronic acid accelerates osteoblastic differentiation. Unmethylation status of BSP indicates that zoledronic acid does not have any effect on BSP methylation status. Other genetic or epigenetic mechanisms may control BSP expression during osteoblastic differentiation induction by zoledronic acid.

## Metabolic Syndrome X

#### Effects of losartan vs enalapril on the markers of metabolic syndrome.

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Oman Medical Journal 2012; 27 (1): 27-30 (33 ref.)

**Keywords:** Losartan; Enalapril; Waist Circumference; Body Weight; Body Mass Index; Blood Pressure; Blood

Glucose; Triglycerides; Cholesterol, HDL

Abstract: To compare the effects of losartan and enalapril on the markers of metabolic syndrome. One hundred and twenty six newly diagnosed hypertensive patients having other markers of metabolic syndrome participated in this study. The study was performed in the department of pharmacology, college of medicine at Ibn-Sina Teaching Hospital in Mosul city, Iraq, during the period between December 2007 and June 2009. The patients were divided into 2 main groups: 1] Losartan group: consisted of 60 patients, and 2] enalapril group: Consisted of 66 patients. Waist circumference, weight, Body mass index, blood pressure, serum glucose concentration, triglyceride and HDL-cholestrol were measured before and after administration of therapy. The effects of therapy were assessed by statistically comparing the results before and after the drug administration. Comparison of waist circumference, blood pressure, FSG, triglycerides of the patients before drug administration [baseline data], with those of the controls showed a significant elevation, while HDL-cholesterol showed a significant reduction. A significant reduction of waist circumference, BP, FSG and a significant elevation of HDL-cholesterol were also noted after therapy with both losartan and enalapril. Both losartan and enalapril produced a significant reduction of markers of metabolic syndrome and may be regarded as effective drugs for treatment of hypertension in patients with markers of metabolic syndrome.

#### Metals

In situ measurement of bioavailable metal concentrations at the downstream on the Morava river using transplanted aquatic mosses and DGT technique.

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Brno University of Technology - Faculty of Chemistry

International Journal of Environmental Research 2012; 6 (1): 87-94 (33 ref.)

Keywords: Zinc; Lead; Nickel; Copper; Rivers; Water-analysis

Abstract: This work summarized the results of a long term monitoring programme performed downstream on the Morava river [Czech Republic]. During this programme the total dissolved concentrations and bioavailable fraction of selected metals [Zn, Pb, Ni, Cu] were monitored. For the determination of bioavailable metals species, diffusive gradients in thin films technique [DGT] together with moss bags technique utilizing Fontinalis antipyretica moss species were used. All of the measured metal concentrations were compared with an amount of accumulated mass by Fontinalis antipyretica, represented as a concentration factor, CF. Obtained results shown that further investigation of DGT technique and metal accumulation processes by Fontinalis antipyretica is needed to conclude if the DGT technique is a good alternative for the biomonitoring technique using Fontinalis antipyretica moss bags as a means to measure [bio] available metal concentrations in natural water. Significant correlation with CF was found in the case of DGT[Zn] and DGT[Pb] concentrations. On the other site, accumulated mass of Cu by Fontinalis antipyretica correlated significantly with total dissolved concentration of Cu. In the case of Ni no correlation was found between total dissolved Ni concentrations, DGT[Ni] concentration and CF of Fontinalis antipyretica.

## Metals, Heavy

Bioaccumulation of heavy metals in fish species collected from former tin mining catchment.

Ashraf, M.A.; Maah, M.J.; Yusoff, L.

University of Malaya - Department of Chemistry

International Journal of Environmental Research 2012; 6 (1): 209-218 (52 ref.)

Keywords: Fishes; Tin; Mining; Arsenic; Copper; Lead; Zinc

Abstract: This study has been carried out to determine the accumulation of heavy metals [arsenic, copper, lead, tin and zinc] in fish samples collected from former tin mining catchment. Total eight types of fish family having fifteen different species are identified. Cyperinidae is the most abundant family with eight different species found in the catchment. Fish samples were analysed by using inductively coupled plasma optical emission spectrophotometer ICP-OES. The accuracy of method is validated by certified reference material. The highest level of arsenic was observed in Hampala macrolepidota while Osteochilus hasselti shows the least. For Copper concentrations, the maximum was obtained in Mastacembelus armatus and the minimum in Oxyeleotris marmorata. High levels of lead, tin and zinc were found in the Rasbora elegans, Trichogaster trichopterus, Oxyeleotris marmorata respectively while Macrobrachium resenbergii, Mastacembelus armatus, Rasbora elegans had the least concentrations. The sequence of order of the heavy metals measured was Sn > Pb >Zn > Cu> As, respectively. The results showed elevated levels of tin, lead and zinc in all the fish samples although copper and arsenic were available in relatively low concentration in the most samples. Sn, Pb, and Zn concentration in the samples were greater than Malaysia food act permissible levels. Hazard index < 1 suggests unlikely adverse health effects whereas HI > 1 suggests the probability of adverse health effects. Although the heavy metals analysed in the catchment did not pose any immediate health risk to humans but due to the bioaccumulation and magnification of these heavy metals in humans, it is essential to safeguard levels of the metals in the environment.

# Choose of heavy metals pollution biomonitors: a critic of the method that uses sediments total metals concentration as the benchmark.

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International Journal of Environmental Research 2012; 6 (1): 313-322 (24 ref.)

Keywords: Geologic Sediments; Benchmarking; Edetic Acid; Hydrochloric Acid; Nitric Acid; Aluminum; Cadmium;

Copper; Iron; Manganese; Zinc; Nickel; Water

**Abstract:** The study aimed to come up with a list of specific macroalgae species, which could be used to biomonitor specific metal elements in the coastal waters of East Africa. Water extraction, EDTA, aqua regia extraction and

optimized BCR 3-step sequential extracts were used to mimic bioavailable metals under various environmental conditions. The results indicated that Viva lactuca could be used as a biomonitor to predict BCR 3-step sequential bioavailable Al, Cd, Co, Fe, Mn, Zn and Ni whereas Sargassum species could be used as a biomonitor for BCR 3-step sequential bioavailable Co, Cu, Fe, Mn and Zn. In Sargassum spp. only Co showed significant correlation with concentration in sediment's aqua regia extracted metals whereas in Viva lactuca only Al, Co, Cu and Fe showed significant correlation with total metals extracted through aqua regia procedure. This study therefore recommends the use of Viva lactuca and Sargassum for biomonitoring of Al, Cd, Co, Fe, Mn, Zn, Ni and Co, Cu, Fe, Mn, Zn respectively. The study recommends the use of labile fraction of BCR sequential extraction for screening of macroalgae to be used for heavy metal pollution monitoring in East Africa region.

## **Methyl Ethers**

# Biodegradation of MTBE by bacteria isolated from oil hydrocarbons-contaminated environments.

Lalevic, B.; Raicevic, V.; Kikovic, D.; Jovanovic, L.; Surlan Momirovic, G.; Jovic, J.; Talaie, A.R.; Morina, F. <a href="mailto:E-mailtlalevicb@yahoo.com">E-mailtlalevicb@yahoo.com</a>

University of Belgrade - Faculty of agriculture

International Journal of Environmental Research 2012; 6 (1): 81-86 (41 ref.)

**Keywords:** Biodegradation, Environmental; Bacteria; Staphylococcus; Pseudomonas; Staphylococcus saprophyticus **Abstract:** Methyl tertiary butyl ether [MTBE] belongs to the group of gasoline oxygenates and persistent environment contaminants, and shows potential for bio degradation in aerobic and anaerobic conditions, through application of pure microbial cultures. Presented research shows that indigenous bacterial isolates 6sy and 24p, selected from oil hydrocarbons-contaminated environments, were capable of utilizing MTBE as sole carbon and energy source. Based on 16S rDNA sequence analysis, bacterial isolates 6sy and 24p were identified as Staphylococcus saprophyticus subsp. saprophyticus and Pseudomonas sp., respectively. The MTBE biodegradation rate was affected by longevity of incubation period and initial MTBE concentration. After 3 weeks of incubation at 25°C in a dark, the removal rates of initial 25 and 125 ppm MTBE concentrations by Staphylococcus saprophyticus 6sy were found to be 97, and 63%, respectively, while efficiency of Pseudomonas sp. in degradation of indicated concentrations was 96, and 40%, respectively Both bacterial isolates were able to grow in MTBE-containing growth medium. Highest growth rate of bacterial isolates was observed at the end of incubation period. The presented results indicated the potential of these bacterial isolates in bioremediation of MTBE-contaminated environments.

## **Microcystis**

#### Cyanobacterium Microcystis aeruginosa bloom in Aras dam reservoir.

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Iranian Artemia Research Center

International Journal of Environmental Research 2012; 6 (1): 309-312 (29 ref.)

Keywords: Cyanobacteria; Eutrophication; Lakes; Fresh Water

**Abstract:** Occurances of cyanobacterial bloom typically appear in eutrophic lakes which either have been affected by anthropogenic nutrient loading or are naturally rich in nutrients. Microcystis blooms have been reported all over the world in freshwater ecosystems mainly due to increased population which results in increased the waste water production. The aim of this study was to recognize the basic reasons of Microcystis aeruginosa bloom in Aras reservoir. Water temperature, pH, DO, EC, TN, N-No[2], N-No[3], P-Po[4] chl a and the number of Microcystis colonies were determined. The effects of these parameters on the microcystis increased growth was examined. Though we could not strictly relate a few other factors to this phenomenon, higher water temperature, pH and DO in the sampling site i.e. 27° C, 9.16 and 17.2 mg/L respectively, surely favored the M.aeruginosa bloom. In brief, preventing or reducing the nutrients flow into the reservoir should be considered as a priority in order to reduce Microcystis scum forming colonies.

## Molar, Third

### surgery

Relationship between route of antibiotic administration and post-surgical complications following removal of lower third molars.

Malkawi, Ziad; Al Omiri, Mahmoud K.

The University of Jordan - Faculty of Dentistry

Jordan Journal of Pharmaceutical Sciences 2011; 4 (3): 191-197 (28 ref.)

**Keywords:** Drug Administration Routes; Anti-Bacterial Agents-therapeutic use; Prospective Studies; Postoperative Complications-prevention and control; Cephradine-therapeutic use; Cephalexin-therapeutic use; Administration, Oral; Injections. Intravenous

**Abstract:** This prospective clinical trial aims at evaluating the effects of antibiotic therapy following different administration routes on the postoperative complications of surgical removal of lower impacted third molars. Two hundred and fourty eight consecutive patients [100 males and 148 females] aged 18 to 38 years old [mean=24 +/- 5 years] were recruited into this study. The lower third molars of all recruited patients were surgically extracted. Participants received preoperative antibiotic cover either as intravenous Cephradine injection [1 gram] or oral dose of 500 mg Cephalexin. Immediate and late complications following the surgery; including pain, swelling, trismus, paraesthesia, bleeding, dry socket, infection and fracture of mandible; were assessed 3 days and 7-14 days following the surgery. The most frequent complications were slight pain, swelling, and trismus. Oral route of antibiotic administration was associated with more immediate and late complications [p<0.001]. Oral route of antibiotic administration was associated with more pain, swelling, trismus, and dry socket [p<0.05]. Following surgical extraction of third molars, intravenous antibiotic administration was more effective in reducing the post surgical complications than oral antibiotic administration.

#### Motor Vehicles

# An investigation on vehicle's fuel consumption and exhaust emissions in different driving conditions.

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Iran University of Science and Technology - Systems Simulation and Control Laboratory - Department of Mechanical Engineering

International Journal of Environmental Research 2012; 6 (1): 61-70 (22 ref.)

Keywords: Vehicle Emissions; Automobile Driving; Gasoline

**Abstract:** In this paper, vehicle's fuel consumption and exhaust emissions are investigated in different driving conditions based on driving segments clustering. Driving data collection is performed using global positioning systems in real traffic conditions. The driving data is clustered into five groups using k-means clustering technique. Vehicle's fuel consumption and exhaust emissions [i.e. HC, NOx and CO] are investigated in different driving conditions using computer simulations. The relationship between driving features and vehicle's fuel consumption and exhaust emissions is also presented. According to the simulation results, vehicle's fuel consumption decreases as average velocity increases from very congested traffic condition to freeway traffic condition. The most HC is produced is low speeds. The results also demonstrate that high accelerations and decelerations cause high amount of NOx. About the CO emission, a moderate driving in which the velocity and accelerations are not very high or very low, leads to the least amount of CO.

## Mycobacterium tuberculosis

Suppression of Mycobacterium tuberculosis induced reactive oxygen species and tumor necrosis factor-alpha activity in human monocytes of systemic lupus erythematosus patients by reduced glutathione.

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Oman Medical Journal 2012; 27 (1): 11-19 (25 ref.)

**Keywords:** Reactive Oxygen Species; Tumor Necrosis Factor-alpha; Monocytes; Lupus Erythematosus, Systemic; Glutathione; Electrophoresis, Polyacrylamide Gel; Enzyme-Linked Immunosorbent Assay; Cell Culture Techniques; Fever; Arthritis; Exanthema

**Abstract:** The etiology and pathogenesis of systemic lupus erythematosus remains unknown, evidence exists for the involvement of mycobacterial antigen. This study is aimed to determine the effect of Mycobacterium tuberculosis on clinical course of SLE patients and the role of ROS and TNF-alpha in the pathogenesis of tuberculosis associated SLE patients. This study was done on 100 patients divided into SLE group [n=30] TB group [n=30], SLE-TB group [n=30] and control group [n=10]. All patients underwent clinical, biochemical and immunological evaluation by employing techniques such as SDS-PAGE, direct binding and competition ELISA, PBMC and cell culture. Fever, arthritis, skin rash, photosensitivity were more common in both SLE and SLE-TB group Reduced glutathione showed amelioration of ROS and TNF-alpa, induced action, which in turn, subsequently suppressed the immune-bindings observed in monocytes of TB and SLE patients cultured without glutathione. Data shows that SLE patients are more susceptible to developing Mycobacterium tuberculosis, as ROS and TNF-alpha in SLE patients could activate the replication of mycobacterial Ag85B [30 kDa] after bacilli infection.

## **Myiasis**

## diagnosis

# Gastrointestinal and urogenital myiasis caused by Psychodid fly [diptera: nematocera] in Egypt: case report.

Lotfy, Wad M.

Medical Research Institute - Parasitology Department

PUJ - Parasitologists United Journal 2011; 4 (1): 115-116 (21 ref.)

Keywords: Signs and Symptoms, Digestive; Urological Manifestations; Psychodidae; Larva-pathogenicity

# Light and scanning electron microscopy studies of Oeslrus ovis first instar maggot causing ophthalmomylasis.

Abdelmotaal, Hazem; Bakir, Hanaa V.; Yones, Doaa A.; Attia, Rasha A.H. Assiut University - Faculty of Medicine - Department of Ophthalmology **PUJ - Parasitologists United Journal** 2011; 4 (1): 55-60 (33 ref.)

Keywords: Larva-uktrastructure; Microscopy, Electron, Scanning; Conjunctivitis

Abstract: External ophthalmomyiasis refers to superficial infestation that involves the lids and conjunctiva in man by fly larvae [maggots of the order Diptera]. Ophthalmomyiasis is often a benign self-limiting disease. Oestrus ovis is the most common cause affecting mainly persons in rural areas such as shepherds and farmers. Numerous cases of external ophthalmomyiasis due to this fly were reported from Africa. Middle East, Australia, North America, Southern Europe and Egypt. The aim of this study is to describe the morphological characteristics of O. ovis 1[st] stage larvae using light microscopy [LM] and scanning electron microscopy [SEM] and to correlate between these larval structures and their pathogenesis. A 24 years-old-man presented with severe symptoms of conjunctivitis. On examination, 5 small sized larvae were observed in the bulbar conjunctiva. They were picked up, described and documented photographically by LM and SEM. The larvae were identified as O. ovis 1[st] stage larvae. They showed characteristic mouth parts, surrounded by crown shaped spines. More distinctive features revealed by SEM were mirror image papillae on the ventral side and rows of currycomb-shaped spines on the body segments. This study highlighted particular diagnostic structures of the anterior and posterior ends of O. ovis 1[st] stage larvae that may aid in larval identification and explain their mechanism of pathogenesis. Most important is the early diagnosis and treatment.

## **Neoplasms**

## drug therapy

Cancer chemotherapy and biotherapy principles and practice.

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Sultan Qaboos University Hospital - Department of Medicine

SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 424-425

Keywords: Antineoplastic Agents; Pharmacogenetics; Molecular Targeted Therapy; Immunomodulation

#### Neurilemmoma

## diagnosis

#### Schwannoma of the cervical symphathetic chain first case report from Oman.

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Sultan Qaboos University Hospital - Departments of Surgery

SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 403-406 (11 ref.)

**Keywords:** Neurilemmoma-pathology; Ganglia, Sympathetic-pathology; Cervical Plexus; Horner Syndrome-etiology; Diagnosis, Differential

**Abstract:** Schwannomas are benign, encapsulated and slow-growing nerve sheath tumours arising from Schwann cells. The schwannoma arising from the cervical sympathetic chain [SCSC] is a very rare tumour. It usually presents as a slow growing, painless and asymptomatic neck mass, hence preoperative clinical diagnosis is difficult. Radiological investigation and fine needle aspiration cytology make only a small contribution to its preoperative diagnosis, histopathological examination being much more useful. We report here the first case report of SCSC from Oman. It occurred in a 45 year-old female and was successfully excised.

## Nonprescription Drugs

# Parents' knowledge, perception, and practices of over-the-counter medicines used for their children.

Albsoul Younes, Abla; Tahaineh, Linda; Moumani, Basima

The University of Jordan [JU] - Faculty of Pharmacy - Department of Biopharmaceutics and Clinical Pharmacy

Jordan Journal of Pharmaceutical Sciences 2011; 4 (3): 181-189 (22 ref.)

Keywords: Parents; Health Knowledge, Attitudes, Practice; Child; Cross-Sectional Studies; Questionnaires

**Abstract:** The purpose of this study is to evaluate parents' knowledge, attitudes and common practices about using overthe- counter [OTC medications for their children. This is a cross-sectional survey of parents attending outpatient pediatric clinic at King Abdullah University Hospital from March 2007 to June 2007. A total of 1490 questionnaires were filled, mostly by mothers [71.9%. More than half of parents indicated that they used at least one OTC medication for their child[ren within the previous month. The main reasons for use were: convenience and time savings. More than 90% of parents believed OTC medications were effective and safe. Most parents reported asking their pharmacist for advice regarding the OTC. Many participants were unaware of information needed for safe medication use. Parents' knowledge regarding OTC medication use is inadequate. Specific guidelines for appropriate use should be provided to parents to the prescribing physician, and dispensing pharmacist.

#### Nose

### injuries

A novel V- silicone vestibular stent: preventing vestibular stenosis and preserving nasal valves.

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Sultan Qaboos University Hospital - Department of ENT Oman Medical Journal 2012; 27 (1): 60-62 (8 ref.) Keywords: Stents; Silicones; Constriction, Pathologic

Abstract: This report presents a novel style of placing nasal stents. Patients undergoing surgical procedures in the region of nasal vestibule and nasal valves are at risk of developing vestibular stenosis and lifelong problems with the external and internal nasal valves; sequels of the repair. The objective of the report is to demonstrate a simple and successful method of an inverted VStent placement to prevent potential complication of vestibular stenosis and nasal valve compromise later in life. Following a fall on a sharp edge of a metallic bed, a sixteen month old child with a deep lacerated nasal wound extending from the collumellar base toward the tip of the nose underwent surgical exploration and repair of the nasal vestibule and nasal cavity. A soft silicone stent fashioned as inverted V was placed bilaterally. The child made a remarkable recovery with no evidence of vestibular stenosis or nasal valve abnormalities. In patients with nasal trauma involving the nasal vestibule and internal and external nasal valves stent placement avoids sequels, adhesions, contractures, synechia vestibular stenosis and fibrosis involving these anatomical structures. The advantages of the described V- stents over the traditional readymade ridged nasal stents, tubing's and composite aural grafts are: a] technical simplicity of use, b] safety, c] less morbidity, d] more comfortable, and e] economical. To our knowledge, this is the first report of such a stent for prevention of vestibular stenosis and preserving nasal valves.

## Obesity, Abdominal

#### Trends in waist circumference and central obesity in adults, northern Iran.

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Golestan University of Medical Sciences - School of Medicine - Golestan Cardiovascular Research Center

Oman Medical Journal 2012; 27 (1): 50-53 (35 ref.)

Keywords: Waist Circumference; Adult; Cross-Sectional Studies; Urban Population; Rural Population

**Abstract:** The main aim of this study is to determine the central obesity trends during the period from 2006 to 2010 among 15-65 years old people in Northern Iran. This was a population-based cross-sectional study conducted on 6466 subjects who had been chosen by a multi stage cluster random sampling within five steps. The subjects were randomly chosen from 325 clusters and each cluster included 20 cases. Central obesity was defined as waist circumference >/=102 cm and >/=88 cm in men and women, respectively. Compared to 2010, the mean waist circumference in 2006 changed from 87.2 cm to 88.1 cm in men [p=0.237], and from 90.3 cm to 88.6 cm in women [p=0.045]. The comparison between 2006 and 2010 revealed that the prevalence of central obesity slightly decreased, 6.8% and 2.4% in urban women and men, respectively. Generally, the mean of waist circumference significantly decreased in urban women [by 0.069 cm in each year; p=0.020]; however, the decrease of waist circumference in urban men was not significant [0.006 cm decrease each year; p=0.915]. The prevalence of central obesity declined among both males and females in the urban area; however, there was an attenuated increasing trend in the rural area. The disparity of trends between the two regions should be considered for further study.

# Oceanography

Lessons from multi-decadal oceanographic monitoring at an estuarine ecosystem in Argentina.

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Argentine Institute of Oceangraphy [I ADO]

International Journal of Environmental Research 2012; 6 (1): 219-234 (113 ref.)

**Keywords:** Ecosystem; Phytoplankton; Zooplankton; Crustacea; Fisheries; Temperature; Hydrogen-Ion Concentration: Salinity; Oxygen

**Abstract:** Both climate change and anthropogenic impact are creating a dynamic of continuous changes in ecosystems. While the expected consequences of these changes are global, the occurrence of extreme events and specific environmental problems are usually local or regional phenomenon. In particular, the coastal ecosystems are among the first vulnerable areas to show those changes; in spite of this, are the least studied. The Bahia Blanca estuary, Argentina, is located at 38° 40' S and 62° 09' W with an area of 2300 km[2]. Along the northern shore of the estuary it is found the most important deepwater harbor of the country, where most of the agricultural and industrial products are exported. For the first time, based on multi decadal oceanographic monitoring and meteorological data of this ecosystem, a co-relational analysis approach was outlined considering several documented changes at various trophic levels; namely, phytoplankton and zooplankton assemblages, commercial crustaceans and fisheries. As results, several novel emerging hypotheses regarding cause-and-effect relationships were formulated. These unprecedented findings represent substantial information for the focus of the future ecosystem management and research, revealing gaps in the present knowledge of the coastal ecosystem which can be extrapolated to other worldwide coastal systems.

### Ocimum basilicum

# Gene expression and activity of phenyl alanine amonia-lyase and essential oil composition of Ocimum basilicum L at different growth stages.

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Tarbiat Modares University - Faculty of Biological Sciences - Department of Plant Biology

IJB - Iranian Journal of Biotechnology 2012; 10 (1): 32-39 (41 ref.)

**Keywords:** Gene Expression; Phenylalanine Ammonia-Lyase; Oils, Volatile; Anisoles; Seedling; Reverse Transcriptase Polymerase Chain Reaction; Gas Chromatography-Mass Spectrometry; Spectrophotometry

Abstract: Phenylalanine amonia-lyase [PAL] is one of the most important enzymes that plays a key role in regulation of phenylpropanoid production in plants. It catalyzes the first step of the phenylpropanoid pathway in which L-phenylalanine is deaminated to trans-cinnamic acid. This step is significant for metabolic engineering and hyper-expression of the major phenylpropanoid, methyl chavicol. We followed gene expression and activity of PAL in Ocimum basilicum L. at different stages of growth including seedling, beginning and middle of growth phase, budding stage and flowering, and their correlation with final concentration of phenylpropanoid compounds. The level of gene expression was monitored by semi quantitative RT-PCR and phenylpropanoid compounds were identified by gas chromatography/mass spectrometry [GC/MS]. PAL activity was assayed using spectrophotometer. The results indicated that the level of gene expression and activity of PAL enzyme are altered during the plant development, where the highest expression and activity [0.851 [micromol cinnamic acid/mg/min] was achieved at budding stage. In this experiment, changes of methylchavicol content were correlated to the transcription and activity of PAL enzyme.

## Oryza sativa

#### Improving rice [Oryza sativa L.] drought tolerance by suppressing a NF-YA transcription factor.

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IJB - Iranian Journal of Biotechnology 2012; 10 (1): 40-48 (50 ref.)

Keywords: Droughts; CCAAT-Binding Factor; Transcription Factors; DNA, Bacterial

**Abstract:** The response to drought stress is a complicated process involving stress sensing, intracellular signal transduction, and the execution of a cellular response. Transcription factors play important roles in the signaling pathways including abiotic stress. In the present study a rice NF-YA transcription factor gene was partially characterized following dehydration. Disrupting the gene via a T-DNA insertion resulted in drought tolerant plants and a high rate of recovery after water re-supply. It was demonstrated that the improved drought tolerance of the mutant is primarily due to non-stomatal mechanisms such as free radical scavenging, which might be related to changes in metabolism of carbohydrates.

## **Osteopetrosis**

## complications

#### Late-onset visual loss in osteopetrosis.

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Aga Khan University Hospital

SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 407-411 (9 ref.)

**Keywords:** Vision Disorders-etiology; Intracranial Hypertension-complications; Papilledema-etiology; Blindness-etiology; Optic Nerve-surgery; Magnetic Resonance Imaging

**Abstract:** Late-onset visual loss is a complication of nerve entrapment and increased intracranial pressure. We hereby describe the first case in Eastern Africa. A 23 year-old lady presented with sudden blindness, headaches and body weakness. She had previously had treatment for multiple unexplained fractures. Findings of optic nerve entrapment explained this blindness. This case highlights the need to have a high index of suspicion in cases of unexplained fractures with late-onset blindness.

## **Pancreatic Neoplasms**

## diagnosis

#### Sneaky pancreatic head mass.

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Father Muller Medical Collage and Hospital - Department of Surgery

Oman Medical Journal 2012; 27 (1): 70-71 (7 ref.)

Keywords: Lipoma-diagnosis; Pancreas; Tomography, X-Ray Computed; Dyspepsia; Gastritis

**Abstract:** A 60 yrs old male presented to the Father Muller Medical College and Hospital, India, with dyspeptic symptoms. On physical examination, epigastric tenderness was present and ultrasound revealed an ill defined in homogeneous hyper echoic lesion in the head of pancreas. Hemogram, serum amylase, serum lipase and liver function tests were all normal. Contrast-enhanced CT showed a homogeneous focal mass measuring about 5x6 cm in the pancreatic head, [Figs, la and b]. The mass was isodense with fat tissue, with interlobular septa, and without central or peripheral contrast. Upper GI endoscopy revealed mild antral gastritis. The patient improved with antacids.

# **Pancytopenia**

#### etiology

#### Etiological profile of pancytopenia in adults in Marrakesh, Morocco.

Nafil, H.; Tazi, I.; Sifsalam, M.; Bouchtia, M.; Mahmal, L.

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Kadi Ayyad University - Mohammed IV University Hospital - Department of Hematology

EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 532-536 (16 ref.)

**Keywords:** Pancytopenia-diagnosis; Pancytopenia-blood; Bone Marrow Examination; Anemia, Megaloblastic-epidemiology; Anemia, Aplantic-epidemiology; Leukemia-epidemiology

**Abstract:** This retrospective study evaluated the frequency of different causes of pancytopenia in all adult patients with pancytopenia presenting to the Department of Haematology of Mohamed VI Hospital, Marrakesh from 1 January 2008 to 31 December 2010. A total of 118 cases of pancytopenia were found [average of 39 cases per year]. The mean age of patients was 52 years [range 18-82 years] and 52.5% were male. The main clinical signs were pallor [100%], asthenia [100%] and fever [30.5%]. Mean haemoglobin was 6.5 g/dL [range 2.9-9.2 g/dL], mean white blood cell count was 2360/mm[3] [range 840-3360/mm[3]] and platelet count 66 000/mm[3] [range 3000-123 000/mm[3]]. Bone marrow aspiration was performed in 112 patients; megaloblastosis was found in 32.2% and marrow blasts in

23.7%. Anaemia due to vitamin B[12] deficiency [32.2%], acute leukaemia [23.7%] and aplastic anaemia [15.2%] were the main causes of pancytopenia. Given the incidence of acute leukemia among our cases, patients presenting with pancytopenia require urgent diagnosis and treatment.

#### **Parasitic Diseases**

### therapy

Herbal medicine and parasitic diseases.

Etewa, Samia E.; Abaza, Sherif M.

Zagazig University - Faculty of Medicine - Department of Parasitology **PUJ - Parasitologists United Journal** 2011; 4 (1): 3-14 (163 ref.)

Keywords: Phytotherapy; Herbal Medicine; Plants, Medicinal-chemistry; Plants, Medicinal-classification; Review

Literature as Topic

#### **Patient Readmission**

Study of the relation between quality of inpatient care and early readmission for diabetic patients at a hospital in the Eastern province of Saudi Arabia.

Mokhtar, S.A.; El Mahalli, A.A.; Al Mulla, S.; Al Hussaini, R.

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University of Alexandria - High Institute of Public Health - Department of Biostatistics

EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 474-479 (14 ref.)

Keywords: Inpatients; Hospitalization; Quality Indicators, Health Care; Diabetes Mellitus; Case-Control Studies;

Retrospective Studies

**Abstract:** Readmission of diabetic patients after discharge from hospital has potential value as a quality of care indicator. This retrospective cohort and case-control study aimed to determine the readmission rate for diabetic patients within 28 days after discharge and the association between quality of inpatient care and unplanned readmission. An audit of records was conducted in a hospital in the Eastern province of Saudi Arabia during 2000-2008. The rate of unplanned readmission of patients originally admitted with diabetes mellitus [n = 1125] was 5.2%. Comparison of data from readmitted patients [n = 62] and a sample of non re admitted patients [n = 62] showed that adherence by health care providers to American Diabetes Association guidelines for admission work-up [OR 0.91, 95% CI: 0.85-0.99] and readiness for discharge criteria [OR 0.89, 95% CI: 0.84-0.95] were significantly more likely to decrease the risk of readmission within 28 days.

#### **Phenol**

# Adsorption isotherm modeling of phenol onto natural soils-applicability of various isotherm models.

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SASTRA University - School of Civil Engineering

International Journal of Environmental Research 2012; 6 (1): 265-276 (22 ref.)

Keywords: Adsorption; Soil

Abstract: Liquid-phases adsorption equilibrium of phenol onto two naturally available soils namely Kalathur soil [Kr] and Adhanur soil [Ar] were studied. The experimental data were analyzed using fourteen isotherm models, ranging from single-parametric model to multi-parametric models [up to 5 parameters] of the system. Results show that in general the accuracy of models to fit experimental data improves with the degree of freedom. To understand the mechanism involved with different types of sorbate-sorbent system as well as to find out the best fitting isotherm model, the correlation coefficients, and average percentage error and student t-test were carried out. Temkin isotherm model, Langmuir-Freundlich isotherm model and Fritz-Schlunder model as well as Baudu model were found to be the best fit models amongst the two-parametric models, three parametric models and four parametric isotherms modeling, respectively. This study brings out the need of simultaneous solution of multi-parametric equations [using relevant

softwares, MATLAB, in present case] than solution of their linearized forms, which is mostly followed by contemporary investigators.

# **Phosphorus**

Distribution and fractions of phosphorus and nitrogen in surface sediments from Dianchi lake, China.

Li, H.; Wang, Y.; Shi, L.Q.; Mi, J.; Song, D.; Pan, X. J.

Kunming University of Science and Technology - Faculty of Environment Science and Engineering

International Journal of Environmental Research 2012; 6 (1): 195-208 (42 ref.)

Keywords: Nitrogen; Geologic Sediments; Lakes; Biological Availability

**Abstract:** Dianchi Lake is one of the most three seriously eutrophic lakes in China. In the present study, the phosphorus [P] and nitrogen [N] fractions in 37 surface sediments samples collected in the Dianchi Lake were investigated. The total phophorus [TP] in sediments was divided into two parts: inorganic P [IP] and residual P [Res-P]. The results showed that the total phosphorus content in surface sediments ranged from 1465.27 to 3650.12 mg/kg, IP was the major component of TP and the Ca bound P was the main fraction of IP. The bio-available phosphorus [BAP] in Dianchi Lake was first estimated in this study. BAP ranged from 215.66 to 678.02 mg/kgand the mean concentration was 382.78 +/- 89.77 mg/kgfor all 37 samples. The nitrogen fractions for the whole Dianchi Lake were firstly studied. It was shown that the sediment had been an important N nutrient source of the water, owing to the high content of transferable nitrogen forms in the sediment.

# **Physical Therapy Modaities**

#### standards

Perspective of clinicians on physical therapy clinical education in Saudi Arabia.

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King Saud Bin Abdulaziz University - Rehabilitation and Qualification and Physical Therapy Department

New Egyptian Journal of Medicine [The] 2011; 44 (3): 238-244 (10 ref.)

**Keywords:** Perception; Physicians; Clinical Medicine; Curriculum-standards; Prospective Studies

Abstract: Physical Therapy [PT] curriculum is composed of foundation sciences, specialization courses, and clinical education [CE], as well as the extracurricular components. CE component is the part that is conducted in clinical sites and aims to reinforce the theoretical and practical skills that have been taught in the classrooms. Previous PT researches have not identified and evaluated different CE strategies and the role of clinical instructors in Saudi Arabia. This Research examined perception and experiences of physical therapist in CE, as well as their views about barriers facing CE. This is a cross-sectional study which included 112 therapists working in Riyadh, Saudi Arabia. Questionnaire survey was used to collect data. The survey composed of 4 parts; demographical, perceptions of therapists about CE, therapist experiences with CE, and therapists' view on barriers facing CE; was used to collect data. Descriptive statistics and simple correlations were used to analyze data. The results of sample showed that 60% were females, 85% were younger than 40 years, 40% were non Saudi, and that 87% participate in CE. Therapists support the need for further training and guidelines in conducting CE. They believe CE improves their daily practice. They agreed on many obstacles, difficulties and barriers that are facing CE practice. The study showed that Physical Therapy is a young profession in Saudi Arabia. Training of clinical instructors and providing clear guidelines are needed to enhance CE practices. Further studies are needed in this area.

# **Phytoplankton**

The influence of land based activities on the phytoplankton communities of Shimoni-Vanga system, Kenya.

Kiteresi, L.I.; Okuku, E.O.; Mwangi, S.N.; Ohowa, B.; Wanjeri, V.O.; Okumu, S.; Mkono, M.

Kenya Marine and Fisheries Research Institute

International Journal of Environmental Research 2012; 6 (1): 151-162 (33 ref.)

Keywords: Ecology; Water; Diatoms; Dinoflagellida; Food

Abstract: Phytoplankton communities play a significant role in the oceanic biological pump by forming the base of the trophic structure. Increase in nutrients loading affects spatial and temporal distribution of phytoplankton. This study examined the phytoplankton community structure and ecological indices in relation to nutrients dynamics in both estuarine and oceanic areas of Ramisi-Vanga systems along the Kenyan coast. Surface water samples were collected and analysed for nutrients [PO[4][3-] -P, NO[3] -N and N[4+]-N] and phytoplankton abundance and community structure. This study reported very diverse phytoplankton community structure consisting of 88 taxa that were dominated by Chaetoceros sp., Coscinodiscus sp., Nitzschia sp., Pseudo-nitzschia sp., Alexandrium sp., Protoperidium sp. and Prorocentrum sp that are among the potentially harmful algae. Diatoms were the most abundant taxa in Ramisi-Vanga system. Phytoplankton abundance was found to be higher in the estuarine systems [1182.06 +/-149.14 cells/L] as compared to the oceanic systems [551.99 +/- 166.70 cells/L] with high abundance observed in May for oceanic and estuarine systems. Shannon Weiner's species diversity index was greater than 2 in both oceanic and estuarine systems. Phytoplankton species' abundance, composition and diversity were found to be influenced by the availability of NH/-N, NO[3-]-N and PO[4][3-]-P. Phytoplankton cell density was below 4000 cells/ L, thus, this study has classified Ramisi-Vanga system as an oligotrophic system implying that the current level of land based activities are not having significant impacts on the phytoplankton communities.

# Machine learning for predictive management: short and long term prediction of phytoplankton biomass using genetic algorithm based recurrent neural networks.

Kirn, D.K.; Jeong, K.S.; McKay, R.I.B.; Chon, T.S.; Joo, G. J.

Seoul National University - School of Computer Science and Engineering

International Journal of Environmental Research 2012; 6 (1): 95-108 (71 ref.)

Keywords: Biomass; Neural Networks (Computer); Algorithms; Ecology; Chlorophyll; Rivers

Abstract: In the regulated Nakdong River, algal proliferations are annually observed in some seasons, with cyanobacteria [Microcystis aeruginosa] appearing in summer and diatom blooms [Stephanodiscus hantzschii] in winter. This study aims to develop two ecological models forecasting future chlorophyll a at two time-steps [one-week and one-year forecasts], using recurrent neural networks tuned by genetic algorithm [GA-RNN]. A moving average [MA] method pre-processes the data for both short- and long-term forecasting to evaluate the effect of noise downscaling on model predictability and to estimate its usefulness and trend prediction for management purposes. Twenty-five physicochemical and biological components [e.g. water temperature, DO, pH, dams discharge, river flow, rainfall, zooplankton abundance, nutrient concentration, etc. from 1994 to 2006] are used as input variables to predict chlorophyll a GA-RNN models show a satisfactory level of performance for both predictions. Using genetic operations in the network training enables us to avoid numerous trial-and-error model constructions. MA-smoothed data improves the predictivity of models by removing residuals in the data prediction and enhancing the trend of time-series patterns. The results demonstrate efficient development of ecological models through selecting appropriate network structures. Data pre-processing with MA helps in forecasting long-term seasonality and trend of chlorophyll alpha, an important outcome for decision makers because it provides more reaction time to establish and control management strategies.

# Phytoplankton and zooplankton modeling of pishin reservoir by means of an advection-diffusion drought model.

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International Journal of Environmental Research 2012; 6 (1): 163-172 (41 ref.)

Keywords: Zooplankton; Water Quality; Water; Aquaculture; Lakes

Abstract: Phytoplankton and zooplankton concentrations in Pishin reservoir are predicted employing a three-dimensional numerical model in this paper. Modeling is performed using a numerical model based on mass transport equation. Advection, diffusion and source/sink processes are considered as separate subroutines for predicting the concentrations of phytoplankton and zooplankton in the reservoir. Finite volume method is used for solving the governing equations of water quality and water flow. The model is adopted for drought periods and dry climates. Water flow in the reservoir is simulated by Fluent software that is a finite volume numerical model. The model also uses a sub-model for compatibility providing of geometry between software and water quality model. A one-year period of experimental works and sampling is done in the study area. Phytoplankton and zooplankton cycles are used to determine the sources and sinks. Standard methods are chosen for experimentation. The concentrations of phytoplankton and zooplankton are calculated and measured in a one-year period. The concentrations of phytoplankton and zooplankton decrease in the depth of water and the decease rate is not linear. Also the concentrations are increase in the times after the maximum floods because of the inflows contain high amounts of nutrients. The calculated values by the model are in good agreement with measured values of laboratory works. It was concluded that the model can be used for water quality prediction in such aquatic environments.

## **Plantago**

Evaluating the efficiency of Plantago ovata and starch in water turbidity removal.

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International Journal of Environmental Research 2012; 6 (1): 259-264 (39 ref.)

Keywords: Starch; Water; Coagulants; Ferric Compounds; Chlorides; Hydrogen-Ion Concentration

**Abstract:** In. the current study, the efficiency of starch and Plantago ovata extract as coagulant aids is compared in water turbidity removal. The coagulant is ferric chloride and the experiments are run in two ranges of pH 7 and 8. The achieved results of turbidity removal in different turbidity levels of 100, 50 and 20 NTU caused by different concentrations of starch and P.ovata as coagulant aids besides ferric chloride as the main coagulant are compared. According to the achieved results, the use of P.ovata or starch as the coagulant aid may play a key role in reducing the amount of FeCl[3] as the main coagulant and consequently decreasing the generated sludge. Furthermore, the remarkable turbidity removal efficiency gained when these coagulant aids are used in comparison with the case when no coagulant aid is introduced is also of interest. Generally, the both coagulant aids seem to be more efficient in pH value of 7 rather than 8. Although both coagulant aids used in this study manifested acceptable turbidity removal efficiencies, P.ovata showed higher capabilities of removal in different turbidity levels and pH values in comparison with starch.

# **Policy Making**

Making informed policy and decisions in Pakistan: role of health policy and systems research.

Abdul Ghaffar; Hafeez, Assad

World Health Organization - Alliance for Health Policy and Systems Research PJPH - Pakistan Journal of Public Health 2011; 1 (1): 2-3 (4 ref.)

Keywords: Health Policy; Policy; Decision Making; Research

## Polycyclic Hydrocarbons, Aromatic

Heavy metals and PAH assessment based on mussel caging in the north coast of Tunisia [Mediterranean Seal.

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National Institute of Science and Technology of the sea

International Journal of Environmental Research 2012; 6 (1): 109-118 (45 ref.)

Keywords: Metals, Heavy; Mediterranean Sea; Mytilus; Bivalvia; Mercury; Lead; Cadmium; Copper; Iron; Zinc

**Abstract:** In the framework of the Mytilos project [Interreg IIIB Medocc], international research cruises were carried out in 2006 in order to evaluate the level of Heavy metals and polycyclic aromatic hydrocarbons [PAH] along the coast of the western basin of the Mediterranean Sea. Caged mussels [Mytilus galloprovincialis] were placed in situ at six sites in the North coast of Tunisia, Results showed total PAH levels were in the range 45.6-241.6 ng/g dry weight [dw]. The ranges of trace metals concentrations expressed in ug/gdw are: Hg [0.1-0.2], Pb [0.4-0.7], Cd [0.9-2.9], Cu [2.9-3.9], Fe [117-248] and Zn [250-426]. Higher concentrations were observed at Rades, La Galite and Tabarka which can be attributed to the industrial activities implanted in the coast of Algeria and in the city of Rades. Concentrations of PAH, Cd, Pb, Fe and Zn are generally different from initial concentrations [before caging], depending on the adaptability of transplanted mussels to be used as bio-indicator of contaminants. Yet bio-monitoring using mussels give information on compound bioavailability which depends on their ability to accumulate contaminants in its tissue.

# Pre-Eclampsia

The effect of short duration sperm exposure on development of preeclampsia in primigravid women.

Sadat, Z.; Kalahroudi, M. Abedzadeh; Saberi, F.

Kashan University of Medical Sciences - School of Nursing and Midwifery - Trauma Research Center

IRCMJ - Iranian Red Crescent Medical Journal 2012; 14 (1): 20-24 (24 ref.)

Keywords: Spermatozoa; Gravidity; Pregnancy; Case-Control Studies

**Abstract:** Preeclampsia is one of the most serious complications, and affecting about 3% of pregnancies. The aim of this study was to estimate the impact short duration of exposure to sperm on development of preeclampsia. The duration of sperm exposure with the biological father [cohabitation without barrier methods] <3, <6 months were evaluated among 120 primigravid women with preeclampsia and 120 women without preeclampsia in a case-control study. The short duration of exposure to sperm was more common in women with preeclampsia compared with controls [29.2 versus 14.2 for <3 months, adjOR 2.6 [95% Cl=1.32-5.13] and [45 versus 29.2 for <6 months, adjOR 2.4 [95% 01=1.35-4.32]. Regardless of the contraceptive method, short duration of cohabitation was more common in preeclamptic group [14.2 versus 5.8 for <3 months, adjOR 3.38 [95% Cl=1.28-8.92] and [29.7 versus 13.3 for <6 months, adjOR 2.64 [95% Cl=1.24-5.79]. It was concluded that short duration of exposure to sperm was more common in women with pree-clampsia compared with controls.

## Pregnancy, Ectopic

### surgery

## Submyomatous cornual pregnancy managed surgically after failed medical management.

Al Kharusi, Lamya; Gowri, Vaidyanathan; Al Sukaiti, Rashid; Al Ghafri, Wadha; Rao, Kuntal

Sultan Qaboos University Hospital - Departments of Obstetrics and Gynaecology

SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 399-402 (10 ref.)

**Keywords:** Pregnancy, Ectopic-diagnosis; Leiomyoma; Chorionic Gonadotropin, beta Subunit, Human-blood; Methotrexate

**Abstract:** Cornual pregnancy constitutes an emergency while its diagnosis and management remain a challenge. Anatomical abnormalities in the uterus, such as fibroids in the cornual region, make the management even more difficult. A nulliparous patient presented with an ectopic pregnancy at the right cornua under a huge fibroid. Despite multiple doses of methotrexate for a cornual ectopic gestation, the serum beta human chorionic gonadotropin [3-hcG] levels doubled on the fifth day and a viable fetus was demonstrated on imaging. Thus surgical intervention in the form of laparoscopy followed by laparotomy, myomectomy of a large cornual fibroid and cornuostomy was performed. The serum beta human chorionic gonadotropin result was negative three weeks later. Surgical intervention in the form of myomectomy and cornuostomy was necessary to preserve fertility in this unusual presentation of cornual ectopic pregnancy.

#### **Probiotics**

# Suitability of MRS-bile agar for the selective enumeration of mixed probiotic bacteria in presence of mesophilic lactic acid cultures and yoghurt bacteria.

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IJB - Iranian Journal of Biotechnology 2012; 10 (1): 16-21 (20 ref.)

**Keywords:** Bacteria; Agar; Bile; Lactic Acid; Yogurt; Lactobacillus acidophilus; Bifidobacterium; Lactococcus lactis; Streptococcus thermophilus; Lactobacillus delbrueckii; Bile Acids and Salts

**Abstract:** Measuring the viability of probiotic microorganisms in food products using plate count methodology is a common practice due to the simplicity [ease of performance], inexpensive and routine testing characters of this method. In present study, the suitability of de man rogosa and sharpe agar [MRS] bile agar medium for the selective enumeration of mixed probiotic bacteria [Lactobacillus acidophilus LA-5, L. casei 431 and Bifidobacterium lactis BB-12] in presence of mesophilic lactic cultures [Lactococcus lactis ssp. lactis and Lactococcus lactis ssp. Cremoris] and

yoghurt bacteria [Streptococcus thermophilus and Lactobacillus delbrueckii ssp. Bulgaricus] was investigated. Yoghurt bacteria did not grow neither in presence of 0.15% nor 0.30% of bile salts, as was expected. Mesophilic lactic starters could grow at both concentrations of bile salts at all incubation temperatures except 37°C. According to these results, MRS-bile agar [0.15 bile salts] could be successfully used for selective enumeration of mixed probiotic cultures in presence of mesophilic culture and/or yoghurt bacteria when plates were incubated at 37°C for 72 h.

# **Prodrugs**

#### Synthesis and pharmacological evaluation of tyrosine and glycine prodrugs of aceclofenac.

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Jordan Journal of Pharmaceutical Sciences 2011; 4 (3): 198-208 (16 ref.)

**Keywords:** Tyrosine; Glycine; Diclofenac-analogs and derivatives; Anti-Inflammatory Agents, Non-Steroidal; Peptic Ulcer-prevention and control

Abstract: The gastrointestinal toxicity associated with aceclofenac [AC] can be reduced by synthesis of its prodrugs. It involves condensing the carboxylic acid group of AC with methyl esters of amino acids like tyrosine and glycine to give tyrosine conjugated aceclofenac [3a] and glycine conjugated aceclofenac [3b], respectively. Physicochemical characterization of the prodrugs by various analytical and spectral methods was carried out. In vitro hydrolysis in simulated gastric fluid [SGF], simulated intestinal fluid [SIF] and human plasma showed an encouraging hydrolysis rate in SIF and human plasma than in SGF. This indicated that the prodrugs do not break in stomach but release aceclofenac in SIF and human plasma. The pharmacological evaluations showed a comparable increase in anti-inflammatory activity and marked reduction of ulcer index for the prodrugs. Normal histological findings revealed that the prodrugs are not producing any ulceration in the gastric region. The prodrugs thus possess better pharmacological response than the parent drug.

# **Proton Pump Inhibitors**

# Development of rapid and simple analytical method for some proton pump inhibitors [PPIs] using HPLC.

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Jordan Journal of Pharmaceutical Sciences 2011; 4 (3): 222-236 (18 ref.)

Keywords: Chromatography, High Pressure Liquid; Omeprazole; 2-Pyridinylmethylsulfinylbenzimidazoles

**Abstract:** A simple, selective and rapid reversed phase High Performance Liquid Chromatographic [HPLC] method for the analysis of Lansoprazole [LNS], Omeprazole [OMP] and Esomeprazole [ESOMP] has been developed and validated. HPLC-UV detector equipped with RP-C18 column, mobile phase [Water: Acetonitrile: TEA, 60: 40: 0.5 V/V/V pH=7 adjusted with phosphoric acid] and a flow rate of 1ml/min were used for the quantification for each compound. The analytical method parameter was the same except for the wave lengths; they were 285, 280, 303 nm; and the retention times were 7 min, 4.5 min and 5 min for LNS, OMP and ESOMP, respectively. Method validation was performed for each compound, and all the parameters were acceptable. Therefore, the method could be used as a simple, rapid and efficient option for the analysis of LNS, OMP, and ESOMP during routine tests in pharmaceutical industries because all the parameters [mobile phase, column, flow rate] of the method are the same except for the wave length which should be changed for each compound, and the change of the wave length does not need more than 2 minutes.

## **Psychomotor Agitation**

### drug therapy

Midazolam versus ketamine in the management of emergence agitation in children undergoing lower abdominal and limb surgeries.

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Isfahan University of Medical Sciences - Anesthesiology and Critical Care Research Center - Department of Anesthesiology

Tehran University Medical Journal [TUMJ] 2012; 69 (11): 730-736 (26 ref.)

**Keywords:** Midazolam-therapeutic use; Ketamine-therapeutic use; Disease Management; Child; Abdomen-surgery; Extremities-surgery; Premedication; Prospective Studies

**Abstract:** Emergence agitation [EA] is a post-anesthetic problem which interferes with a child's recovery and presents a challenge in terms of assessment and management. In this study, we compared the effects of midazolam and ketamine as premedication in the management of EA in children aged 1-6 years. In this prospective, randomized clinical trial study, 58 children aged 1-6 years who were undergoing general anesthesia for elective surgery in Alzahra Hospital in Isfahan during 2008 until 2009. The patients were randomly assigned to receive 0.1 mg/kg midozolam [28] or 0.5 mg/kg ketamine [29] by IV route in the premedication room. All patients received a standardized anesthetic regimen and isoflurane was used for the maintenance of anesthesia. The incidence and severity of agitation [agitation score], severity of pain [pain score], anesthesia, recovery and extubation durations were recorded postoperatively. The prevalence of agitation in midazolam [21.4%] was lower than ketamine group [34.5%; P<0.05]. In addition, the duration of agitation in ketamine group [21 +/- 16.67 min] was significantly higher than midazolam group [6.83 +/- 6.55 min], [P<0.05]. However, no significant differences were seen in agitation score, pain score, anesthesia, recovery or extubation durations in the two groups [P>0.05]. The study showed that midazolam could reduce the frequency of agitation better than ketamine but both drugs were able to reduce the severity of agitation after short-time surgeries in young children.

# **Quality of Health Care**

Conference on Quality of Healthcare in Hospitals [Stakeholders' Perspective].

Perdes, Mohammad Saber Ministry of Public Health

AFJPH - Afghanistan Journal of Public Health 2012; 1 (1): 52-57 (1 ref.)

Keywords: Hospitals; Quality Indicators, Health Care; Quality Assurance, Health Care

Improving quality of care in hospitals: is there a role for performance management?

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PJPH - Pakistan Journal of Public Health 2011; 1 (1): 53-55 (10 ref.)

Keywords: Hospitals; Primary Health Care

Abstract: Hospitals are an important part of any health system. In Low Income Countries [LICs] lack of appropriate quality services at the Primary Health Care level encourages patients to proceed directly to the hospitals. Improving hospital performance can therefore maximize health benefits and improve health systems. In order to provide the highest quality patient care and to follow through with performance improvement initiatives, hospitals have begun to apply performance management [PM] tools like TQM, Benchmarking, ISO 9000 certifications, Malcolm Baldrige National Quality Award criteria, European Foundation for Quality Management [EFQM] model and the Balanced Scorecard [BSC]. BSC is a multidimensional strategic framework with widespread use in high income countries [HICs]. BSC has now been successfully implemented as a PM system to manage the delivery of primary health care services in Afghanistan. A recent hospital based case study conducted at an ISO certified hospital in Karachi also showed emerging signs of a positive change in units where BSC was successfully implemented. Considering the successful application of BSC to assess and improve health service capacity, quality and service delivery it is worthwhile exploring the large scale use of PM tools in LIC hospital settings.

## Reagent Kits, Diagnostic

## supply and distribution

### Availability and suitability of rapid diagnostic kits for screening donated blood in Afghanistan.

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Health Protection and Research Organization

AFJPH - Afghanistan Journal of Public Health 2012; 1 (1): 42-46 (14 ref.)

**Keywords:** Blood Donors-supply and distribution; Blood Transfusion-standards; Diagnostic Techniques and Procedures; Cross-Sectional Studies; Questionnaires; Sensitivity and Specificity

Abstract: As health infrastructure is being rebuilt in Afghanistan, military, public, and private facilities offer donor blood collection/ transfusion services. This study aims to measure availability and type of blood screening test kits in the military, public and private facilities in Afghanistan. This national cross-sectional assessment targeted all facilities providing donor blood collection/transfusion services across all sectors. Descriptive statistics were generated with screening test availability compared by setting [urban vs. rural], province/region, and facility type [private vs public] using Chi-square test. A total of 243 facilities were assessed, with all 34 provinces represented with urban settings containing 63% of the facilities. Screening rapid tests were widely present for most pathogens, including HIV [87.7% of facilities], hepatitis B surface antigen [HB[s]Ag] [93.8%], hepatitis [HCV] antibody [90.5%], and syphilis [70.0%]. Private facilities were less likely to have syphilis tests available [51.4% vs. 84.1% [public], p<0.01]. Nineteen percent of facilities use the WHO evaluated test kit for HIV, 2.1% for HB[s]Ag, and none for HCV Ab. Of sites with available test kits, 7.5% of HIV, 0.9% of HB[s]Ag, 2.3% of HCV, and 6.5% of syphilis tests were expired at time of assessment. For expired tests, private facilities were more likely to have expired HIV and syphilis tests [p=0.07 and p=0.02, respectively] than other facility types. Blood collection/transfusion is a multisectoral service in Afghanistan, with substantial differences in test availability and type between sectors. Mechanisms are needed that ensure availability of quality test kits at all levels where blood collection/transfusion is performed. Test kits that have been evaluated by the WHO should be used for blood screening in all facility types.

## **Referral and Consultation**

# Relationship between consultation length and rational prescribing of drugs in Gorgan city, Islamic Republic of Iran.

Khori, V.; Changizi, S.; Biuckians, E.; Keshtkar, A.; Alizadeh, A.M.; Mohaghgheghi, A.M.; Rabie, M.R.

EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 480-486 (41 ref.)

Keywords: Time; Drug Prescriptions; General Practitioners; Patients

**Abstract:** Doctors with longer consultation times tend to diagnose illnesses more precisely, prescribe fewer drugs and present better health advice to their patients. The aim of this study was to measure the average consultation time of general practitioners in Gorgan, Islamic Republic of Iran and to investigate the factors affecting consultation length, especially in relation to rational prescribing of drugs. Data were collected on 620 patient consultations with 62 randomly selected general practitioners. Mean consultation length was 6.9 [SD 2.6] minutes. Patient factors that were significantly associated with a longer mean duration of consultation time were; higher number of health problems, older age and fewer items of previously used drugs. Physician factors that were significantly associated with a longer mean consultation time were: younger age, higher numbers of items prescribed and injectable drugs prescribed, frequency of interruptions and higher workload.

## Rehabilitation

# Association of cardiac rehabilitation with improvement in high sensitive C-reactive protein post-myocardial infarction.

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IRCMJ - Iranian Red Crescent Medical Journal 2012; 14 (1): 49-50 (9 ref.)

Keywords: C-Reactive Protein; Myocardial Infarction; Prospective Studies; Exercise; Behavior Therapy

## **Research Support as Topic**

Appraisal of the research grant schemes of the World Health Organization Regional Office for the Eastern Mediterranean: the way forward.

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World Health Organization - Research Policy and Cooperation Unit

EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 515-521 (12 ref.)

Keywords: Research Personnel; Research; World Health Organization; Public Health; Health Priorities

**Abstract:** One way that the World Health Organization Regional Office for the Eastern Mediterranean [EMRO] promotes the important area of health research is by providing research grants within the Region. A desk review of 2 of the EMRO-supported research grant schemes was done to assess: the selection process of the research proposals, the priority areas, country data and information on the principal investigator. The 2 schemes were: EMRO grant for Research in Priority Areas of Public Health, started in 2002, and the EMRO and Organization of Islamic Conference Standing Committee for Science and Technological Cooperation Grant for Research in Applied Biotechnology and Genomics in Health, started in 2004. The paper proposes the following recommendations to enhance benefit from the grant process: create a critical mass of researchers through joint collaboration in proposals and mentoring; instigate a more rigorous process to disseminate the call for proposals more widely and effectively; and include relevant stakeholders in the identification of priority areas for research and overall monitoring of the process.

## **Restless Legs Syndrome**

## drug therapy

The effect of selenium administration on restless leg syndrome treatment.

Rahimdel, A.G.; Ayatollahi, P.; Zeinali, A.; Mehrabanian, N.; Mellat Ardekani, A.

Yazd University of Medical Science - Shahid Sadooghi Hospital - Department of Neurology

IRCMJ - Iranian Red Crescent Medical Journal 2012; 14 (1): 14-19 (32 ref.)

Keywords: Selenium-therapeutic use; Questionnaires; Placebos

Abstract: Restless leg syndrome [RLS] is defined as an uncomfortable feeling in the limbs which is prominently sensed in legs. Dopamine system involvement is considered as the base of RLS's etiology. Because of safety, anti-oxidant and dopaminergic promoting action of selenium, this study aims to investigate the effect of selenium on restless leg syndrome treatment. Sixty patients with primary RLS were enrolled in this clinical trial [Irct2011103015943n1]. It was based on 3 periods of drug prescription with one month wash out period. As placebo, 50 and 200 microg of selenium were administered in each separated month. The diagnosis was based on criteria published by IRLSG [International RLS Study Group]. The questionnaire included 10 questions while each question's rating was between 0 and 4. Points between 1 and 10 were considered mild, 11 to 20 as moderate, 21 to 30 as severe and 31 to 40 as very severe. After end of each month of drug consumption, questionnaires were completed and each subject was asked to report the severity of disease and side effects of the drugs. At least 10 declines in scale were considered as appropriate responses. Improvement [decline IRLS score >10] was significantly higher in selenium [50 and 200 microg] than placebo group. Selenium prescription in daily recommended dose of 50 ug instead of a dopamine agonist would be an alternative treatment in improvement of RLS symptoms.

## **RNA-Binding Proteins**

Identification of RNA-binding sites in artemin based on docking energy landscapes and molecular dynamics simulation.

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IJB - Iranian Journal of Biotechnology 2012; 10 (1): 8-15 (30 ref.)

Keywords: Iron-Binding Proteins; Arthropod Proteins; Molecular Dynamics Simulation; Artemia

**Abstract:** There are questions concerning the functions of artemin, an abundant stress protein found in Artemia during embryo development. It has been reported that artemin binds RNA at high temperatures in vitro, suggesting an RNA protective role. In this study, we investigated the possibility of the presence of RNA-binding sites and their structural properties in artemin, using docking energy landscapes and molecular dynamics simulation. Analysis of

docking energy landscapes revealed sites in artemin with the potential of binding RNAs. We found a good agreement between RNA-binding sites of artemin and RNA-interacting sites of a specific group of RNA-binding proteins called PUF, as regards to the type of their interactions with RNA molecules. Furthermore, the results from molecular dynamics simulation showed that firstly, the presence of RNA molecule and its interaction with artemin cause significant decrease in the secondary structure content of artemin; secondly, RNA-binding sites are mostly located in the low flexible regions. Finally, it seems that these binding sites are distributed in such a way that leads RNA molecule into the interior of the protein, strengthening the previous suggestion for RNA-pro-tecting role of artemin.

# Salmonella typhimurium

#### Molecular characterization of a Salmonella typhimurium isolate from Caspian pony.

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IJB - Iranian Journal of Biotechnology 2012; 10 (1): 49-53 (17 ref.)

**Keywords:** Horses-microbiology; Typhoid Fever; Salmonella Infections; Multiplex Polymerase Chain Reaction; Electrophoresis, Gel, Pulsed-Field; Transportation; DNA Primers; DNA; Microbial Sensitivity Tests

Abstract: Typhoid disease or salmonellosis is a common sickness in horses. In several epidemiological studies in hospitalized horses, several serotypes of Salmonella often are predominant in nosocomial infections. Transportation, overcrowding, dehydration, oral antimicrobial therapy and infections are the risk factors which may activate latent or subclinical salmonellosis. In this study, the occurrence of typhoid due to Salmonella serogroup B was considered in a Caspian ponies flock kept in a husbandry center of ponies around Tehran. During transportation of 19 ponies, two pregnant ponies aborted and four cases died because of acute septicemia. Pathological and bacteriological follow up showed salmonellosis. A multiplex poly-merase chain reaction [m-PCR] assay was used for detection and identification of Salmonella to confirm pathological and bacteriological studies. Salmonella typhimurium was isolated from bone marrow, mesenteric lymph nodes, liver and intestinal contents of died pony. Salmonella was not isolated from stools of other ponies. Pulsed Field Gel Electrophoresis [PFGE] and antibiotic susceptibility test were also performed. PFGE pattern was similar to the other collected isolates which have existed since more than 30 years ago in Iran. Because of importance of salmonellosis in ponies, using rapid methods are recommended to confirm the presence of Salmonella. Results showed that m-PCR permit to evaluate samples more rapidly than other methods and also can detect multiple genes simultaneously like virulence factors which declare virulence of the isolates and have surveillance significances.

## Sarcoma, Ewing

## diagnosis

#### Congenital soft tissue Ewing's sarcoma.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 778-779 (10 ref.)

**Keywords:** Neoplasms-congenital; Immunohistochemistry; Lymph Nodes; Lymphatic Metastasis; Neoplasm Metastasis; Drug Therapy

**Abstract:** A 15 days old female baby presented with a 6 x 7 cm reddish lump with irregular margins on her right scapular region, since birth. Histopathology and immunohistochemistry of excised tissue revealed it to be soft tissue Ewing's sarcoma. Postoperatively, she received only one dose of chemotherapy but could not survive and expired at the age of one month.

#### Schistosomiasis Mansoni

## epidemiology

Proteomic profiles characteristic of Schistosoma mansoni infection in patients from two different endemic areas.

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PUJ - Parasitologists United Journal 2011; 4 (1): 77-88 (39 ref.)

Keywords: Proteomics; Electrophoresis, Agar Gel-methods; Blatting, Western-methods

Abstract: Knowledge of the Schistosoma proteome may greatly enhance our understanding of its physiological and pathological processes at the molecular level and may provide new models for diagnosis and development of vaccines or drugs. Despite the importance of this approach, Schistosoma proteomic research in Egypt and Brazil is still incipient. To identify the profiles of S. mansoni serum reactive proteins [SRP] that may characterise clinically relevant subgroups of patients with schistosomiasis from two different endemic regions; Egypt and Brazil. Soluble egg antigen [SEA] and soluble worm antigen preparation [SWAP] of Egyptian and Brazilian strains of S. mansoni were resolved by twodimensional gel electrophoresis [2-DE]. Serum samples were collected from patients with intestinal [INT] and hepatosplenic [HS] schistosomiasis from both countries. Sera were probed using 2-dimensional western blot [2-DWB] against the corresponding separated antigens proteins [i.e. Egyptian SEA and SWAP were probed separately against Egyptian sera, while Brazilian SEA and SWAP were probed separately against Brazilian sera] to determine the isoelectric focusing point [pI] and molecular weight [MW] of the SRP. Both Egyptian and Brazilian strains antigens gave similar electrophoretic patterns in their p1 amid MW, where 97 soluble proteins from SEA and 125 from SWAP were resolved by 2-DE. For SEA, 11 and 12 proteins uniquely reacted to sera of INT and US patients respectively, and 62 proteins reacted to sera from patients with concurrent INT and HS schistosomiasis. Out of 85 SEA reactive proteins; 16 were reactive to>/=50% of sera of patients with the INT or HS clinical form of the disease. Regarding SWAP, 24 and 10 proteins uniquely reacted to sera of INT and HS patients respectively, and 35 proteins reacted to sera from patients with both clinical forms of schistosomiasis. Out of 69 SWAP reactive proteins, 6 proteins were reactive to>/=50% of sera from Egyptian patients with INT schistosomiasis. Sera of patients from Egyptian and Brazilian populations exhibited significant differences [P=0.032] for recognition of the immune reactive proteins to SEA and SWAP in the two different clinical forms of the diseases. Further definition of reactive proteins could provide novel targets for vaccine design and therapeutic intervention. Further detailed studies on large population scale are recommended to correlate different proteomic data among different clinical forms of schistosomiasis in an attempt to generate a vaccine valuable in schistosomiasis control in endemic areas.

## Sewage

# Comparative study on startup performance of UAHR and UASB reactors in anaerobic treatment of distillery spentwash.

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International Journal of Environmental Research 2012; 6 (1): 235-244 (28 ref.)

**Keywords:** Biofuels; Methane; Hydrogen-Ion Concentration; Electric Conductivity; Biological Oxygen Demand Analysis

**Abstract:** In this paper, startup performance of Upflow Anaerobic Hybrid Reactor and Upflow Anaerobic Sludge Blanket reactors in anaerobic treatment of distillery spentwash has been studied under identical conditions of operation. Various effluent characteristics like pH, Electrical Conductivity, Chemical Oxygen Demand, Biochemical Oxygen Demand and Total Solids and other process parameters like biogas production and methane per cent in biogas were studied until the attainment of steady state. The startup of the reactors has been completed and steady state condition attained on 25[th] day of reactor operation in UAHR and 34[th] day in UASB reactor. The treated effluent characteristics of both reactors were fairly steady after attaining the steady state condition. The pH of treated effluent during steady state condition was almost neutral for both reactors even though the influent had an acidic pH. The maximum COD, BOD and TS removal efficiencies were as high as 79.60%, 87.39% and 69.96% in UAHR as compared with UASB of 72.98%, 81.34% and 66.23%, respectively during the steady state period. The maximum volumetric gas production of 149 L nr3 produced more in UAHR than in UASB reactor during steady state condition.

The population of total anaerobic bacteria and methanogenic bacteria also more as that of the other parameters in UAHR than in UASB reactor and it were 55.2 x 10[3] ml[-1] and 40.0 x 10[2] ml[-1] respectively in UAHR. It is found that from an overall assessment the UAHR has proved superior in its performance compared to the UASB reactor during the startup process.

# Direct treatment of settled sewage by DHS reactors with different sizes of sponge support media.

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Kisarazu National College of Technology - Department of Environmental Engineering International Journal of Environmental Research 2012; 6 (1): 25-32 (12 ref.)

Keywords: Porifera; Polyurethanes

**Abstract:** The down-flow hanging sponge [DHS] reactor, which was developed for post-treatment of effluent from upflow anaerobic sludge blanket [UASB] process treating sewage, uses polyurethane sponge as media to retain biomass. Wastewater is trickled from the top of the reactor and purified by microorganisms retained both inside and outside of the sponge media as the wastewater flows vertically down through the reactor. Three DHS reactors employing different sizes of sponge media with the same total sponge volume were used for the direct treatment of settled sewage. All the reactors exhibited excellent performance in removal of COD, ammonium nitrogen, and fecal coliform at a fixed hydraulic retention time of 2.0 h based on the sponge volume. It was shown that smaller sponge media produced better removal efficiencies for all the parameters listed above. The most reasonable explanation for this might be that smaller sponge media allows better oxygen uptake in the stream flowing down through the reactors.

#### Sex

# Harmful cultural practices and women's sexual and reproductive rights from the Pakistani perspective.

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PJPH - Pakistan Journal of Public Health 2011; 1 (1): 48-52 (11 ref.)

Keywords: Culture; Women's Rights; Reproductive Rights; Marriage; Islam; Violence; Domestic Violence

#### Sex Workers

#### New face of female sex work in Pakistan: need for innovative interventions.

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Health Services Academy - R and D Department

PJPH - Pakistan Journal of Public Health 2011; 1 (1): 28-35 (35 ref.)

Keywords: Socioeconomic Factors; HIV Infections; Sexually Transmitted Diseases; Marriage; Violence; Sexual

Harassment; Reproductive Health

**Abstract:** The prime objective of this paper is to contextualize the socio-economic and environmental factors contributing to and resulting from behaviours and practices of FSWs for transmission of STI/HIV infections. Information on these independent predictors is the key to design health systems related interventions for minimizing risks and vulnerabilities of FSWs. In the bio-behavioural survey, 545 FSWs were recruited for the quantitative component and 13 in-depth interviews were completed for qualitative arm. Data was collected on socio-economic characteristics, sexual interactions, marital relationship, violence and harassment and reproductive and sexual health. Most FSWs are illiterate [n=345, 64%], married]n=490, 91%],having children [n=462, 98%] living with their families [n=478, 91%] sell sex part-time during the day at kothie khana's1, small hotels in the locality. The mean age at first intercourse was reported to be 16 years, yet a significant proportion had had sexual contact before the age of 15 [39%] with someone other than their husband [37%]; the experience was perceived [unwanted] [40%] or even [forced] [5%]. The high contraception rate [64%] especially condom use [54%] reported in the quantitative arm of the study was not validated during in-depth interviews due to client preferences. Abortion is used as a frequent method [58%] of contraception, assisted by locally available midwives or dais[2]. A sizeable proportion reported experiencing STI symptoms [n=317, 63%] for which informal healthcare providers were accessed. Most common perpetuators were husbands [66%] for physical violence and police [43%] for sexual abuse. Female sex trade in Pakistan is mainly part-time by married

women who sell sex due to lack of education, skilled training and formal employment resulting from gender disparities. Standardized reproductive and sexual healthcare interventions, involving informal healthcare sector would improve reproductive health indicators, yet socio-economic and gender disparities demand long-term multi-sectoral structural strategies.

## **Shaken Baby Syndrome**

### etiology

Shaken baby syndrome as a form of abusive head trauma.

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SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 322-327 (39 ref.)

**Keywords:** Shaken Baby Syndrome-diagnosis; Shaken Baby Syndrome-prevention and control; Child Abuse; Early Diagnosis; Brain Injuries-diagnosis

**Abstract:** Shaken baby syndrome [SBS] is a form of abuse that is characterised by brain injury. Because of the subtle and yet debilitating neurobehavioural impairment which ensues, SBS represents a diagnostic dilemma for attending clinicians. The situation is made worse by the young age of the affected child who may not be capable of explaining what happened. SBS has been reported in many parts of the world. To our knowledge, there is a dearth of literature on the topic from Arab/Islamic countries. This article attempts to shed light on the syndrome by reviewing information on the aetiology of SBS, as well as on its diagnosis and the reasons for delayed diagnosis. The central aim of this review is to increase awareness of SBS so that enlightened policies for prevention and intervention could be developed in the region and particularly in Oman.

## **Sick Sinus Syndrome**

Anaesthetic management of abdominal hysterectomy in patient with congenital sinus node dysfunction.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 760-762 (9 ref.)

**Keywords:** Hysterectomy; Anesthesia; Anesthesia, General; Metrorrhagia; Sinoatrial Node-abnormalities; Arrhythmias, Cardiac; Pacemaker, Artificial

**Abstract:** A 45 years old woman having dysfunctional uterine bleeding was scheduled for total abdominal hysterectomy with bilateral salpingo-oophorectomy under general anaesthesia. On pre-operative anaesthesia assessment, she was found to have junctional rhythm at rate of 44 beats/minute with bigeminies and pre-mature ventricular contractions on ECG. On further evaluation, she was diagnosed as having congenital sinus node dysfunction on the basis of 24 hours Holter monitoring. She was asymptomatic, no prior comorbidity and belonged to functional class one. General anaesthesia was successfully managed by vigilance, invasive monitoring, standby transcutaneous and transvenous pacemakers; use of cardiostable and vagolytic anaesthetic agents like Etomidate, Atracurium and Pethidine during the procedure and for postoperative pain management. Transcutaneous external pacing pads were placed just after induction of anaesthesia, their functional capability was confirmed and was ready for use if needed. The transcutaneous and transvenous pacemakers were on backup and both were not required. Patient was successfully managed and was discharged home on third postoperative day with uneventful hospital course. The elective pacemaker implantation was therefore not required.

## **Sirolimus**

### therapeutic use

Reduction of left ventricular hypertrophy by sirolimus in kidney transplant recipients: a nonrandomized clinical trial.

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Tehran University Medical Journal [TUMJ] 2012; 69 (11): 718-724 (22 ref.)

**Keywords:** Hypertrophy, Left Ventricular-drug therapy; Kidney Transplantation; Calcineurin-antagonists and inhibitors; Immunosuppressive Agents; Prospective Studies; Cohort Studies

Abstract: Persistence of left ventricular hypertrophy [LVH] in renal transplant recipients is associated with unfavorable outcomes. Calcineurin-inhibitor [CNI] nephrotoxicity is a major cause of morbidity and mortality after kidney transplantation. In this study we compared sirolimus [SRL] with calcineurin-inhibitor as primary immunosuppressants for the attenuation of left ventricular hypertrophy in renal transplantation recipients. In this prospective cohort study done in Shariati Hospital in 2010, we evaluated the effects of sirolimus and CNI on LVH of 55 renal transplant recipients. The cases [19] received sirolimus while the controls [36] received CNI while being matched for age and duration of transplantation. Data regarding blood pressure [BP], hemoglobin, serum creatinine, uric acid and lipid concentrations were assessed and changes in left ventricular [LV] mass were evaluated by echocardiography over a one-year follow-up. Left ventricular mass significantly decreased [P=0.0001] in the SRL group but blood pressure did not differ between the two groups. LV mass and LV mass index both decreased significantly [P<0.05] but the difference was not associated with changes in BP. The difference in interventricular septal thickness at end diastole [IVSD] and posterior wall diameter [PWD] were significant [P<0.05] in the SRL group but the difference in end diastolic diameter [EDD] was not significant. Conversion from CNI to SRL-based immunosuppressive therapy in RTRs is safe and SRL may decrease LVH. SRL seems to be safe and improve renal function without cardiac compromise in kidney transplant recipients.

## Skin Diseases

### etiology

Jessner lymphocytic infiltrate presenting on a cutaneous leishmaniasis scar: case report.

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EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 537-538 (7 ref.)

**Keywords:** Lymphocytes; Skin Diseases-diagnosis; Erythema-diagnosis; Erythema-etiology; Cicatrix; Leishmaniasis, Cutaneous; Erythema-pathology; Skin Diseases-pathology

## Sleep Apnea, Obstructive

## epidemiology

Gender difference in relationship of apnoea/hypopnoea index with body mass index and age in the Omani population.

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SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 363-368 (18 ref.)

**Keywords:** Sleep Apnea, Obstructive-etiology; Prevalence; Body Mass Index; Age Distribution; Sex Distribution; Risk Factors; Obesity; Polysomnography; Retrospective Studies

**Abstract:** Obstructive sleep apnoea/hypopnoea syndrome [OSAHS] is a disorder characterised by repetitive upper airway collapse during sleep in association with daytime sleepiness. It has an estimated prevalence of 2% and 4% among middle-aged women and men respectively. The aim of the study was to look at the association of body mass index [BMI], age and gender and prevalence of OSAHS in the Omani population. Polysomnography reports and hospital medical records of all patients who took part in the Sleep Study at the Sleep Laboratory of the Clinical Physiology Department, Sultan Qaboos University Hospital, between January 1995 and December 2006, were retrospectively reviewed. Data from both sources was gathered and analysed. A total of 1,042 sleep studies were conducted with 608 valid studies for analysis. The study showed that the apnoea/ hypopnoea index [AHI] >15 was more prevalent in men compared to women [47.9% versus 33.5%, P = 0.001]. There was significant correlation of AHI with BMI [P <0.0001] among men compared to women [P = 0.1]; however, age was significantly correlated with AHI among women [P <0.0001], but not with men [P = 0.1]. The results indicate that there is a gender difference in the prevalence of OSAHS and obesity is a major risk factor for OSAHS among Omani men whereas age is found to be a risk factor for OSAHS among women.

# **Smoking**

#### Smoking habits and attitudes among university students in Palestine: a cross-sectional study.

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EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 454-460 (19 ref.)

Keywords: Attitude; Students; Universities; Cross-Sectional Studies; Questionnaires; Sex Distribution

**Abstract:** Information about the rate of smoking and factors associated with initiating and maintaining the behaviour is scarce in Palestine. The aim of this study was to explore the rate of and attitudes towards smoking among An-Najah National University students. During spring 2010, a questionnaire adopted from the Global Health Professionals Survey and the Global Youth Tobacco Survey was administered to 954 randomly selected full-time students. Overall 34.7% of the study sample were cigarette or waterpipe smokers, and this rate was higher among males than females [52.7% versus 16.5%]. In logistic regression analysis, sex [male], type of college [humanities], older age and higher family income were predictors of current smoking status. Smokers had more negative attitudes to banning smoking in public areas on campus and to education about the harmful effects of smoking. Antismoking programmes with special attention to males and students in humanities are badly needed.

# Social Responsibility

#### [Social responsibility in hospitals of Isfahan city].

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Tehran University of Medical Sciences - School of Management and Medical Information Sciences - Health Care Management Department

**Payavard - Salamat** 2011; 5 (1): 10-23 (35 ref.)

**Keywords:** Hospitals; Cross-Sectional Studies; Questionnaires; Leadership; Workplace; Environmental Policy; Social Environment; Environment; Cross-Sectional Studies; Questionnaires; Leadership; Workplace; Environmental Policy; Social Environment; Environment

**Abstract:** Hospital's traditional charter that mostly emphasized productivity has been replaced by a charter that stresses social and environmental issues. On this basis, to achieve success, managers should regard both the inner and the outer environments of hospitals. This study aims at measuring hospitals' social responsibility. The present descriptive-analytic study was carried out through a cross-sectional method in 2010. The study population consisted of hospital managers of the city of Isfahan [n=21]. The data collection instrument was a researcher-made questionnaire. The instrument's content validity was determined by the experts' views and its reliability calculated through Cronbach's alpha was found to be 0.95. The collected data were analyzed using SPSS software [version 16] and the hypotheses were tested by t-test, ANOVA and Eta coefficients. The maximum mean score was 100. The mean score of hospitals' social responsibility was computed to be 68.6. The mean scores of leadership and inner processes, market place, community policies, environmental policies, and workplace policies were found to be 72.2, 70, 67.8, 67.4 and 66.2, respectively. There was no significant relationship between hospital's social responsibility and type of hospital's

possession and activity [p value > 0.05]. The social responsibility of hospitals was assessed as moderate. To improve hospital's social responsibility, it is suggested that more attention be paid to workplace and environmental policies.

# **Social Support**

Power politics: researching the informal social networks in health policy analysis.

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PJPH - Pakistan Journal of Public Health 2011; 1 (1): 61-63 (13 ref.) Keywords: Politics; Health Policy; Decision Making; Primary Health Care

#### Soil

#### An investigation on As, Cd, Mo and Cu contents of soils surrounding the Meyduk tailings dam.

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International Journal of Environmental Research 2012; 6 (1): 173-184 (52 ref.)

Keywords: Arsenic; Cadmium; Copper; Dust

Abstract: The contents of As, Cd, Cu and Mo were determined in soil surrounding Meyduk tailings dam based on 21 surface soil samples. Assessment of toxic element pollution in studied soil samples needs knowledge of preanthropogenic metal concentration to act as a reference against which measured values could be compared. Estimating the background values was executed by sampling rocks adjacent to soil sampling stations. Various indices including enrichment factor [EF], pollution load index [PLI], modified contamination degree [mCd] and geoaccumulation index [I geo] were used for determining the contamination level of soil in the vicinity of tailings impoundment under the effect of the tailings dust. Anthropogenic pollution was diagnosed from natural one by sequential extraction done by Tessier et al method and calculating pollution intensity index [I poli]. The results indicate a significant upward enrichment in northeastern and southwestern surface soil around the tailings dam for Cd and Cu. The dominant wind direction demonstrated that only the contamination of southwestern soil around the tailings dam would be attributed to tailings dust while the dispersive dusts scattered after the mine explosions generally affected the northeastern part.

# Evaluation of anthropogenic impacts on soil and regolith materials based on BCR sequential extraction analysis.

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International Journal of Environmental Research 2012; 6 (1): 185-194 (55 ref.)

Keywords: Metals, Heavy; Lead; Copper; Zinc; Chromium; Manganese; Iron

Abstract: This study was conducted in Assaluyeh region, southwest of Iran to show utilization and efficiency of sequential extraction analysis in environmental impact studies using soil and related regolith materials as sample media. In order to investigate distribution of heavy metals, optimized BCR [Community Bureau of Reference] sequential extraction analysis method was used. In this case eight representative samples which state all types of different regolith materials in the area were investigated. Total concentration and chemical partitioning of a number of elements [Pb, Cu, Zn, Cr, Mn and Fe] were studied to cover all spectral from typical anthropogenic elements, lead and copper, elements of assumed mixed origin, chromium and zinc, to mostly lithogenic elements, iron and manganese. Results stated that the concentrations of each chemical phase extracted from samples are below the total concentration of each element. The results could be used to establish best media indicators for environmental studies with dependence on type of elements determined in regolith material. Using sequential extraction analysis, the association of particular elements with geochemical phases in soils and related materials was investigated as well as the importance of particular phases in the scavenging of heavy metals. Results showed that the organic and sulphide phase was less important in scavenging mechanism -in spite of industrial and petrochemical activities in the study area- than exchangeable and carbonate fraction, which showed to be most important phase with respect to metal scavenging capacity.

## **Stomach Neoplasms**

## microbiology

# Evaluation of specific biochemical indicators of Helicobactepylori-associated gastric cancer in Egypt.

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EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 501-507 (36 ref.)

**Keywords:** Stomach Neoplasms-blood; Helicobacter pylori; Gastrins-blood; Cadherins-blood; Stomach Neoplasms-diagnosis; Gastritis-microbiology; Sensitivity and Specificity

Abstract: The aim of the study was to assess the accuracy of some specific biochemical indicators in discriminating between Helicobacter pylori-associated gastritis and H. pylori-associated stomach cancer [serum gastrin level, serum soluble E-cadherin and tissue COX-2 activity, as well as serodiagnostic markers for H. pylori infection] in order to find a simple diagnostic test that can reasonably predict the development of gastric cancer. The study participants comprised 20 patients with gastric carcinoma, 20 patients with positive H. pylori-associated gastritis and 20 individuals as the control group. Standard procedures and quality control measures were followed. Using cut-off values and ROC analysis to assess the diagnostic abilities of the biochemical indicators, E-cadherin showed the highest sensitivity [100%]. We suggest that close follow-up together with periodic endoscopic examination for all patients with persistent H. pylori infection and serum soluble E-cadherin level above 5 microg/mL is essential.

#### Stroke

## diagnosis

#### Role of CT angiography in diagnosis and prognosis of acute ischemic stroke.

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Al Azhar University - Faculty of Medicine - Departments of Neurology

New Egyptian Journal of Medicine [The] 2011; 44 (3): 245-253 (19 ref.)

**Keywords:** Acute Disease; Tomography, X-Ray Computed-methods; Brain-pathology; Prognosis; Cerebral Angiography-methods

Abstract: Neuroimaging revolution has led to a much better understanding of cerebrovascular and tissue pathology, creating a wide array of opportunities for acute treatment and secondary prevention. The study was performed to assessment of the intracranial arterial system by CT angiography and evaluation of its role in prediction of the functional outcome in patients with acute ischemic stroke. This study included 42 patients with acute ischemic stroke within 24 hours of onset of symptoms. They were recruited from the stroke units and neurology departments at Al-Azhar University hospitals. All selected patients, were subjected to medical and neurological examination with special emphasis on neurovascular assessment. CT brain was performed at the time of admission to exclude cerebral hemorrhage and mass lesion and CT angiography of intracranial arterial blood vessels. National institute of health stroke scale [NIHSS] was performed on admission to assess stroke severity and routine searching for stroke risk factors. Outcome after 3 months was measured using the modified Rankin Disability Scale [mRS] and the patients divided into two groups; Group 1: included 26 patients with good outcome and Group II: included 16 patients with poor outcome. NIHSS score>/=7 represented the optimal value for predicting arterial occlusion in patients within 24 hr of stroke onset. Mean NIHSS was significantly higher for patients with complete occlusion than those with non-occlusive intra-cerebral blood vessels [p<0.001]. According to the Oxford shire classification of stroke, total anterior cerebral infarction [TACI] and partial anterior cerebral infarction [PACI] were significantly higher in group [II] than in group [I] [p<0.01]. The frequency of DM, age and NIHSS were significantly higher in group [II] than group [I] [p<0.01]. Patients with good collateral flow on CTA showed a better clinical outcome compared to those with poor collaterals [p>0.05]. In univariate analysis; age, DM, baseline NIHSS score and intracranial large-vessel status were significant predictors of outcome. Both baseline NIHSS score and large vessel occlusion independently predict short-term poor outcome in multivariate models. CT angiography adds important information to conventional CT studies in cases of acute ischemic stroke. It shows the site of occlusion and collateral blood flow to choose the optimal treatment. Outcome of acute ischemic stroke depends on the age, severity of neurological signs and presence or absence of occlusion.

## Students, Dental

Dentistry students' reasons for choosing dentistry as a career in Damascus University.

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EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 508-514 (14 ref.)

Keywords: Career Choice; Dentistry; Questionnaires; Cross-Sectional Studies

**Abstract:** This cross-sectional questionnaire survey assessed the motives for choosing dentistry as a profession among dentistry students at Damascus University, Syrian Arab Republic. A total of 408 undergraduate students [233 males and 175 females] aged 18-23 years were selected randomly from students in the second, third and fourth years of dentistry study. They completed a questionnaire that enquired about their reasons for studying dentistry as well as their sociodemographic characteristics. The number of admissions in females had increased over the 3 years. Most parents of the students were university-educated. The main motivation for choosing dentistry was as a means to achieve personal goals, including getting a good job abroad, having financial independence, and attaining a good reputation. There were significant differences between the sexes with regard to the reasons for choosing dentistry.

### **Thalassemia**

## therapy

Healthcare seeking for thalassaemia management among children: a descriptive cross sectional study in Azad Jammu and Kashmir.

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PJPH - Pakistan Journal of Public Health 2011; 1 (1): 17-20 (12 ref.)

**Keywords:** Patient Acceptance of Health Care; Disease Management; Child; Cross-Sectional Studies; Delivery of Health Care; Developing Countries

Abstract: A wide range of services is required for treating the thalassaemic children. However, in resource constrained settings of a developing country, it is important to understand the problems faced by thalassaemic children and their families prior to proposing any interventions or strategies for the prevention and control of thalassaemia-related morbidities and mortalities. A cross sectional descriptive study was carried out with fifty thalassaemic children [and their families]. These frequently transfused children had been registered with the AJK Central Blood Transfusion Service, district Muzaffarabad. Eighty percent of the thalassaemic children belonged to a poor socio-economic quintile. Only 4% of the parents never faced any difficulty in arranging blood for their children and they represent a well-off class. Forty four percent of the thalassaemic children were not using the chelation therapy because their parents could afford it. Thirty six percent of the families of thalassaemic children never had heard about the thalassaemic screening test. Thalassaemic children need a standard treatment. However, it is a distant dream for the thalassaemic children of Muzaffarabad, AJK. There is no public or private sector facility specifically providing full range of services to treat thalassaemia. The poverty has compounded the sufferings and imperiled the health seeking behaviours of these children. There is an urgent need to appraise the financing and functioning of the health services so as to provide free or subsidized treatment to thalassaemic children for improving their quality of life.

# Theophylline

Encapsulation of theophylline into binary blend of ethylcellulose and eudragit microparticles: development, characterization and kinetic release.

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Jordan Journal of Pharmaceutical Sciences 2011; 4 (3): 237-250 (14 ref.)

**Keywords:** Acrylic Resins; Cellulose-analogs and derivatives; Pharmacy; Microscopy, Electron; Polymethacrylic Acids

**Abstract:** The objective of this study was to prepare and evaluate microparticles of Eudragit and Ethyl cellulose binary blend loaded with theophylline for controlled release. Microparticles were prepared by Phase separation method. The method is quite simple, rapid, and economical and does not imply the use of toxic organic solvents. Solid, discrete, reproducible free flowing microparticles were obtained. The yield of the microparticles was up to 92%. More than 85% of the isolated microparticles were of particle size range of 325 to 455 micro m. The obtained angle of repose,% carr's index and tapped density values were well within the limits, indicating that prepared microparticles had smooth surface, free flowing and good packing properties. Scanning Electron Microscopy photographs and calculated sphericity factor confirms that the prepared formulations are spherical in nature. Prepared microparticles were sTab. and compatible, as confirmed by DSC and FT-IR studies. The prepared formulations were quantitatively analyzed for the amount of encapsulated drug. It was observed that there is no significant release of the drug at gastric pH. The drug release was controlled more than 12 h. Intestinal drug release from microparticles was studied and compared with the release behavior of commercially available oral formulation Duralyn CR 400. The release kinetics followed different transport mechanisms.

# Thoracic Surgery

# Reasons for cancellation of elective cardiac surgery at Prince Sultan cardiac centre, Saudi Arabia.

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Journal of the Saudi Heart Association 2012; 24 (1): 29-34 (30 ref.)

Keywords: Surgical Procedures, Elective; Retrospective Studies; Prospective Studies; Anesthetics

Abstract: The cancellation of surgery is a significant drain on health resources. However, a persistent problem in most hospitals is short notice cancellation of scheduled operations, even upto the day of surgery. In some cases, patients have been prepared for surgery, and the staff is assembled and expecting to operate. In UK 8% of scheduled elective operations are cancelled within 24 hours of surgery. The reasons include cancellation by the patient, cancellation for poorly optimized medical conditions, or cancellations due to poor organization. Many of these are difficult to quantify. However, one relatively easily measured factor is the possibility that some operating lists were predictably overbooked. An operating list may over-run because of delayed starts, slow turnover, unanticipated surgical/anaesthetic problems or staff shortages. Many of these are difficult to quantify. Prince Sultan Cardiac center is one of the largest referral center in the Middle East and there is no published data on the reasons for cancellation of specifically cardiac procedures. However, an audit was performed to assess the reasons for the cancellation of the cases on the day of surgery in cardiac theatres. According to one of the studies published in an Australian journal the percentage of cancelled cardiothoracic cases was determined to be 15.8%. Total number of cardiac surgical patients including pediatric and adult during a period from June 2008 to May 2009 were 2191. Out of those, 1681 cases were done during the study period, 510 [23.27%] cases were cancelled during the study period. The operation theatre was functional for 331 days during the study period. Cancellations done by the surgeons were 34% while the patient's related cancellations were 32%. The administrative issues contributed to 34% in overall cancellation and anaesthetistrelated cancellation were 0%. We estimated 22% of the elective operations which were cancelled on the day of surgery were potentially avoidable. There is still a need to do further research to look for the identifiable reasons and strategic measures to eliminate the reasons for cancellation on the day of surgery.

## **Thrombocytopenia**

### chemically induced

Successful use of alternative anticoagulants in the management of heparin-induced thrombocytopenia with thrombotic complications report of 5 cases and review of literature.

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SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 391-398 (28 ref.)

**Keywords:** Heparin-adverse effects; Anticoagulants-adverse effects; Anticoagulants-therapeutic use; Hirudins; Platelet Count; Dermatan Sulfate; Pulmonary Embolism; Venous Thrombosis

**Abstract:** Heparin is one of the most frequently used anticoagulants. It is easy to use, but can be associated with life-threatening side effects. One of these is heparin-induced thrombocytopenia syndrome [HITS], which develops in about 3-5% of patients exposed to heparin and is associated with thrombosis in 1% of cases. We report here the successful treatment of five patients with HITS who were treated with alternative anticoagulants namely danaparoid or hirudin. The median time between their exposure to heparin and onset of symptoms and or signs was 10.2 days [range 7-14 days]. Platelet counts decreased to a mean of 38.4 x 10[9] /I [12-82 x 10[9]/1]. All five patients had evidence of thrombosis; four patients had clinical and radiological evidence of pulmonary emboli, one patient had confirmed deep vein thrombosis [DVT] and one patient had extensive skin necrosis of the thighs and abdomen. Platelet aggregation test were positive in two patients, inconclusive in one patient and negative in two patients. Two patients were anticoagulated with danaparoid and three with hirudin until their platelet counts returned to normal between 4 and 14 days [average 6 days] following the recognition of the syndrome. Our patients had significant morbidity, but no mortality. Immediate withdrawal of heparin is of paramount importance and introduction of alternative anticoagulant is necessary in the presence of thrombosis.

## **Thymus Plant**

## toxicity

#### In vivo acute toxicity study of thyme- primulae syrup.

Issa, Ala; Tarawneh, Ruba; Abu Gharbieh, Eman; Najjar, Samer; Salah, Raa'd; Aeidah, Khaled; Bustanji, Yasser; Mohammad, Mohammad

University of Jordan - Faculty of Pharmacy

Jordan Journal of Pharmaceutical Sciences 2011; 4 (3): 166-173 (10 ref.)

Keywords: Toxicity Tests, Acute; Plants, Medicinal-toxicity; Plant Extracts-toxicity; Rats

**Abstract:** The current study is an acute toxicity study of Thyme - Primulae syrup in Albino male and female rats. The syrup was administered in three escalating doses: 3, 6 and 12 ml/kg body weight. The weight-based doses were given to the rats by intra gastric to minimize loss and variability among them. The treated groups were compared to the untreated control in regards to their body weight gain, hepatic and kidney appearances and their weight. Even at the highest dose, the syrup was found to be non-toxic under the conditions of this study.

## **Thyroid Neoplasms**

### Extrathyroidal uptake from thyroid carcinoma on [99m]Tc-pertechnetate scintigraphy.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 772-774 (10 ref.)

**Keywords:** Lymphatic Metastasis; Neoplasm Metastasis; Radionuclide Imaging; Sodium Pertechnetate Tc 99m; Lymph Nodes; Thyroidectomy; Neck Dissection; Treatment Outcome; Iodine Radioisotopes

Abstract: Three cases of imaging with 99mTc-pertechnetate [[99m]TcO[4]] and unusual positive lymph node uptake in the neck are reported hereby. Two cases were later diagnosed to be well-differentiated thyroid carcinoma, [DTC] with nodal metastasis. The third was a confirmed case of carcinoma thyroid that had presented with mass in the neck soon after surgery, being prepared for ablative dose of radioactive iodine [131]I. All three were young females under 40 years of age. These 3 cases signify that extra thyroidal areas of uptake on a routine thyroid scan with [99m] TcO[4] can some time be due to thyroid carcinoma with regional metastases. Foci of metastasis in patients with DTC may be incidently detected with [99m]TcO[4] scan. Multinodular goiter with palpable lymph node should always be investigated for exclusion of malignancy. The patients underwent near total thyroidectomy and radical neck dissection; histopathology confirmed the scan findings.

### **Titanium**

Ecotoxicology of nano-Tio[2]- an evaluation of its toxicity to organisms of aquatic ecosystems.

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International Journal of Environmental Research 2012; 6 (1): 33-50 (86 ref.)

Keywords: Ecotoxicology; Aquatic Organisms; Ecosystem; Nanoparticles; Nanotechnology

**Abstract:** The production and use of synthetic nanoparticles is growing rapidly, and therefore the presence of these materials in the environment seems inevitable. Titanium dioxide [TiO[2]] presents various possible uses in industry, cosmetics, and even in the treatment of contaminated environments. Studies about the potential ecotoxicological risks of TiO[2] nanoparticles [nano-TiO[2]] have been published but their results are still inconclusive. It should be noted that the properties of the diverse nano-TiO[2] must be considered in order to establish experimental models to study their toxicity to environmentally relevant species. Moreover, the lack of descriptions and characterization of nanoparticles, as well as differences in the experimental conditions employed, have been a compromising factor in the comparison of results obtained in various studies. Therefore, the purpose of this paper is to make a simple review of the principal properties of TiO[2], especially in nanoparticulate form, which should be considered in aquatic toxicology studies, and a compilation of the works that have been published on the subject.

## Tomography, Optical Coherence

Accuracy of the retinal nerve fiber layer measurements by stratus optical coherence tomography for perimetric glaucoma.

Gondal, Talat Mehmood; Qazi, Zaheer Uddin Aqil; Jamil, Ahmad Zeeshan; Jamil, Muhammad Hannan Laser Vision Centre - Department of Ophthalmology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 749-752 (20 ref.)

**Keywords:** Glaucoma; Retina; Sensitivity and Specificity; Predictive Value of Tests; Cross-Sectional Studies; Visual Fields; Visual Field Tests

Abstract: To calculate the sensitivity, specificity, positive predictive value, negative predictive value and diagnostic accuracy of measurements of the retinal nerve fiber layer using the Stratus optical coherence tomography in glaucoma subjects with visual field defects on achromatic perimetry as the gold standard. Comparative cross-sectional. Outdoor clinic of Layton Rehmatulla Benevolent Trust Hospital [LRBT], Lahore, from August 2007 to January 2008. Fifty normal subjects and 50 glaucoma patients were selected from outdoor clinic of LRBT. Retinal nerve fiber layer thickness [RNFL] of all the subjects were measured by Stratus optical coherence tomography [OCT]. Visual field defects on achromatic perimetry was used as the gold standard. The sensitivity and specificity of retinal nerve fiber layer measurement for perimetric glaucoma using the OCT were 82% and 96% respectively. The positive predictive value, negative predictive value and diagnostic accuracy were 95%, 84% and 89% respectively. There is a high sensitivity and specificity of RNFL measurements using the new Stratus OCT for the diagnosis of perimetric glaucoma.

# Retinal thickness evaluation in healthy eyes from north-west Punjab through optical coherence tomography.

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JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 745-748 (23 ref.)

Keywords: Retina; Ethnology

Abstract: To determine the mean retinal thickness in healthy eyes from north-west Punjab through commercially available optical coherence tomography [OCT] mapping software, version 3.0, from the Stratus OCT [OCT3]. Descriptive study. Al-Shifa Trust Eye Hospital, Rawalpindi, from August 2008 to February 2009. One hundred and two eyes of 75 healthy north-west Punjabis, fulfilling inclusion criteria were enrolled from OPD of Al-Shifa Trust Eye Hospital. After informed consent, demographic detail was taken. Best-corrected Snellen visual acuity was recorded. OCT was performed by using Stratus Carl Zeiss OCT through dilated pupil by an experienced operator. The retinal thickness was divided into 9 sections and displayed as three concentric circles including a central circle at fovea [1 mm], an inner ring [3 mm] and an outer ring [6 mm], each ring being divided into four quadrants. OCT parameters of macular thickness were analysed with baseline variables including age, gender and best corrected visual acuity. The mean central foveal thickness [at foveola] was 166.30 +/- 24.95 micro m while the mean foveal thickness [in central

1000 microns] was 194.89 +/- 21.33 micro m. There was no correlation between macular thickness and either age [r=0.109, p=0.275] or gender [Eta=0.128] or best corrected visual acuity [Eta=0.234]. Reference values were determined for mean retinal thickness in healthy eyes from north-west Punjab through OCT. These measurements were upto 54-micro m higher and upto 29 micro m lower than some previously reported healthy retinal thickness values. Therefore, normative database should be determined for the population under study based on regional and ethnic differences.

## **Toxoplasmosis**

### diagnosis

Evaluation of cystatin capture ELISA and sodium metaperiodate antigen treated ELISA in diagnosis of toxoplasmosis.

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Ain Shams University - Faculty of Medicine - Parasitology Department

PUJ - Parasitologists United Journal 2011; 4 (1): 61-68 (45 ref.)

**Keywords:** Enzyme-Linked Immunosorbent Assay-methods; Serologic Tests-methods; Sensitivity and Specificity **Abstract:** ELISA has become the mainstay for clinical serologic evaluation of toxoplasmosis. One of the major obstacles encountered in the evaluation of ELISA is the false-positive results due to immunological cross-reactions with other parasitic diseases that exhibit some lack of specificity. Evaluation of the diagnostic efficacy of two ELISA techniques: Cystatin capture ELISA and sodium metaperiodate treated antigen-ELISA [SMP-ELISA] compared to conventional ELISA, to detect IgG antibodies for crude T. gondii antigen in sera of toxoplasmosis patients. The study was carried out on 50 individuals categorized into three groups. Toxoplasmosis group included 30 patients confirmed by Sabin-Feldman dye test. Other parasitic diseases group included 10 sera from patients with amoebiasis [2], fascioliasis [2], hydatidosis [3] and schistosomiasis [3]. Control group included 10 healthy individuals. All sera under study were examined for the detection of T gondii IgG by three different ELISA techniques: Cystatin capture ELISA, SMP-ELISA amid conventional ELISA. The diagnostic performance of the three tests was statistically compared. Cystatin capture ELISA gave the best diagnostic results with 96.6% sensitivity, 95% specificity, 96.6% Positive Predictive Value [PPV], 95% Negative Predictive Value [NPV] and 96% diagnostic accuracy. In spite of the lower sensitivity and NPV of SMP-ELISA [86.6% and 82.6%, respectively] than the conventional ELISA, it had higher specificity [95%] and PPV [96.3%]. Cystatin capture ELISA improved the diagnostic performance of conventional

## epidemiology

ELISA in diagnosis of human toxoplasmosis.

#### Seroprevalence of toxoplasmosis among females in rural areas, Qalubeya governorate, Egypt.

Eraky, Maysa A.; Selem, Rabab F.; Ali, Ali E.; Atta, Mohammad Magdi E.

Benha University - Benha Faculty of Medicine - Department of Parasitology

PUJ - Parasitologists United Journal 2011; 4 (1): 109-114 (49 ref.)

Keywords: Seroepidemiologic Studies; Female; Rural Population; Immunoglobulin G-blood; Follow-Up Studies

Abstract: Toxoplasma gondii is an obligate intracellular protozoan parasite of significant public health importance, being a major cause of congenital infection and abortion as well as a significant and often fatal infection in the immunocompromised hosts. Infection by T gondii is usually asymptomatic, but it can be life threatening in fetuses whose mothers are acutely infected during pregnancy. 10 determine the seroprevalence of Toxoplasma antibodies and the frequency of assumed associated complications among females in childbearing period in the rural community surrounding Benha Faculty of Medicine, Benha University, Qalubeya Governorate, Egypt. A total of 338 females were randomly selected from two villages scheduled in the routine Community Service Campaign Program [CSCP] of Benha Faculty of Medicine and from those attending Gynecology and Obstetrics Department, Benha University Hospital. Sera were screened for Toxoplasma IgG and IgM using enzyme immunoassay. One hundred and fifty females in the child bearing period aged from 15 to 49 years who fulfilled detailed history data, were chosen for assessment of the assumed associated risk of Toxoplasma complications, regarding unfavorable outcome of pregnancy. Of 338 sampled females, 165 [46.2%] and 17[5%] were seropositive for anti-Toxoplasma IgG and IgM, respectively, while out of 150 females in the childbearing period, corresponding results were 87 [58%] and 7 [4.7%], respectively. In the latter group, there was an observable difference in the age prevalence with peaks among 25-29 and 40-49 age groups for IgG positive females and among 25-29 and 45-49 years for IgM positive females, but this difference was statistically insignificant. There was a significant positive correlation between IgG positivity amid number of labors and also

between IgM positivity amid history of congenital anomalies. The risk of abortion, congenital anomalies and stillbirth were insignificantly higher among IgG positive females. In IgM positive group, only an insignificant increased risk of congenital anomalies was observed. The IgG seroprevalence of T gondii among females in the childbearing age is relatively high [58%] indicating persistent featvoring ecological circunistances. IgM seroprevalence [4.7%] suggested a potential considerable risk of primary infection during pregnancy with the subsequent risk of Toxoplasma congenital infection. Hence, it is worth considering routine antenatal screening of females as a mandatory measure, with follow up of seronegative case for possible seroconversion due to infection during pregnancy amid prompt treatment for sero-converted cases.

#### **Tretinoin**

### therapeutic use

Therapeutic effects of all-trans retinoic acid on experimental autoimmune encephalomyelitis and its role in T-helper lymphocyte responses.

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Tehran University Medical Journal [TUMJ] 2012; 69 (11): 710-717 (29 ref.)

**Keywords:** Encephalomyelitis, Autoimmune, Experimental-drug therapy; T-Lymphocytes, Helper-Inducer-drug effects; Freund's Adjuvant; Mice; T-Lymphocytes, Regulatory; Interferon-gamma; Interleukin-10; Interleukin-17

Abstract: Recent studies have demonstrated an essential role for IL-17 in the pathogenesis of experimental autoimmune encephalomyelitis [EAE]. Furthermore, it has been shown that FoxP3+Treg cells play an important role in the suppression of auto inflammatory reactions. Although, previous studies have determined the immunomodulatory potentials of all-trans-retinoic acid [ATRA], but these immunomodulations have been mostly justified by alteration in ThI/Th2 cytokines. The present study was carried out to investigate the therapeutic effects of ATRA on EAE and its effects on T-helper cells responses. EAE was induced by MOG[35-55] peptide and complete Freund's adjuvant in female C57BL/6 mice. The mice were allocated to two therapeutic groups [n=7 per group]. Treatment with ATRA [500 microg/mouse; every other day] was initiated in treatment group on day 12 when they developed a disability score. EAE controls received vehicle alone with the same schedule. Signs of disease were recorded daily until day 33 when the mice were sacrificed. Splenocytes were tested for proliferation by MTT test, cytokine production by ELISA and FoxP3[+] reg cell frequency by flowcytometry. ATRA significantly reduced the clinical signs of established EAE. Aside from decreasing lymphocytic proliferation [P<0.05], ATRA significantly inhibited the production of pro-inflammatory IL-17 [P<0.005] as well as IFN-gamma [P<0.0005] upon antigen-specific restimulation of splenocytes. FoxP3+Treg cell frequency and IL-10 levels were not altered significantly. However, IFN-gamma to IL-10 and IL-17 to IL-10 ratios decreased significantly [P<0.0005]. Parallel to reducing autoreactive lymphocyte proliferation and cytokine production in favor of pro-inflammatory cytokines, all-trans-retinoic acid ameliorated established experimental autoimmune encephalomyelitis.

### **Tuberculosis**

## diagnosis

Common challenges in laboratory diagnosis and management of tuberculosis.

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IRCMJ - Iranian Red Crescent Medical Journal 2012; 14 (1): 3-9 (61 ref.)

**Keywords:** Disease Management; Clinical Laboratory Techniques; Tuberculin Test; Polymerase Chain Reaction; Mycobacterium tuberculosis

**Abstract:** The history of tuberculosis [TB] traces back to antiquity. Despite significant progress of various diagnostic methods and introduction of anti-tuberculosis drugs in past decades, TB is still a major worldwide health concern which leads annually to two million deaths, especially after the emergence of multidrug-resistant Mycobacterium TB and HIV co-infection. Presented here is a brief review of conventional and new TB diagnostic laboratory methods including their advantages and disadvantages as well as common challenges in diagnosis and management of TB.

## epidemiology

Prevalence and risk factors of mycrobacterium tuberculosis infection among prisoners in Kabul central prison [Puli Charkhi], Afghanistan.

Saeed, K.M. Islam; Fatmi, Z.; Rozi, S.H.

Ministry of Public Health - Afghan Public Health Institute

AFJPH - Afghanistan Journal of Public Health 2012; 1 (1): 20-26 (33 ref.)

**Keywords:** Tuberculosis-etiology; Prevalence; Risk Factors; Prisoners; Cross-Sectional Studies; Questionnaires;

**Tuberculin Test** 

Abstract: Afghanistan has the second highest tuberculosis [TB] burden in the Eastern Mediterranean Region with 76,000 new cases and 20,000 deaths each year. Among the highest risk settings for TB acquisition and transmission are prisons. There is a paucity of data to inform evidence-based design of health policies to control TB in prisons. This study aimed to determine the prevalence and relevant risk factors of TB in Kabul Puli Charkhi Prison. A cross-sectional study was conducted in Kabul Central Prison from January to September 2006. Using a structured questionnaire and tuberculin skin test [PPD], a total of 250 prisoners were selected using a stratified random sampling technique. Those who were sentenced to death, had less than 3 months remaining of their sentence, had a previously confirmed case of TB, or were pregnant, were excluded. The prevalence of TB infection was 55.7% [132/237] among the prison population. Using comparison analysis of two outcome groups [positive and negative PPD], we found that age [odds ratio [OR] = 4.14], income [OR = 7.62], duration of incarceration [OR = 2.62], accommodation area [OR = 3.51], personal hygiene [OR = 15.13], content of food [OR = 5.58] and low-grade fever [OR = 3.25] were positively associated with TB infection. To control TB in this environment, attention should be given to high risk groups such as those in low socio-economic classes, the elderly, and low-weight individuals. Rebuilding of damaged prison facilities and better distribution of prisoners will prevent overcrowding and decrease the likelihood of TB transmission. Improving the quality of food and hygiene would also reduce the level of infection. Based on preliminary findings of this study, the National TB program has strengthened its existing activities in prisons and has made a commitment to establish a comprehensive TB centre.

## prevention and control

Promoting public-private mix forTB-DOTS: a multi-country study from the WHO Eastern Mediterranean Region.

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University of South Carolina - Arnold School of Public Health

EMHJ - Eastern Mediterranean Health Journal 2012; 18 (5): 410-416 (19 ref.)

**Keywords:** Public-Private Sector Partnership; Health Promotion; National Health Programs; World Health Organization

Abstract: This study was carried out to document the implementation status of public-private mix [PPM] in 6 member countries of the World Health Organization Eastern Mediterranean Region, with a particular focus on advocacy, communication and social mobilization [ACSM] specific to PPM. Interviews and focus group discussions were held with staff of national tuberculosis control programmes and partners. Four PPM models were being practised. For all models, ACSM specific to PPM was at the elementary stage. Participants perceived that promoting private partners was difficult, specific policy guidelines were deficient and human resources and capacity for both initiatives were lacking across the region. Building ACSM capacity is required along with the development of guidelines and the implementation of country-specific communication plans to carry out local-level advocacy, strategic communication and effective social mobilization to maximize the benefits of PPM.

# **Tuberculosis, Pulmonary**

Prevalence of multidrug-resistant and extensively drug-resistant tuberculosis in patients with pulmonary tuberculosis in zahedan, southeastern Iran.

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IRCMJ - Iranian Red Crescent Medical Journal 2012; 14 (1): 53-55 (19 ref.)

**Keywords:** Extensively Drug-Resistant Tuberculosis-epidemiology; Tuberculosis, Multidrug-Resistant-epidemiology; Prevalence; Mycobacterium tuberculosis; Isoniazid; Rifampin; Amikacin; Kanamycin; Capreomycin; Ciprofloxacin; Ofloxacin

## **Urinary Bladder Neck Obstruction**

## diagnosis

#### Bladder outlet obstruction in a 5 years boy.

Murtaza, Badar; Akmal, Muhammad; Mahmood, Arshad; Niaz, Waqar Azim; Ahmad, Hussain

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Armed Forces Institute of Urology [AFIU] - Department of Urology

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 780-781 (10 ref.)

**Keywords:** Urethra-abnormalities; Polyps; Urethral Neoplasms; Cystoscopy; Urography; Urologic Surgical Procedures

**Abstract:** We report a 5 years old boy with bladder outlet obstruction secondary to a fibroepithelial polyp of prostatic urethra. The micturating cystourethrogram showed a filling defect in the posterior urethra. Cystourethroscopy revealed a polyp in the prostatic urethra proximal to the verumontanum. Transurethral resection was done and histopathology confirmed fibroepithelial polyp of the urethra.

## Vitamin D Deficiency

#### blood

#### Author's Response.

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Royal Hospital - Department of Chemical Pathology Directorate of Medical Laboratories SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 419 (1 ref.)

Keywords: Vitamin D Deficiency-drug therapy; Women; Enzyme-Linked Immunosorbent Assay

## epidemiology

## Re: Vitamin d deficiency in Omani women.

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SQUMJ - Sultan Qaboos University Medical Journal 2011; 11 (3): 418 (4 ref.)

**Keywords:** Vitamin D Deficiency-blood; Women; Vitamin D-blood; Pregnancy Complications-blood; Enzyme-Linked Immunosorbent Assay

## Waste Disposal, Fluid

# Biochemical kinetics of cross flow membrane bioreactor processes in the treatment of refinery wastewater.

Rahman, M.M.; Al Malack, M.H.

University of Western Sydney - School of Engineering

International Journal of Environmental Research 2012; 6 (1): 285-296 (30 ref.)

Keywords: Bioreactors; Sewage; Biological Oxygen Demand Analysis

**Abstract:** A lab-scale cross flow membrane bioreactor [CF-MBR] was operated to determine the biokinetic coefficients under MLSS concentrations of 5000 and 3000 mg/L. The investigation showed that the yield [Y], the

endogenous decay coefficient [k[d], the maximum specific growth rate [micro[m]] and the saturation constant [K[s]] were 0.276 mg/mg, 0.07 /day, 0.653 /day, and 396.62 mg COD/L respectively for MLSS 5000 mg/L, and 0.222 mg/mg, 0.09 /day, 1.2 /day, and 659.45 mg COD/L for MLSS 3000 mg/L. The values of kinetic coefficients were within the normal range of the activated sludge process found in the literature, except the values of Y. However, value of Y increased with the increase of MLSS. Kinetic parameters determined from CF-MBR process were used to simulate the effluent COD. The simulation study showed good agreement between model prediction and experimental data. Sensitivity analysis was carried out to determine influence of biokinetic parameters on the effluent substrate concentration. From the analysis, it was evident that k[d] and K[s] were directly proportional to the effluent substrate concentration, while micro[m] was inversely proportional.

## Waste Management

#### Outcome of 7-S, TQM technique for healthcare waste management.

 $\label{thm:lab_equation} \textbf{Habib Ullah, Junaid; Ahmed, Rashid; Malik, Javed Iqbal; Khan, M. Amanullah}$ 

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Hospital Waste Management

JCPSP - Journal of the College of Physicians and Surgeons Pakistan 2011; 21 (12): 731-734 (17 ref.)

**Keywords:** Medical Waste Disposal; Delivery of Health Care; Outcome Assessment [Health Care]; Outcome and Process Assessment [Health Care]; Total Quality Management; Incineration; Refuse Disposal; Health Facilities

Abstract: To assess the present waste management system of healthcare facilities [HCFs] attached with Shalamar Hospital, Lahore by applying the 7-S technique of Total Quality Management [TQM] and to find out the outcome after imparting training. Interventional quasi-experimental study. The Shalamar Hospital, Lahore, Punjab, Pakistan, November, 2009 to November, 2010. Mckinsey's 7-S, technique of TQM was applied to assess the 220 HCFs from Lahore, Gujranwala and Sheikhupura districts for segregation, collection, transportation and disposal [SCTD] of hospital waste. Direct interview method was applied. Trainings were provided in each institution. After one year action period, the status of four areas of concern was compared before and after training. The parameters studied were segregation, collection, transportation and disposal systems in the 220 HCFs. Each of these were further elaborated by strategy, structure, system, staff, skill, style and stakeholder/shared value factors. Standard error of difference of proportion was applied to assess significance using 95% confidence level. There was marked improvement in all these areas ranging from 20% to 77% following a training program of 3 months. In case of disposal of the waste strategy, structure and system an increase of 60%, 65% and 75% was observed after training. The 7-S technique played a vital role in assessing the hospital waste management system. Training for the healthcare workers played a significant role in healthcare facilities.

## Water Pollutants, Chemical

# Study on high-strength anaerobic landfill leachate treatability by membrane bioreactor coupled with reverse osmosis.

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Islamic Azad University - Science and Research Branch - Department of Environmental and Energy

International Journal of Environmental Research 2012; 6 (1): 129-138 (24 ref.)

Keywords: Bioreactors; Osmosis; Biological Oxygen Demand Analysis

**Abstract:** One of the most important concerns in Tehran municipal landfill is the production of leachate and its potential for water resources pollution, this study was undertaken to examine feasibility of biological and physico/chemical treating of high-strength landfill leachate that was collected from Tehran municipal landfill. Average COD of the leachate in aerobic submerged membrane bioreactor is 68000 mg/L. The reactor with a working volume of 175 L, having membrane module [Hollow fiber] with pore size of 0.1 microm coupled with reverse osmosis with pore size of 0.001 micron was used in this study. The dissolved oxygen [DO] concentration was maintained at 3.2 mg/L and solid retention times [SRTs] and hydraulic retention times [HRT] were controlled at 55 and 15 days respectively, the average Membrane Bioreactor effluent COD was 1733 mg/L with average removal efficiency of 97.46%. The average NH4 -N removal efficiencies was 99%. On the other hand, an almost complete nitrification was achieved during this period. PO[4] -P concentration in the effluent was low and its average removal efficiency was as high as 90%; especially during the operation period. The averages reverse osmosis [RO] effluent COD was 335 mg/L with average removal efficiency of 99.13%. PO[4]-P concentration in the RO effluent was 0.86 mg/L and its average removal efficiency was 99.33%. The use of Membrane technologies, more especially reverse osmosis offers the best solution of

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achieving full purification with average COD removal efficiency of 99% and solving the problem of water resources pollution

#### Treatment of landfill leachate by fenton process with nano sized zero valent iron particles.

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Amirkabir University of Technology [AUT] - Civil and Environmental Engineering Department

International Journal of Environmental Research 2012; 6 (1): 119-128 (39 ref.)

Keywords: Hydrogen Peroxide; Iron; Biological Oxygen Demand Analysis; Waste Management

**Abstract:** Leachate treatment from municipal landfills has been always a major anxiety in waste management due to its high level of various contaminations. In this paper the effect of Nanosized Zero Valent Iron particles [NZVI] in Fenton process for the treatment of high COD strength landfill leachate was scrutinized. The results corroborated this procedure was fast and efficient. In fact, about 87% of initial COD [38 g/L] was reduced in an hour. The various operation conditions such as pH, initial H[2]O[2] concentration, H[2]O[2]/Fe molar ratio and temperature in a batch reactor were investigated. The optimum condition was obtained at pH value of 2, temperature of 40°C and H[2]O[2] to Fe molar ratio equal to 39 by using only 0.07 M of NZVI. In such conditions, 0.08 M H[2] O[2] for the removal of 1 g/L of COD was needed. Furthermore, hydrogen peroxide consumption after Fenton process was evaluated and it was found that it had a direct relationship with COD removal efficiency.

#### **Zinc**

#### blood

## Concentrations of serum zinc, hemoglobin and ferritin among pregnant women and their effects on birth outcomes in Kashan, Iran.

Samimi, Mansoureh; Asemi, Zatollah; Taghizadeh, Mohsen; Azarbad, Zohreh; Rahimi Foroushani, Abbas; Sarahroodi, Shadi

Kashan University of Medical Sciences - School of Medicine - Department of Gynecology and Obstetrics

Oman Medical Journal 2012; 27 (1): 40-45 (39 ref.)

**Keywords:** Hemoglobins; Ferritins-blood; Pregnancy; Birth Weight; Body Height; Head; Infant, Newborn; Cross-Sectional Studies; Infant, Low Birth Weight

Abstract: Zinc and Iron are essential micronutrients in fetus growth and development. The aim of this study was to assess the relationship of maternal serum Zinc, Hemoglobin and Ferritin levels with their newborns weight, height and head circumference. This cross sectional-analytical study carried out among pregnant women referred to Naghavi Polyclinic, Kashan, Iran from November 2009 to October 2010. One hundred and twenty-nine pregnant women in the third trimester were selected and anthropometric factors of their newborns [weight, height and head circumference] and their relation to serum Zn, Hemoglobin and Ferritin concentrations were assessed. Serum Hemoglobin deficiency [<11g/dl], serum Ferritin deficiency [<12 microg/L] and serum Zn deficiency [<66 microg/dl] were present in 11 [85%], 9 [7%] and 9 [7%] women, respectively. The proportion of newborns with birth weight of 2500-2999 g was greater among mothers with lower Hemoglobin [<11 g/dl] compared to mothers with normal Hemoglobin [>/=11 g/dl;p-0.04] Multiple regression analysis showed that among biochemical characteristics of pregnant women, serum Hemoglobin levels were positively correlated with low birth weight [beta=0.26; p=0.04]. But serum Zn and Ferritin levels were not significantly associated with weight, height and head circumference. Low maternal serum hemoglobin levels are associated with low birth weight and does not have any association with birth height or head circumference; but there was no significant association between maternal serum zinc and Ferritin levels with weight, height and head circumference.

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El Shennawy, Shahinaz F.

ECHINOCOCCOSIS (genetics)

El Toukhi, M.A.

STOMACH NEOPLASMS (microbiology)

El Wakil, Hala S.

TOXOPLASMOSIS (diagnosis)

ElBadry, Ahmad

CARCINOMA, HEPATOCELLULAR (diagnosis)

Elevli, S.

CHROMIUM

Elhgry, Ghada M.

**GLAUCOMA** 

Elhoury, M.E.

ANGIOTENSIN-CONVERTING ENZYME

INHIBITORS (therapeutic use)

Elnour, Ibtisam B.

SHAKEN BABY SYNDROME (etiology)

Elolemy, Ahmed Tawfik

**COMPLEMENTARY THERAPIES** 

Elsedfy, Heba

LIVER DISEASES (complications)

Emamdjomeh, Hessamaldin

CONNEXINS

Enright, Helen

THROMBOCYTOPENIA (chemically induced)

Eraky, Maysa A.

TOXOPLASMOSIS (epidemiology)

Erden, Ismail

ATRIOVENTRICULAR BLOCK

Eshraghian, M.

MEDICAL INFORMATICS

Esmaeily, H.

**BLOOD DONORS** 

Esmat, Serag

CARCINOMA, HEPATOCELLULAR (diagnosis)

Etemadi, Arash

ESOPHAGEAL NEOPLASMS

Etewa, Samia E.

PARASITIC DISEASES (therapy)

Ezedine, M.

CROSS INFECTION (microbiology)

ESCHERICHIA COLI (growth and development)

Faghihi, A.A.

**LEARNING** 

Faghihi, Mahdieh

CREATINE KINASE, MB FORM (drug effects)

Fahmy, Iman A.

TOXOPLASMOSIS (diagnosis)

Fahmy, Sahar

ASPIRIN (therapeutic use)

Fakeye, Olurotimi O.

BACTERIURIA (epidemiology)

Falah, Masoumeh

CONNEXINS

Farahani, Maryam Moshkani

BONE MARROW TRANSPLANTATION

Farahini, Hosein

BENZIMIDAZOLES (therapeutic use)

Farazmand, Abbas

**BACTERIAL PROTEINS** 

Farhadi, Mohammad

CONNEXINS

Farokhi, Farah

CULTURE MEDIA, CONDITIONED

DENDRITIC CELLS

Farooqi, Badar Jahan **BETA-LACTAMASES** 

Farres, Mohamed Nazmy

HEPATITIS C, CHRONIC (immunology)

Farzin, M.

MATRIX METALLOPROTEINASE 3 (blood)

Fasaei, Bahar Nayeri

SALMÓNELLA TYPHIMURIUM

Fatmi, Z.

TUBERCULOSIS (epidemiology)

Fattahi, M.J.

MATRIX METALLOPROTEINASE 3 (blood)

Fazeli, Roghayeh

BONE MARROW TRANSPLANTATION

Fisher Hoch, Susan

HEPATITIS C (epidemiology)

Fitzwarryne, Caroline

HEALTH MANPOWER

Foroumadi, Alireza

CANDIDA (drug effects)

Fotouhi. A.

MOTOR VEHICLES

Fowotade, Adeola

BACTERIURIA (epidemiology)

Fraceto, L.F. **TITANIUM** 

Freeman, James

ACCIDENTS, TRAFFIC (prevention and control)

Freije, R.H.

**OCEANOGRAPHY** 

Froushani, Seyyed Meysam Abtahi

TRETINOIN (therapeutic use)

Gaber, Mamdouh

CLEFT PALATE (surgery)

Gad, Ahmed

CLEFT PALATE (surgery)

Gad, Khaled Hussein

ECHINOCOCCOSIS, HEPATIC (surgery)

Galal, M.O.

ANGIOTENSIN-CONVERTING ENZYME

INHIBITORS (therapeutic use)

Gallagher ,R.

**ASTHMA** 

Ganesh, Anuradha

SHAKEN BABY SYNDROME (etiology)

Garba, Ekundayo S. **GENERAL SURGERY**  Georgiadis, T.H.

BUTTERFLIES

Ghabanchi, J.

MATRIX METALLOPROTEINASE 3 (blood)

Ghallab, Mohamed

ACUTE CORONARY SYNDROME (blood)

Gharagozlou, Mohammad Javad

SALMONELLÁ TYPHIMURIUM

Gharaibeh, M.

MATERNAL MORTALITY

Gharamaleki, A.S.

FOOD-DRUG INTERACTIONS

Gharehbagh, E.Jazayeri

CORONARY ARTERY BYPASS

Gharibi, A. **BIOFUELS** 

Ghavami, Yaser

CONNEXINS

Gholami, Roya **CESAREAN SECTION** 

Ghorashi, Saied Ali

**CLOSTRIDIUM PERFRINGENS** 

Ghorbani, A.

BETA-THALASSEMIA (psychology)

Gilani, Irum

THALASSEMIA (therapy)

Goldie, Sue J.

**HEALTH SYSTEMS PLANS** FAMILY PLANNING SERVICES

Golozar, Asieh

**ESOPHAGEAL NEOPLASMS** 

Gondal, Talat Mehmood

TOMOGRAPHY, OPTICAL COHERENCE

Gowda, D.V.

THEOPHYLLINE

Gowri, Vaidyanathan

PREGNANCY, ECTOPIC (surgery)

Grant, I.N.

DEPRESSION, POSTPARTUM (epidemiology)

Gundag, M.

HEMATOMA, EPIDURAL, SPINAL (diagnosis)

Habbal, Omar

ANATOMY (education)

Habib Ullah, Junaid

WASTE MANAGEMENT

Habib, Faiza S.M.

GIARDIASIS (diagnosis)

Habib, Yasir

APPENDICITIS (diagnosis)

Habibi. M. **LEARNING** 

Hafeez, Assad POLICÝ MAKING

Hagh, M.Farsh Dusty MESENCHYMAL STEM CELLS

Haghollai, Fedyeh **CESAREAN SECTION** 

Hagr, Abdulrahman

COCHLEAR IMPLANTATION (methods)

Hajighasemi, Fatemeh

ISOSORBIDE DINITRATE (pharmacology)

Haishafiha, M. HEALTH EDUCATION

Hallikeremath, Seema R. FIBROSARCOMA (diagnosis)

Hamamy, H.

ABNORMALITIES, MULTIPLE (diagnosis)

Hamed, Saja H. COSMETICS

Hameed, Wagas

FAMILY PLANNING SERVICES

Hamid, Hamida

LEISHMANIASIS, CUTANEOUS (therapy)

Hammoud, H.

CROSS INFECTION (microbiology)

Hantooshzadeh, Sedigheh CESAREAN SECTION

Haq, Z.

TUBERCULOSIS (prevention and control)

Harada, H. **SEWAGE** 

Harshavardhana, B.G. MAGNETICS

Hasannia, Sadegh RNA-BINDING PROTEINS

Hassan, Mohammed

SLEEP APNEA, OBSTRUCTIVE (epidemiology)

Hassani, A.H.

WATER POLLUTANTS, CHEMICAL

Hassen, Shaimaa G. HYMEN (injuries)

Hatamleh, W.

**DOCUMENTATION** (standards)

Hedayat, Darioush Kamal

SIROLIMUS (therapeutic use)

Heidari. M. **MICROCYSTIS** 

Hersi, Ahmed

ACUTE CORONARY SYNDROME (mortality)

Heunis, Christo SOCIAL SUPPORT

Heydari, S.T.

MATRIX METALLOPROTEINASE 3 (blood)

Hibino, Narutoshi

ARTERIOVENOUS MALFORMATIONS (surgery)

Hill, Peter Stewart SOCIAL SUPPORT

Hobbenaghi, Rahim TRETINOIN (therapeutic use)

Hoffiani, Maroof HEALTH MANPOWER

Homayee, Sarwar **HEALTH MANPOWER** 

Honarvar, Behnam

INFLUENZA A VIRUS, H1N1 SUBTYPE

Hosseini, Negar Mohammad CANDIDA (drug effects)

Hosseini, Seyed Ali Reza CLINICAL TRIALS AS TOPIC

Hosseini, Younes HIV-1 (drug effects)

Houshe, Samer

PROTON PUMP INHIBITORS

Houshmand, Massoud

CONNEXINS

Huang, Chun Chieh AORTA (pathology)

Hussain, Arif **BETA-LACTAMASES** 

Hussain, S.

**DEPRESSION** (diagnosis)

Hussain, Sved Sheeraz COMPOSITE RESINS

Ibrahim, Ayman N.

TOXOPLASMOSIS (diagnosis)

Ibrahim, Medhat M. CLEFT PALATE (surgery)

Imani, Alireza

CREATINE KINASE, MB FORM (drug effects)

Inuwa, Ibrahim M.

ANATOMY (education)

Ishage, Muhammad

FAMILY PLANNING SERVICES

Islam, Farrah

TOMOGRAPHY, OPTICAL COHERENCE

Islam, M.

DEPRESSION (diagnosis)

Islam, Najmul

MYCOBACTERIUM TUBERCULOSIS

Ismail. Dina

CARCINOMA, HEPATOCELLULAR (diagnosis)

Ismail, Khadiga A.

LEISHMANIASIS, CUTANEOUS (diagnosis)

Ismail, Ola A.

**DIENTAMOEBIASIS** (diagnosis)

Ismayilova, L.

ACQUIRED IMMUNODEFICIENCY SYNDROME

Issa. Ala

THYMUS PLANT (toxicity)

Jadali, Zohreh

**HEPATITIS C** 

Jaddou, H.

MATERNAL MORTALITY

Jafari, H.R.

SOIL

Jafarian, K.

FOOD-DRUG INTERACTIONS

Jafri, Mahmood Ali

DEPRESSION

Jahan, Sawrat **BIRTH WEIGHT** 

Jaju, Deepali

SLEEP APNEA, OBSTRUCTIVE (epidemiology)

Jalali, Samina

**BIRTH WEIGHT** 

Jalil, Ana

APPENDICITIS (diagnosis)

Jamil. Abdul moneim

ACUTE CORONARY SYNDROME (blood)

Jamil, Ahmad Zeeshan

TOMOGRAPHY, OPTICAL COHERENCE

Jamil, Muhammad Hannan

TOMOGRAPHY, OPTICAL COHERENCE

Jamille, Ashar

COMPÓSITE RESINS

Javadi, Shahram

CULTURE MEDIA, CONDITIONED

Jeong, K.S.

**PHYTOPLANKTON** 

Jiang, Mingde

LYMPHOMA, EXTRANODAL NK-T-CELL

(pathology)

Jnaneshwari, Jayaram

PANCREATIC NEOPLASMS (diagnosis)

Jonas, Richard A.

ARTERIOVENOUS MALFORMATIONS (surgery)

Jonsson, C.M.

**TITANIUM** 

Joo. G. J.

**PHYTOPLANKTON** 

Joseph, Vivek

MALARIA (diagnosis)

Joshi, Surendranath

HEPATOLENTICULAR DEGENERATION

(genetics)

Jovanovic, L.

METHYL ETHERS

Jovic, J.

METHYL ETHERS

Juibary, Ali Ghabeli

CLINICAL TRIALS AS TOPIC

Kalahroudi, M. Abedzadeh

PRE-ECLAMPSIA

Kale. Alka D.

FIBROSARCOMA (diagnosis)

Kalhori, A. Alimohammad

SOIL

Kamal, Abdel Aziz

CLEFT PALATE (surgery)

Kamani, Lubna

HEMOBILIA (diagnosis)

Kandil, Hossam M.

HEPATITIS C, CHRONIC (drug therapy)

Kandis, Hayati

ATRIOVENTRICULAR BLOCK

Karami, M.

SOIL

Karamizadeh, Z.

**LEARNING** 

Karapolat, Sami

ATRIOVENTRICULAR BLOCK

Kargar, M.

SOIL

Kashoob, Masoud

HEPATOLENTICULAR DEGENERATION (genetics)

Kashour, Tarek

ACUTE CORONARY SYNDROME (mortality)

Kaviyany, S.

MESENCHYMAL STEM CELLS

Kavani, Zivad Afzal THALASSEMIA (therapy)

Kazemi, A. **MALNUTRITION** 

Kazemi, Sh. **ADIPONECTIN** 

Kazim. Hameedullah M. HEPARIN (therapeutic use)

Keddeas, Marcel William

CARCINOMA, HEPATOCELLULAR (diagnosis)

Keivanara, M.

SOCIAL RESPONSIBILITY

Kella, Nandlal

SARCOMA, EWING (diagnosis)

Keshav, A. **GLYCOLATES** 

Keshtkar, A.

REFERRAL AND CONSULTATION

Khader, Y.

MATERNAL MORTALITY

Khalaf, A.

**HEALTH STATUS** 

Khalifa, Khalifa El Sayed HELMINTHIASIS (immunology)

Khalili, Gholam Reza

PSYCHOMOTOR AGITATION (drug therapy)

Khan, Aakif U.

THYROID NEOPLASMS

Khan, Adnan A.

HEALTH CARE SECTOR

Khan, Amna

INFANT MORTALITY

Khan, Ayesha

HEALTH CARE SECTOR

Khan, Ayub

THYROID NEOPLASMS

Khan, Farhan Raza COMPOSITE RESINS

Khan, Kamran

THYROID NEOPLASMS

Khan, M. Amanullah

WASTE MANAGEMENT

Khan, Mohammed S.

THEOPHYLLINE

Khan, Saman Yazdani

SFX

Khan, Sami U.

THYROID NEOPLASMS

Khan, W.

TUBERCULOSIS (prevention and control)

Khani, H.

BETA-THALASSEMIA (psychology)

Khaniki, Mahmod

CURCUMIN (therapeutic use)

Khansari, Maryam

CREATINE KINASE, MB FORM (drug effects)

Khattak, Rauf

LYMPHOMA, NON-HODGKIN (diagnosis)

Khayamy, M.E.

**BLOOD DONORS** 

Khayyal, Amira E.

GIARDIASIS (diagnosis)

Khazaei, M. ADIPONECTIN

Khazaei, S.

**ADIPONECTIN** 

Khiavi, F.Faraji FOOD-DRUG INTERACTIONS

Khodakarami, Nahid

**CESAREAN SECTION** 

Khorasani, N.A.

SOIL

Khori. V.

REFERRAL AND CONSULTATION

Kikovic, D.

METHYL ETHERS

Kirn, D.K.

**PHYTOPLANKTON** 

Kiteresi. L.I.

PHYTOPLANKTON

HEMATOMA, EPIDURAL, SPINAL (diagnosis)

Kokya, T. Ahmadzadeh

Koliyadan, Sreedharan V.

FIBROMA (diagnosis)

Kosuri, Kalyan

HYPERTENSION, PULMONARY

Kotrashetti, Vijayalakshmi S.

FIBROSARCOMA (diagnosis)

Kouhkan, Azam

BONE MARROW TRANSPLANTATION

Krishnaveni, J.

IMMUNOGLÓBULIN LIGHT CHAINS

Kumar, C.K. Ashok

**PRODRUGS** 

Kumar, Dileep

SICK SINUS SYNDROME

Kumar, Prasanna N.

IMMUNOGLOBULIN LIGHT CHAINS

Kumar, Sudesh

**NEURILEMMOMA** (diagnosis)

Kuo, Chin Chi

AORTA (pathology)

Lahijanian, A.

ENVIRONMENT

Lalani, Nasreen Sulaiman

ACQUIRED IMMUNODEFICIENCY SYNDROME

Lalevic, B.

METHYL ETHERS

Langroudi, Reza Pilehchian

**CLOSTRIDIUM PERFRINGENS** 

Lankarani, Kamran Bagheri

MATERNAL MORTALITY

INFLUENZA A VIRUS, H1N1 SUBTYPE

Laurel, Nwaorga O'C.

**CERVIX UTERI** 

Leghari, Farman

SARCOMA, EWING (diagnosis)

Leo, F. Tauro

PANCREATIC NEOPLASMS (diagnosis)

Li, Gandi

LYMPHOMA, EXTRANODAL NK-T-CELL

(pathology)

Li, H.

**PHOSPHORUS** 

Li, Jinnan

LYMPHOMA, EXTRANODAL NK-T-CELL

(pathology)

Longo, Dan L.

NEOPLASMS (drug therapy)

Lotfy, Wad M.

MYIASIS (diagnosis)

Maah, M.J.

METALS, HEAVY

Mabrouk, Shadia

LIVER CIRRHOSIS (etiology)

Machat, J.

**METALS** 

Madadgar, Omid

SALMONELLA TYPHIMURIUM

Madani Civi, Manouchehr

BONE MARROW TRANSPLANTATION

Madani, Fatemeh Zahra Resvan

ISOSORBIDE DINITRATE (pharmacology)

Madani, S.H.

CORAL REEFS

Mahani, Saeed Esmaeili

ASCORBIC ACID

Maharlouei, Najmeh

MATERNAL MORTALITY

Maheshwari, Gaurav

**EVIDENCE-BASED MEDICINE** 

Maheshwari, Namrata

EVIDENCE-BASED MEDICINE

Maheswari, M.

SEWAGE

Mahfouz, Ahmed A.

ACUTE CORONARY SYNDROME (blood)

Mahmal, L.

PANCYTOPENIA (etiology)

Mahmood, Arshad

URINARY BLADDER NECK OBSTRUCTION

(diagnosis)

Mahmood, Isam H.

METABOLIC SYNDROME X

Mahmoud, Manal S.E.

GIARDIASIS (diagnosis)

Mahmoud, Nermine Helmy

LIVER CIRRHOSIS (etiology)

Mahmoud, T.

ABNORMÁLITIES, MULTIPLE (diagnosis)

Mahmoud, Zizi S.

ACUTE CÓRONARY SYNDROME (blood)

Mahmoudi, Mahmoud

CESAREAN SECTION

Mahmoudian, Saeid

CONNEXINS

Mahmoudkhani, R.

WATER POLLUTANTS, CHEMICAL

Majdi, M.R.

BETA-THALASSEMIA (psychology)

Makama, Jerry G. GENERAL SURGERY

Maklad, Soheir S.

ECHINOCOCCOSIS (genetics)

Malekzadeh, Reza

**ESOPHAGEAL NEOPLASMS** 

Malik, Asmat Ullah SOCIAL SUPPORT

Malik, Javaid Mehmood HLA-DRB1 CHAINS

Malik, Javed Iqbal WASTE MANAGEMENT

Malkawi, Ziad

MOLAR, THIRD (surgery)

Manal, M.A.

ESCHERICHIA COLI (growth and development)

Mane, Deepa R.

FIBROSARCOMA (diagnosis)

Mansoor, Ghulam Farooq

REAGENT KITS, DIAGNOSTIC (supply and distribution)

Marcovecchio, J.E. OCEANOGRAPHY

Mardani. M.

MATRIX METALLOPROTEINASE 3 (blood)

Marnani, A.Barati SOCIAL RESPONSIBILITY

Maruyama, Y. SEWAGE

Marzabadi, E. Azad

BETA-THALASSEMIA (psychology)

Mashlah, A.M. STUDENTS, DENTAL

Masroor, Muhammad

INTERFERON-ALPHA (therapeutic use)

Massarrat, Sadegh CANDIDA (drug effects)

Mathew, Alvin MALARIA (diagnosis)

Mazhar, Arslan

THALASSEMIA (therapy) INFANT MORTALITY

Mazloomi, Ezat MATERNAL MORTALITY

McKay, R.I.B. PHYTOPLANKTON Mehnaz, Aisha

INTERFERON-ALPHA (therapeutic use)

Mehrabanian, N.

RESTLESS LEGS SYNDROME (drug therapy)

Mehrani, F.

CORONARY ARTERY BYPASS

Mellat Ardekani, A.

RESTLESS LEGS SYNDROME (drug therapy)

Mesci, B. CHROMIUM

Metanat. M.

TUBERCULOSIS, PULMONARY

Meymand, M.Mahmodi Niya MESENCHYMAL STEM CELLS

Mhadhbi, L. FLATFISHES DIAZINON (toxicity)

Mi, J.

**PHOSPHORUS** 

Mimish, L. HEAT STROKE

Minhas, Fareed A. DEPRESSION

Minuchehr, Zarrin BACTERIAL PROTEINS

Mir, Alia

BEZOARS (diagnosis)

Mirbagheri, S.A. PHYTOPLANKTON

Mishra, Ashutosh PRODRUGS

Mkono, M. PHYTOPLANKTON

Moawad, H.

**ERECTILE DYSFUNCTION (drug therapy)** 

Moazzami, Kasra

BONE MARROW TRANSPLANTATION

Modabernia, S.H. CLEFT LIP

Moez, S.

HEALTH EDUCATION

Mofleh, J.

HEMORRHAGIC FEVER, CRIMEAN (epidemiology)

Moghadam, H. Rezakhani HEALTH EDUCATION

Moghadami, Mohsen

INFLUENZA A VIRUS, H1N1 SUBTYPE

Moghaddami, Abbas OBESITY, ABDOMINAL

Moghimi, Sedigheh CESAREAN SECTION

Moghimian, Maryam

CREATINE KINASE, MB FORM (drug effects)

Moghtadaee, Mehdi

BENZIMIDAZOLES (therapeutic use)

Mohaddesi, H. HEALTH EDUCATION

Mohaghgheghi, A.M.
REFERRAL AND CONSULTATION

Mohaghgheghi, Mohammad Ali CURCUMIN (therapeutic use)

Mohamadlo, S. HEALTH EDUCATION

Mohamed, Anhar A.
GIARDIASIS (drug therapy)

Mohamed, Sahar N. HYMEN (injuries)

Mohammad, Mohammad ASPIRIN (therapeutic use) THYMUS PLANT (toxicity)

Mohammadi, H. LEARNING

Mohammadi, Mehdi COUGH

Mohanakrishnan, A.

IMMUNOGLOBULIN LIGHT CHAINS

Moharloei, Pooneh OBESITY, ABDOMINAL

Mohebbi, F. MICROCYSTIS

Mohsen, Magda M. GLAUCOMA

Moinuddin

HEPATITIS C (epidemiology)

Mokhtar, S.A.

PATIENT READMISSION

Mollaian, M. CLEFT LIP

Monfared, Ayad Bahadori

**PROBIOTICS** 

Monfared, S.A. Hashemi PHYTOPLANKTON Montazeri, A.

BETA-THALASSEMIA (psychology)

Montazeri, Gh.M. MOTOR VEHICLES

Morina, F. METHYL ETHERS

Mortazavi, Y.

MESENCHYMAL STEM CELLS

Mortazavian, Amir-Mohammad

**PROBIOTICS** 

Mosayebi, Ghasem

TRETINOIN (therapeutic use)

Mosharraf, S. M. Faisal HEMOBILIA (diagnosis)

Moshref, M.

Mossalanejad, A. ENVIRONMENT

Moumani, Basima

NONPRESCRIPTION DRUGS

Moustafa, Manal F. HYMEN (injuries)

Moustafa, Nevine Nabil

ECHINOCOCCOSIS, HEPATIC (surgery)

Mujeeb, Faiza DEPRESSION

Mukhtar, Rubina

LYMPHOMA, NON-HODGKIN (diagnosis)

Munir, S.M. LIVER CIRRHOSIS

Murtaza, Badar

URINARY BLADDER NECK OBSTRUCTION (diagnosis)

Musmar, S.G. SMOKING

Mwachofi, Ari

HEALTH CARE COSTS

Mwangi, S.N. PHYTOPLANKTON

Mzoughi, N.

POLYCYCLIC HYDROCARBONS, AROMATIC

Nabiolahi, A. HEALTH EDUCATION

Nabolsi, M.M. HEALTH STATUS

Nadir, Mohammed

LEISHMANIASIS, CUTANEOUS (therapy)

Nafil, H.

PANCYTOPENIA (etiology)

Nahia, A.E.M.

ESCHERICHIA COLI (growth and development)

Najafabadi, Masood Soltani

ORYZA SATIVA

Najjar, Samer

THYMUS PLANT (toxicity)

Namiri, Mehrnaz

BONE MARROW TRANSPLANTATION

Nanbakhsh. F.

HEALTH EDUCATION

Nandakumar, N.B.

**SEWAGE** 

Nagi, Nighat

**HLA-DRB1 CHAINS** 

Naqvi, H.A.

**DEPRESSION** (diagnosis)

Naseh, R.

SOIL

Natig, Kayhan

COMMUNITY HEALTH WORKERS

Nejadkoorki, F.

AIR POLLUTION

Nejati, Vahid

DENDRITIC CELLS

Niaz, Waqar Azim

URINARY BLADDER NECK OBSTRUCTION

(diagnosis)

Nikazar, M.

WATER POLLUTANTS, CHEMICAL

Nikdoost, Farahnaz

SIROLIMUS (therapeutic use)

Nirmala, V.

IMMUNOGLOBULIN LIGHT CHAINS

Niya, M.Nowrozi

MESENCHYMAL STEM CELLS

Njindam, Iliassou Mfochive

HIV INFECTIONS

Noor ul Ain, Wajeeha

INTERFERON-ALPHA (therapeutic use)

Nowrozi, H.

MALNUTRITION

Nwabuisi, Charles

BACTERIURIA (epidemiology)

Obada, Manar A.

HEPATITIS C, CHRONIC (drug therapy)

Ofoghi, Hamideh

**BACTERIAL PROTEINS** 

Ohowa, B.

**PHYTOPLANKTON** 

Okour, A.M.

MATERNAL MORTALITY

Okuku, E.O.

PHYTOPLANKTON

METALS, HEAVY

Okumu, S.

**PHYTOPLANKTON** 

Olimat, H.

ACQUIRED IMMUNODEFICIENCY SYNDROME

Olunya, Oluoch

OSTEOPETROSIS (complications)

Omar, Nabeel A.

HEPATITIS C, CHRONIC (drug therapy)

Omran, Dalia

CARCINOMA, HEPATOCELLULAR (diagnosis)

Ostovar, Rahim

CESARÉAN SECTION

Ouyang, Qin

LYMPHOMA, EXTRANODAL NK-T-CELL

(pathology)

Ozkan, N.

HEMATOMA, EPIDURAL, SPINAL (diagnosis)

Palanca, A.

**FLATFISHES** 

Pan, X. J.

**PHOSPHORUS** 

Panduranga, Prashanth

ACUTE CORONARY SYNDROME (epidemiology)

Pappas, Gregory

HEALTH

Patil, S.V.

**INDINAVIR** 

Pedramnia, Shahrzad

CANDIDA (drug effects)

Peel, Sheila A.

REAGENT KITS, DIAGNOSTIC (supply and

distribution)

Perdes, Mohammad Saber

QUALITY OF HEALTH CARE

Peter, H.K.

METALS, HEAVY

Piccolo, M.C.

OCEANOGRAPHY

Pourreza, Abolghasem

CESAREAN SECTION

Pourshahid, Omid

INFLUENZA A VIRUS, H1N1 SUBTYPE

Prakash, P.

DIET

Prathvi, Shetty

PANCREATIC NEOPLASMS (diagnosis)

Prohic, E.

SOIL

Qazi, Zaheer Uddin Aqil

TOMOGRAPHY, OPTICAL COHERENCE

Qureshi, Asma Fozia

SEX WORKERS

Qureshi, Mohammad Ali

SARCOMA, EWING (diagnosis)

Qureshi, Nadeem

TOMOGRAPHY, OPTICAL COHERENCE

Rabbani, Fauziah

QUALITY OF HEALTH CARE

Rabie, M.R.

REFERRAL AND CONSULTATION

Rachidi, S.

CROSS INFECTION (microbiology)

Rafiee, G.H.

SOIL

Rahbar, F.

**CORAL REEFS** 

Rahimdel, A.G.

RESTLESS LEGS SYNDROME (drug therapy)

Rahimi Foroushani, Abbas

ZINC (blood)

Rahman, M.M.

WASTE DISPOSAL, FLUID

Rahman, Munawar

COMPOSITE RESINS

Rahmani, Ahmad Masoud

REAGENT KITS, DIAGNOSTIC (supply and

distribution)

Raicevic, V.

METHYL ETHERS

Rajabpour, Saeed

BENZIMIDAZOLES (therapeutic use)

Rajper, Jamila

INTERFERON-ALPHA (therapeutic use)

Ramadan, Nashwa I.

GIARDIASIS (drug therapy)

Ramezani, M.

BETA-THALASSEMIA (psychology)

Rao, Kuntal

PREGNANCY, ECTOPIC (surgery)

Rashed, Laila

CARCINOMA, HEPATOCELLULAR (diagnosis)

Rasheed, Arun

**PRODRÚGS** 

Rashidi, Batool Hossein

**CESAREAN SECTION** 

Rashidian, Arash

**CESAREAN SECTION** 

Rasti, Behnam

RNA-BINDING PROTEINS

Rathi, Prem Kumar

SARCOMA, EWING (diagnosis)

Ravanshad, Mehrdad

HIV-1 (drug effects)

Rayan, Hanan Z.

**DIENTAMOEBIASIS** (diagnosis)

Razavi, Khadijeh

OCIMUM BASILICUM

Rentas, Francisco J.

REAGENT KITS, DIAGNOSTIC (supply and

distribution)

Rewisha, Eman A.

HEPATITIS C, CHRONIC (drug therapy)

Rezaee, M.

MATRIX METALLOPROTEINASE 3 (blood)

Riaz, Umbreen

APPENDICITIS (diagnosis)

Rismanchi, Mojtaba

INFLUENZA A VIRUS, H1N1 SUBTYPE

Rizvi, Farwa

**BIRTH WEIGHT** 

Rizvi. Nariis

SEX WORKERS

Robert, Leon L.

LEISHMANIASIS, CUTANEOUS (therapy)

Rodriguez Rodriguez, C.E.

**HYDROCARBONS** 

Roodsari, Hamid Reza Sadeghipour

CREATINE KINASE, MB FORM (drug effects)

Roydhousc, J.K.

ASTHMA

Rozi, S.H.

TUBERCULOSIS (epidemiology)

Saad, Ghada A.

LEISHMANIASIS, CUTANEOUS (diagnosis)

Saaiq, Muhammad

APPENDICITIS (diagnosis)

Sabaeian, Behnam

INFLUENZA A VIRUS, H1N1 SUBTYPE

Saberi, F.

PRE-ECLAMPSIA

Sabz, Fatemeh Tanhaye Kalate

CULTURE MEDIA, CONDITIONED

Sabzwari, S.

**DEPRESSION** (diagnosis)

Sadadi, Fereshteh

SIROLIMUS (therapeutic use)

Sadat, Z.

PRE-ECLAMPSIA

Sadeghian, G.

SKIN DISEASES (etiology)

Sadeghian, Hakimeh

BONE MARROW TRANSPLANTATION

Sadiq, M.

**HEALTH MANPOWER** 

Sadrnejad, S.A.

**PHYTOPLANKTON** 

Saeed, K.M. Islam

TUBERCULOSIS (epidemiology)

Safaan, Nahla A.

**GLAUCOMA** 

Safdari, R.

MEDICAL INFORMATICS

Safhi, M.M.

INDINAVIR

Safi, Najibullah

LEISHMANIASIS, CUTANEOUS (therapy)

Sahoo, S.K.

**INDINAVIR** 

Sajadi, H.S.

SOCIAL RESPONSIBILITY

Saiedi, Parvin

PSYCHOMOTOR AGITATION (drug therapy)

Sajedi, Reza Hasan

RNA-BINDING PROTEINS

Salah, Raa'd

THYMUS PLANT (toxicity)

Salama, Mohsen

HEPATITIS C, CHRONIC (drug therapy)

Salameh, P.

CROSS INFECTION (microbiology)

Salari, Sahar

ASCORBIC ACID

Saleh, Jumana

INFANT, NEWBORN

Salehi, Ahmad Shah

FAMILY PLANNING SERVICES

**HIV INFECTIONS** 

Salehi, Taghi Zahraei

SALMÓNELLA TYPHIMURIUM

Salem, Amr Al Sayed

STROKE (diagnosis)

Samimi, Mansoureh

ZINC (blood)

Sandeep, K.

**MAGNETICS** 

Sandhya, V.

IMMUNOGLOBULIN LIGHT CHAINS

Saniee, Parastoo

CANDIDA (drug effects)

Saparamadu, P.A.M.

NEURILEMMOMA (diagnosis)

Saparamadu, RA.M

FIBROMA (diagnosis)

Sarahroodi, Shadi

ZINC (blood)

Sarbolouki, Mohammad Nabi

CURCUMIN (therapeutic use)

Saritas, Ayhan

ATRIOVENTRICULAR BLOCK

Sate, Hossein

SIROLIMUS (therapeutic use)

Sayadi, Hassan H.

HODGKIN DISEASE (therapy)

Saydain, Ghulam

HYPERTENSION, PULMONARY

Sayed, Gamal H.

HYMEN (injuries)

Schluepmann, Henriette

**ARABIDOPSIS** 

Scott, Paul T.

REAGENT KITS, DIAGNOSTIC (supply and

distribution)

Sedaghat, Mehdi

OBESITY, ABDOMINAL

Sedghipour, Mohsen

SIROLIMUS (therapeutic use)

Sedrac, Heba

CARCINOMA, HEPATOCELLULAR (diagnosis)

Seifoddin, Mahsan CESAREAN SECTION

Seita, A.

TUBERCULOSIS (prevention and control)

Selem, Rabab F.

TOXOPLASMOSIS (epidemiology)

Selvamurugan, M.

**SEWAGE** 

Semalesan, Nirannanilathu

BURNS (surgery)

Sepanlou, Sadaf G. CESAREAN SECTION

Seyithanoglu, M.H.

HEMATOMA, EPIDURAL, SPINAL (diagnosis)

Shabana, Sherif Sadek LIVER CIRRHOSIS (etiology)

Shafiei, N. BLOOD DONORS

Shafieiyoun, S.

WATER POLLUTANTS, CHEMICAL

Shah, Abdul Saeed THYROID NEOPLASMS

Shah, Hasnain Ali HEMOBILIA (diagnosis)

Shah, S. ASTHMA

Shah, Syed Aslam APPENDICITIS (diagnosis)

Shahangian, Seyedeh Shirin RNA-BINDING PROTEINS

Shahhoseini, Gholamreza BENZIMIDAZOLES (therapeutic use)

Shahir, Ihsanullah HEALTH MANPOWER

Shahreki, S.H.

TUBERCULOSIS, PULMONARY

Shahriari, S.H. PLANTAGO Shahriari, T.

PLANTAGO

Shaikh, Babar Tasneem

DECISION MAKING

DELIVERY OF HEALTH CARE

Shakeri, M.T. BLOOD DONORS Shama, S. Neelufar

**PRODRUGS** 

Shami, S.A BIRTH WEIGHT

Shamim, Faisal

SICK SINUS SYNDROME

Shams, Nemat

SALMONELLA TYPHIMURIUM

Shamsara, Mahdi

**CLOSTRIDIUM PERFRINGENS** 

Shankar, R. MAGNETICS

Shariati, Parvin BACTERIAL PROTEINS

Sharifi Mood, B.

TUBERCULOSIS, PULMONARY

Sharifi, Mozafar OCIMUM BASILICUM

Shazly, Mona

DENTAL CARE (nursing)

Shehata, Iman H.

HEPATITIS C, CHRONIC (immunology)

Sheng, K.C. BIOFUELS

Sheta, M.I.

STOMACH NEOPLASMS (microbiology)

Shi, L.Q. PHOSPHORUS

Shideed, O.

RESEARCH SUPPORT AS TOPIC

Shivakumar, H.G. THEOPHYLLINE

Shojaeizadeh, D. HEALTH EDUCATION

Shooshtari, M. Jazayeri REHABILITATION

Siavoshi, Farideh CANDIDA (drug effects)

Sifsalam. M.

PANCYTOPENIA (etiology)

Sinha, Pranava

ARTERIOVENOUS MALFORMATIONS (surgery)

Slatch, Munir A. DEPRESSION

Smith, Owen P.

THROMBOCYTOPENIA (chemically induced)

Sohrabvandi, Sarah **PROBIOTICS** 

Solevmani. M.

MESENCHYMAL STEM CELLS

Soliman, Rasha H.

BLASTOCYSTIS HOMINIS (drug effects)

Song, D.

**PHOSPHORUS** 

Soni, A.B. **GLYCOLATES** 

Spanou, S. BUTTERFLIES

Spetter, C.V. **OCEANOGRAPHY** 

Squire, S. Bertel

COUGH

Subramanian, Sureshkannan K.

FIBROMA (diagnosis)

Subramanyam, B.

**PHENOL** 

Suhvb. Sanusi R. CERVIX UTERI

Sulaiman, Kadhim

ACUTE CORONARY SYNDROME (epidemiology)

Sultan, Nabeel

THORACIC SURGERY

Suresh, S. **GLYCOLATES** 

Surlan Momirovic, G. METHYL ETHERS

Suzuki. S. SEWAGE

Szkandera, R.

**METALS** 

Tabatabaei, Seyyed Abdol Hossein

SIROLIMUS (therapeutic use)

Tadbir, A. Andisheh

MATRIX METALLOPROTEINASE 3 (blood)

Taghavi, N. CLEFT LIP

Taghdir, Majid

**RNA-BINDING PROTEINS** 

Taghizadeh, Mohsen

ZINC (blood)

Taha, Azza A.

HEPATITIS C, CHRONIC (drug therapy)

Taha, Hossam A. HISTORY, ANCIENT

Tahaineh, Linda

NONPRESCRIPTION DRUGS

Talaie, A.R.

METHYL ETHERS

Talei, A.R.

**BREAST NEOPLASMS** 

Tamiz ud Din, Asad

**DEPRESSION** 

Tanveer ul Haq

HEMOBILIA (diagnosis)

Tanzeem, Shahila

ECTROMELIA (diagnosis)

Tarabin, Amir

ACUTE CORONARY SYNDROME (mortality)

Taranikanti, Varna ANATOMY (education)

Tarawneh, Ruba

THYMUS PLANT (toxicity)

Tasnim, Nasira

**BIRTH WEIGHT** 

Tavakoli, M.

MALNUTRITION

Tavakolian, Atefeh CANDIDA (drug effects)

PANCYTOPENIA (etiology)

Tazik, Ebrahim

OBESITY, ABDOMINAL

Tharwa, El Sayed

HEPATITIS C, CHRONIC (drug therapy)

Todd, Catherine S.

REAGENT KITS, DIAGNOSTIC (supply and

distribution)

Tokiko, S.

**HEALTH STATUS** 

Torabian, A.

WATER POLLUTANTS, CHEMICAL

Tosson, A.

**DOCUMENTATION** (standards)

Tsai, Ching Wei

AORTA (pathology)

Tsegenidi, K.

BUTTERFLIES

Tudiver, F.

FETAL DEATH (etiology)

Uemura, S.H.

SEWAGE

Ulikpan, Anar SOCIAL SUPPORT

Ullah, Anhar

ACUTE CORONARY SYNDROME (mortality)

Umer. Fahad

COMPOSITE RESINS

Vafaee, A.

**BLOOD DONORS** 

Vargas Azofeifa, I.

**HYDROCARBONS** 

Varma, Muralidhar

MALARIA (diagnosis)

Veghari, Gholamreza

OBESITY, ABDOMINAL

Venkatakrishnan, L. IMMUNOGLOBULIN LIGHT CHAINS

Verma, V. GLYCOLATES

Vidhyasagar, Sudha

MALARIA (diagnosis)

Waa, Sheila

OSTEOPETROSIS (complications)

Wang, Y.

PHOSPHORUS

Wangai, Abdul Majid

OSTEOPETROSIS (complications)

Wangai, Maryam

OSTEOPETROSIS (complications)

Wanjeri, V.O.

PHYTOPLANKTON

Warrier, A.K. MAGNETICS

Waslien, C. DIET

Xia,Y.H.

**BIOFUELS** 

Xu, Hui

LYMPHOMA, EXTRANODAL NK-T-CELL

(pathology)

Xue, Linyun

LYMPHOMA, EXTRANODAL NK-T-CELL

(pathology)

Yahyaraeyat, Ramak

SALMONELLA TYPHIMURIUM

Yakhchali, Bagher

BACTERIAL PROTEINS

Yasir, Iram

**DECISION MAKING** 

Yavari. A.R.

SOIL

Yegane, Ali

BENZIMIDAZOLES (therapeutic use)

Yekta, Batool Ghorbani

SIROLIMUS (therapeutic use)

Yilmaz, V.

Yones, Doaa A.

MYIASIS (diagnosis)

Younis, Tayseer A.

TOXOPLASMOSIS (diagnosis)

Youssef, A.I.

STOMACH NEOPLASMS (microbiology)

Yusoff, L.

METALS, HEAVY

Zaghla, Hasan E.

HEPATITIS C, CHRONIC (drug therapy)

Zaghloul, S.

DIET

Zakeri, Zeinab

MATERNAL MORTALITY

Zaki, A.

STOMACH NEOPLASMS (microbiology)

Zaman, M.

DEPRESSION (diagnosis)

Zamiri, Nima

INFLUENZA A VIRUS, H1N1 SUBTYPE

Zarifsanayei, N.

LEARNING

Zayyan, Marliyya

CERVIX UTERI

Zein, S.

CROSS INFECTION (microbiology)

Zeinali, A.

RESTLESS LEGS SYNDROME (drug therapy)

Zheng, Shumei

LYMPHOMA, EXTRANODAL NK-T-CELL

(pathology)

Ziaei, H.

SKIN DISEASES (etiology)

Ziaei, Mahboobeh

OCIMUM BASILICUM

Zubair, Muhammad

APPENDICITIS (diagnosis)

Zulfiqar, Tehzeeb

BIRTH WEIGHT

Zyoud, Raj'a Nayef

DENTAL CARE (nursing)

### Appendix II

# List of EMR Journals Indexed in IMEMR

(by country)

Journal	ISSN	Status
Afghanistan (1)		
AFJPH - Afghanistan Journal of Public Health	N/A	Active
Bahrain (3)		
Arab Journal for Food and Nutrition	1608-8352	Interrupted
Bahrain Medical Bulletin	1012-8298	Active
JBMS - Journal of the Bahrain Medical Society	1015-6321	Active
Egypt (133)		
AAMJ - Al-Azhar Assiut Medical Journal	1687-1693	Interrupted
African Journal of Urology	1110-5704	Active
Afro-Arab Liver Journal	1687-224X	Active
Ain-Shams Journal of Forensic Medicine and Clinical Toxicology	1687-1030	Active
Ain-Shams Medical Journal	0002-2144	Interrupted
AJAIC - Alexandria Journal of Anaesthesia and Intensive Care	N/A	Interrupted
Al-Azhar Journal of Dental Science	1110-6751	Interrupted
Al-Azhar Medical Journal	1110-0400	Active
Alexandria Dental Journal	1110-015X	Interrupted
Alexandria Journal of Food Science and Technology	1687-3920	Interrupted
Alexandria Journal of Hepatogastroenterology	2090-1879	Interrupted
Alexandria Journal of Pediatrics	1687-9945	Active
Alexandria Journal of Pharmaceutical Sciences	1110-1792	Interrupted
Alexandria Journal of Veterinary Science	1110-2047	Active
Alexandria Medical Journal [The]	0516-5849	Interrupted
Annals of Pediatric Surgery	1687-4137	Interrupted
Applied Endocrinology in Egypt	1110-1776	Interrupted
Arab Journal of Biotechnology	1110-6875	Active
Arab Journal of Gastroenterology	1687-1979	Active
Arab Journal of Laboratory Medicine [The]	1110-1822	Active
ASJOG - Ain-Shams Journal of Obstetrics and Gynecology	1697-2193	Interrupted
ASNJ - Alexandria Scientific Nursing Journal	1687-3858	Active
Assiut Medical Journal	1110-0494	Active
Assiut University Bulletin for Environmental Researches	1110-6107	Active
Assiut Veterinary Medical Journal	N/A	Interrupted
Benha Medical Journal	1110-208X	Active
Bulletin of Alexandria Faculty of Medicine	1110-0834	Active
Bulletin of Alexandria Thoracic Association	N/A	Interrupted

Journal	ISSN	Status
Bulletin of Faculty of Pharmacy - Cairo University	1110-0931	Interrupted
Bulletin of Faculty of Physical Therapy - Cairo University	1110-6611	Interrupted
Bulletin of High Institute of Public Health [The]	1110-0036	Active
Bulletin of Pharmaceutical Sciences - Assiut University	1110-0052	Active
Bulletin of the Faculty of Science - University of Alexandria	0568-9619	Interrupted
Bulletin of the National Nutrition Institute of the Arab Republic of Egypt	N/A	Active
Bulletin of the National Research Centre	1110-0591	Active
Bulletin of the Ophthalmological Society of Egypt	0078-5342	Interrupted
Childhood and Development Quarterly	1110-8681	Interrupted
Clinical Diabetes	0891-8929	Active
EDJ - Egyptian Dental Journal	0070-9484	Interrupted
Egyptian Heart Journal [The]	1110-2608	Interrupted
Egyptian Journal of Anatomy [The]	1110-2144	Interrupted
Egyptian Journal of Biomedical Engineering	1012-5558	Active
Egyptian Journal of Biophysics and Biomedical Engineering	1110-8525	Active
Egyptian Journal of Bronchology [The]	1687-8426	Active
Egyptian Journal of Cataract and Refractive Surgery [The]	N/A	Active
Egyptian Journal of Chemistry	0449-2285	Active
Egyptian Journal of Community Medicine [The]	1110-1865	Active
Egyptian Journal of Dermatology and Andrology	1110-7650	Interrupted
Egyptian Journal of Diabetes [The]	N/A	Interrupted
Egyptian Journal of Food Science	1110-0192	Active
Egyptian Journal of Genetics and Cytology	0046-161X	Interrupted
Egyptian Journal of Histology [The]	1110-0559	Active
Egyptian Journal of Hospital Medicine [The]	1687-2002	Interrupted
Egyptian Journal of Immunology [The]	1110-4902	Active
Egyptian Journal of Medical Human Genetics [The]	1110-8630	Active
Egyptian Journal of Medical Laboratory Sciences	1110-5593	Active
Egyptian Journal of Medical Microbiology	1110-2179	Interrupted
Egyptian Journal of Microbiology	0022-2704	Interrupted
Egyptian Journal of Neonatology [The]	1110-8991	Interrupted
Egyptian Journal of Neurology, Psychiatry and Neurosurgery [The]	1110-1083	Active
Egyptian Journal of Nutrition	1687-1235	Active
Egyptian Journal of Nutrition and Health	1687-7950	Active
Egyptian Journal of Occupational Medicine	1110-1881	Interrupted

Journal	ISSN	Status
Egyptian Journal of Otolaryngology [The]	1012-5574	Interrupted
Egyptian Journal of Paediatrics [The]	1687-1677	Interrupted
Egyptian Journal of Pediatric Allergy and Immunology	1687-1642	Active
Egyptian Journal of Pharmaceutical Sciences	0301-5068	Active
Egyptian Journal of Physiological Sciences	0301-8660	Interrupted
Egyptian Journal of Psychiatry [The]	1110-1105	Interrupted
Egyptian Journal of Schistosomiasis and Infectious and Endemic Diseases	1110-7278	Interrupted
Egyptian Journal of Surgery [The]	1110-1121	Active
Egyptian Journal of Urology	1110-5712	Interrupted
Egyptian Journal of Veterinary Science	1110-0222	Active
Egyptian Liver Journal	2090-6218	Active
Egyptian Medical Journal of the National Research Center	1687-1278	Interrupted
Egyptian Orthodontic Journal	N/A	Interrupted
Egyptian Orthopaedic Journal [The]	1110-1148	Interrupted
Egyptian Pharmaceutical Journal [National Research Center]	1687-4315	Active
Egyptian Population and Family Planning Review [The]	N/A	Interrupted
Egyptian Rheumatology and Rehabilitation	1110-161X	Active
Egyptian Science Magazine [The]	1687-3815	Active
EJB - Egyptian Journal of Biochemistry and Molecular Biology [The]	1687-1502	Active
EJENTAS - Egyptian Journal of ENT and Allied Sciences	2090-0740	Interrupted
EMHJ - Eastern Mediterranean Health Journal	1020-3397	Active
Gazette of the Egyptian Paediatric Association [The]	1110-6638	Interrupted
Health Services Journal of the Eastern Mediterrenean Region	1014-9899	Interrupted
JESN - Journal of Egyptian Society of Nephrology [The]	N/A	Interrupted
Journal of Childhood Studies	2090-0619	Active
Journal of Drug Research of Egypt	0085-2406	Active
Journal of Hepatology, Gastroenterology and Infectious Diseases	1110-0796	Interrupted
Journal of Legal Medicine and Forensic Sciences [The]	1110-6468	Interrupted
Journal of the Arab Society for Medical Research	1687-4293	Active
Journal of the Egyptian Medical Association [The]	0013-2411	Interrupted
Journal of the Egyptian National Cancer Institute	1110-0362	Interrupted
Journal of the Egyptian Public Health Association [The]	0013-2446	Active
Journal of the Egyptian Society of Endocrinology, Metabolism and Diabetes [The]	1110-1245	Active
Journal of the Egyptian Society of Obstetrics and Gynecology [The]	0258-3216	Interrupted
Journal of the Egyptian Society of Parasitology	1110-0583	Active

Journal	ISSN	Status
Journal of the Egyptian Society of Pharmacology and Experimental Therapeutics [The]	N/A	Interrupted
Journal of the Egyptian Society of Toxicology	1110-127X	Active
Journal of the Medical Research Institute - Alexandria University	1110-0133	Interrupted
JPC - Journal of Pediatric Club [The]	N/A	Active
Kasr El Aini Journal of Surgery	0022-9237	Interrupted
Kasr El-Aini Medical Journal New	N/A	Active
Kidney Forum	1369-3050	Interrupted
Mansoura Journal of Pharmaceutical Sciences	1110-1318	Interrupted
Mansoura Medical Bulletin New	N/A	Active
Mansoura Medical Journal	1110-211X	Active
Medical Journal of Ahmed Maher Teaching Hospital [The]	N/A	Interrupted
Medical Journal of Cairo University [The]	0045-3803	Active
Medical Journal of Teaching Hospitals and Institutes [The]	1110-2039	Interrupted
Minoufia Medical Journal	1110-2098	Active
MJFCT - Mansoura Journal of Forensic Medicine and Clinical Toxicology	1110-5437	Interrupted
Neonatology	1687-0492	Interrupted
New Egyptian Journal of Medicine [The]	1110-1946	Active
Pan Arab Journal of Orthopaedic and Trauma [The]	1607-4912	Active
Population Researches and Studies	N/A	Active
Population Sciences	N/A	Interrupted
Population Studies	1110-1342	Interrupted
PUJ - Parasitologists United Journal	1687-7942	Active
Scientific Journal of Al-Azhar Medical Faculty [Girls] [The]	1110-2381	Interrupted
Scientific Journal of El-Minia Faculty of Medicine [The]	1110-2446	Interrupted
Scientific Medical Journal	1110-5607	Active
Sohag Medical Journal New	1110-7529	Active
South Valley Medical Journal	1110-7529	Interrupted
Suez Canal University Medical Journal	1110-6999	Active
Tanta Medical Journal	1110-1415	Interrupted
Tanta Medical Sciences Journal	1687-5788	Interrupted
Veterinary Medical Journal	1110-1423	Active
Zagazig Journal of Forensic Medicine and Toxicology	1687-160X	Interrupted
Zagazig Journal of Pharmaceutical Sciences	1110-5089	Interrupted
Zagazig Medical Association Journal	1110-2322	Interrupted
Zagazig University Medical Journal	1110-1431	Interrupted

Journal	ISSN	Status
Iraq (30)		
Al-Kindy College Medical Journal	1810-9543	Active
Almustansiriya Journal of Pharmaceutical Sciences	1815-0993	Interrupted
Annals of the College of Medicine - Mosul	0028-1446	Interrupted
Basrah Journal of Surgery	N/A	Interrupted
Bulletin of Endemic Disease - Baghdad	0007-4845	Interrupted
DMJ - Dohuk Medical Journal	2071-7326	Active
IMJ - Iraqi Medical Journal	0304-4564	Interrupted
IOJ - Iraqi Orthodontic Journal	1816-0581	Interrupted
IPMJ - Iraqi Postgraduate Medical Journal	1608-8360	Active
Iraqi Army Medical Journal	N/A	Interrupted
Iraqi Journal of Agriculture	1818-6645	Active
Iraqi Journal of Biotechnology	N/A	Interrupted
Iraqi Journal of Community Medicine	1684-5382	Interrupted
Iraqi Journal of Medical Sciences	1681-6579	Interrupted
Iraqi Journal of Microbiology	N/A	Interrupted
Iraqi Journal of Pharmaceutical Sciences	N/A	Interrupted
Iraqi Journal of Tropical Disease Researches	1814-0823	Interrupted
Journal of Basic Medical Sciences	N/A	Interrupted
Journal of Community Medicine	N/A	Interrupted
Journal of Dohuk University	1812-7568	Interrupted
Journal of Karbala University	1813-0410	Interrupted
Journal of the College of Dentistry - Baghdad	N/A	Interrupted
Journal of the Faculty of Medicine - Baghdad	0041-9419	Interrupted
Kufa Medical Journal	N/A	Interrupted
Medical Journal of Basrah University [The]	0253-0759	Active
Medical Journal of Tikrit University [The]	N/A	Interrupted
New Iraqi Journal of Medicine [The]	1817-5562	Active
Risafa Medical Journal	N/A	Interrupted
Scientific Nursing Journal	1812-2388	Interrupted
Zanco Journal of Medical Sciences	1995-5588	Active
Islamic Republic of Iran (171)		
Acta Medica Iranica	0044-6025	Active
Advances in Cognitive Science	1561-4174	Interrupted
AJMB - Avicenna Journal of Medical Biotechnology	2008-2835	Active

Journal	ISSN	Status
Archives of Iranian Medicine	1029-2977	Active
Armaghane-danesh	1728-6506	Active
ARYA Atherosclerosis Journal	1735-3955	Interrupted
Asian Journal of Sports Medicine	2008-000X	Active
Audiology	1735-1936	Active
Basic and Clinical Neurosciences	N/A	Active
BCCR - Basic and Clinical Cancer Research	2228-6527	Active
Bina Journal of Ophthalmology	1026-6399	Interrupted
Cell Journal (Yakhteh)	2228-5806	Active
DARU - Journal of Pharmaceutical Sciences	1560-8115	Active
DENA - Quarterly Journal of Yasuj Faculty of Nursing and Midwifery	1735-8450	Interrupted
Dermatology and Cosmetic Quarterly	2008-7470	Active
DRJ - Dental Research Journal	1735-3327	Active
Endovascular Journal	2008-1812	Active
Feyz - Journal of Kashan University of Medical Sciences	1029-7855	Active
Gastroenterology and Hepatology from Bed to Bench	2010-2258	Active
Genetics in the 3rd Millennium	1728-6182	Active
Govaresh	1560-7186	Active
HAKIM Research Journal	1561-252X	Active
HAYAT - Journal of Faculty of Nursing and Midwifery [The]	1735-2215	Active
Health Information Management	1735-7853	Active
Hepatitis Monthly	1735-143X	Active
Homa-ye-Salamat	2008-2002	Active
Hormozgan Medical Journal	1735-2223	Active
Hospital - Journal of Iranian Scientific Hospital Association	2008-1982	Active
IBJ - Iranian Biomedical Journal	1028-852X	Active
IEJ - Iranian Endodontic Journal	1735-7497	Active
IHJ - Iranian Heart Journal	1735-7306	Active
IJB - Iranian Journal of Biotechnology	1728-3043	Active
IJBC - Iranian Journal of Blood and Cancer	2008-4595	Active
IJCN - Iranian Journal of Child Neurology	1735-4668	Active
IJEM - Iranian Journal of Endocrinology and Metabolism	1683-4844	Active
IJFS - International Journal of Fertility and Sterility	2008-076X	Active
IJHOSCR - International Journal of Hematology-Oncology and Stem Cell Research	2008-2207	Active
IJI - Iranian Journal of Immunology	1735-1383	Active

Journal	ISSN	Status
IJKD - Iranian Journal of Kidney Diseases	1735-8582	Active
IJM - Iranian Journal of Microbiology	2008-3289	Active
IJME - Iranian Journal of Medical Education	1608-9359	Active
IJMS - Iranian Journal of Medical Sciences	0253-0716	Active
IJO - Iranian Journal of Orthodontics	1735-5087	Interrupted
IJOH - International Journal of Occupational Hygiene	2008-5109	Active
IJPM - International Journal of Preventive Medicine New	2008-7802	Active
IJPR - Iranian Journal of Pharmaceutical Research	1735-0328	Active
IJRM - Iranian Journal of Reproductive Medicine	1680-6433	Active
International Journal of Endocrinology and Metabolism	1726-913X	Active
International Journal of Environmental Research	1735-6865	Active
International Journal of Environmental Science and Technology	1735-1472	Active
International Journal of Occupational and Environmental Medicine	2008-6520	Active
International Journal of Organ Transplantation Medicine	2008-6490	Active
INTJVR - International Journal of Veterinary Research	2008-2533	Active
Iran Journal of Nursing	2008-5923	Active
Iran Occupational Health	1735-5133	Active
Iranian Cardiovascular Research Journal	1735-885X	Active
Iranian Journal of Allergy, Asthma and Immunology	1735-1502	Active
Iranian Journal of Arthropod-Borne Diseases	1735-7179	Active
Iranian Journal of Basic Medical Sciences	2008-3866	Active
Iranian Journal of Cancer Prevention	2008-2398	Active
Iranian Journal of Clinical Infectious Diseases	1735-5109	Active
Iranian Journal of Dermatology	0021-082X	Active
Iranian Journal of Diabetes and Lipid Disorders	1726-7544	Interrupted
Iranian Journal of Diabetes and Obesity	2008-6792	Active
Iranian Journal of Environmental Health Science and Engineering	1735-1979	Active
Iranian Journal of Epidemiology	1735-7489	Active
Iranian Journal of Health and Environment	2008-2029	Active
Iranian Journal of Medical Microbiology	1735-8612	Active
Iranian Journal of Medical Physics	1735-160X	Active
Iranian Journal of Nuclear Medicine	1681-2824	Active
Iranian Journal of Nursing and Midwifery Research [IJNMR]	1735-9066	Interrupted
Iranian Journal of Nutrition Sciences and Food Technology	1735-7756	Active
Iranian Journal of Obstetric, Gynecology and Infertility [The]	1680-2993	Active

Journal	ISSN	Status
Iranian Journal of Ophthalmology	1735-4153	Active
Iranian Journal of Otorhinolaryngology	1560-1293	Active
Iranian Journal of Parasitology	1735-7020	Active
Iranian Journal of Pediatrics	2008-2142	Active
Iranian Journal of Psychiatry	1735-4587	Interrupted
Iranian Journal of Psychiatry and Behavioral Sciences	1735-8639	Active
Iranian Journal of Psychiatry and Clinical Psychology (IJPCP)	1735-4315	Active
Iranian Journal of Public Health	0304-4556	Active
Iranian Journal of Radiation Research	1728-4554	Active
Iranian Journal of Radiology	1735-1065	Active
Iranian Journal of Veterinary Research	1728-1997	Active
Iranian Rehabilitation Journal	1735-3602	Active
JBUMS - Journal of Babol University of Medical Sciences	1561-4107	Interrupted
JDT - Journal of Dentistry Tehran University of Medical Sciences	1735-2150	Interrupted
JMR - Journal of Medical Research	1728-1962	Interrupted
JNP - Journal of Nephropathology New	2251-8363	Active
Journal of Arak University of Medical Sciences - Rahavard Danesh	1735-5338	Active
Journal of Dental Medicine - Tehran University of Medical Sciences	1024-641X	Active
Journal of Dental Research, Dental Clinics, Dental Prospects	2008-210X	Active
Journal of Dental School - Shahid Beheshti University of Medical Sciences	1735-7683	Active
Journal of Dentistry - Shiraz University of Medical Sciences	1728-3426	Active
Journal of Environmental Studies	1025-8620	Active
Journal of Family and Reproductive Health	1735-8949	Active
Journal of Fundamentals of Mental Health [The]	1028-6918	Active
Journal of Gorgan University of Medical Sciences	1562-4765	Active
Journal of Guilan University of Medical Sciences	2008-4048	Active
Journal of Health Administration	2008-1200	Active
Journal of Hygiene and Health	1735-2363	Interrupted
Journal of Injury and Violence Research	2008-2053	Active
Journal of Iranian Anatomical Sciences	1728-6158	Active
Journal of Isfahan Dental School	1735-255X	Interrupted
Journal of Isfahan Medical School	1027-7595	Interrupted
Journal of Islamic Dental Association of Iran [The] - JIDA	1024-6428	Active
Journal of Jahrom University of Medical Sciences	1735-5168	Active
Journal of Kerman University of Medical Sciences	1023-9510	Active

Journal of Kermanshah University of Medical Sciences (JKUMS)	2251-9068	
		Active
Journal of Lasers in Medical Sciences	2008-9783	Active
Journal of Mashhad Dental School	1560-9286	Active
Journal of Mazandaran University of Medical Sciences	1735-9260	Active
Journal of Medical Council of Islamic Republic of Iran	1562-1073	Active
Journal of Medical Education	1735-3998	Interrupted
Journal of Medical Science - Islamic Azad University of Mashhad	1735-7594	Active
Journal of Medicinal Plants	1684-0240	Active
Journal of Modern Rehabilitation	2008-2576	Active
Journal of Nursing and Midwifery Quarterly - Shaheed Beheshti University of Medical Sciences and Health Services	1605-8941	Active
Journal of Ophthalmic and Vision Research	2008-2010	Active
Journal of Periodontology and Implant Dentistry	N/A	Active
Journal of Qazvin University of Medical Sciences [The]	1561-3666	Active
Journal of Rafsanjan University of Medical Sciences	1735-3165	Active
Journal of Rehabilitation	1607-2960	Active
Journal of Reproduction and Infertility	2228-5482	Active
Journal of Research in Behavioural Sciences	1735-2029	Active
Journal of Research in Dental Sciences	2008-4676	Active
Journal of Research in Health Sciences [JRHS]	1682-2765	Active
Journal of Research in Medical Sciences	1735-5311	Active
Journal of Sabzevar School of Medical Sciences	1606-7487	Interrupted
Journal of School of Public Health and Institute of Public Health Research	1735-7586	Active
Journal of Shaheed Sadoughi University of Medical Sciences and Health Services	1562-272X	Active
Journal of Shahrekord University of Medical Sciences	1735-1448	Active
Journal of Tehran University Heart Center [The]	1735-8620	Active
Journal of Veterinary Research	2008-2525	Active
Journal of Zahedan University of Medical Sciences and Health Services	1735-076X	Active
Journal of Zanjan University of Medical Sciences and Health Services	1606-9366	Active
JRMS - Journal of Research in Medical Sciences	1735-1995	Active
JRRS - Journal of Research in Rehabilitation Sciences	1735-7519	Active
Jundishapur Journal of Microbiology [JJM]	2008-3645	Active
Jundishapur Scientific Medical Journal	1026-8960	Active
KOOMESH - Journal of the Semnan University of Medical Sciences	1608-7046	Active
Medical Journal of Mashad University of Medical Sciences	1735-4013	Active
Medical Journal of Tabriz University of Medical Sciences and Health Services	1608-5671	Interrupted

Journal	ISSN	Status
Medical Journal of the Islamic Republic of Iran	1016-1430	Active
Medical Sciences Journal of Islamic Azad University	1023-5922	Active
MEJC - Middle East Journal of Cancer	2008-6709	Active
Middle East Journal of Digestive Diseases	2008-5230	Active
Modares Journal of Medical Sciences, Pathobiology	1562-9554	Active
Nursing and Midwifery Research	1753-5001	Interrupted
Ofogh-E-Danesh	1735-1855	Active
Payavard - Salamat	1735-8132	Active
Payesh - Health Monitor	1680-7626	Active
Pejouhandeh: Bimonthly Research Journal	1735-1022	Active
Qom University of Medical Sciences Journal	1735-7799	Active
Quarterly Journal of Medical Ethics	2008-4374	Active
Quarterly Journal of Medical Law	N/A	Active
Quarterly Journal of Relief and Rescue	4544-2008	Active
Razi Journal of Medical Sciences	2228-7043	Active
Salmand - Iranian Journal of Aging	1735-806X	Active
Scientific and Research Journal of Army University of Medical Sciences - J.A.U.M.S.	1727-1789	Active
Scientific Journal of Forensic Medicine	1027-1457	Interrupted
Scientific Journal of Iranian Blood Transfusion Organization [The]	1027-9520	Active
Scientific Journal of Kurdistan University of Medical Sciences	1560-652X	Active
Social Welfare Quarterly	1735-8191	Interrupted
Strides in Development of Medical Education	1735-4242	Active
Tanaffos	1735-0344	Active
Teb Va Tazkie New	1608-2397	Active
Tehran University Medical Journal [TUMJ]	1683-1764	Active
Toloo-e-Behdasht	1728-5127	Interrupted
Urology Journal	1735-1308	Active
Yafteh Journal	1563-0773	Active
Jordan (9)		
Arab Journal of Psychiatry [The]	1016-8923	Active
Dirasat	1026-3772	Interrupted
Jordan Journal of Pharmaceutical Sciences	1995-7157	Active
Jordan Medical Journal	0446-9283	Active
Journal of the Royal Medical Services	2078-8703	Active
Medical Journal of Islamic World Academy of Sciences	1016-3360	Active

Journal	ISSN	Status
Pan Arab Medical Journal	N/A	Interrupted
Population Bulletin of ESCWA	0258-1914	Interrupted
Smile Dental Journal	2072-473X	Active
Kuwait (6)		
Bulletin of the Kuwait Institute for Medical Specialization	N/A	Active
Food and Nutrition Bulletin	N/A	Active
GJO - Gulf Journal of Oncology [The]	2078-2101	Active
KMJ - Kuwait Medical Journal	0023-5776	Active
Medical Arabization	N/A	Active
Medical Principles and Practice	1011-7571	Active
Lebanon (9)		
ACES - Actualites Cliniques et Scientifiques	1683-8068	Active
AJU - Arab Journal of Urology	N/A	Active
Arab Dental Journal	N/A	Interrupted
JLDA - Journal of the Lebanese Dental Association	1810-9632	Active
Journal of the Arab Neonatology Forum	1812-1756	Iterrupted
Lebanese Science Journal	1561-3410	Active
LMJ - Lebanese Medical Journal	0023-9852	Active
Middle East Journal of Anesthesiology	0544-0440	Active
Middle East Journal of Family Medicine	N/A	Interrupted
Libya (6)		
DMJ - Derna Medical Journal	N/A	Active
Garyounis Medical Journal	0254-7198	Interrupted
JMJ - Jamahiriya Medical Journal	N/A	Active
Libyan Journal of Infectious Diseases [The]	N/A	Active
LJM - Libyan Journal of Medicine	1993-2820	Interrupted
Tabib Attifil Alarabi	N/A	Interrupted
Morocco (6)		
Bulletin Epidemiologique	0851-8238	Interrupted
Journal du Practicien	1113-5667	Interrupted
Maroc Medical	0025-4053	Active
Revue Marocaine de Chirurgie Orthopedique et Traumatologique	N/A	Interrupted
Revue Marocaine de Medecine et Sante	0251-0758	Interrupted
Revue Marocaine des Maladies de L'Enfant	N/A	Interrupted

Journal	ISSN	Status
Oman (3)		
Oman Journal of Ophthalmology	0974-620X	Active
Oman Medical Journal	1999-768X	Active
SQUMJ - Sultan Qaboos University Medical Journal	2075-051X	Active
Pakistan (74)		
Anaesthesia, Pain and Intensive Care	1607-8322	Active
Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College	1563-3241	Active
Annals of Jinnah Postgraduate Medical Centre - Karachi	N/A	Interrupted
Annals of King Edward Medical College	1684-6680	Interrupted
APMC -Annals of Punjab Medical College	1024-8919	Active
Bahria Journal of Professional Psychology	1816-0840	Active
Biomedica	1992-4852	Active
Challenge - Quarterly [The]	0528-7944	Interrupted
Community Medicine	0301-7265	Interrupted
Diabetes Digest	1369-7501	Active
GJMS – Gomal Journal of Medical Sciences	1819-7973	Active
Hamdard Medicus	0250-7188	Active
Infectious Diseases Journal of Pakistan	1027-0299	Interrupted
International Journal of Pathology	1810-0155	Active
Isra Medical Journal	2073-8285	Active
JAMC - Journal of Ayub Medical College - Abbotabad - Pakistan	1025-9589	Active
JCPSP - Journal of the College of Physicians and Surgeons Pakistan	1022-386X	Active
JDUHS - Journal of the Dow University of Health Sciences	1995-2198	Active
JKCD - Journal of Khyber College of Dentistry	2220-2633	Active
JLUMHS - Journal of the Liaquat University of Medical Health Sciences	1729-0341	Interrupted
JOPDAK - Journal of the Pakistan Dental Association Karachi	N/A	Interrupted
Journal of Basic and Applied Sciences	1814-8085	Active
Journal of Medical Sciences	1682-4474	Interrupted
Journal of Medical Sciences	1997-3438	Active
Journal of Nephrology Urology and Transplantation	N/A	Interrupted
Journal of Surgery [The]	1681-4517	Interrupted
JPAD - Journal of Pakistan Association of Dermatologists	1560-9014	Active
JPDA - Journal of the Pakistan Dental Association	1680-2292	Active
JPIMS - Journal of Pakistan Institute of Medical Sciences	1683-6928	Interrupted
JPMA - Journal of Pakistan Medical Association	0030-9982	Active

Journal	ISSN	Status
JPMI - Journal of Postgraduate Medical Institute	1013-5472	Active
JPPS - Journal of Pakistan Psychiatric Society	1726-8710	Active
JSP - Journal of Surgery Pakistan International	1817-0242	Active
KMUJ - Khyber Medical University Journal	2072-7763	Active
Lahore Journal of Public Health	N/A	Interrupted
Medical Channel	1681-5491	Interrupted
Medical Forum Monthly	1029-385X	Active
Medical Spectrum [The]	0254-8534	Interrupted
Medicine Today	1813-9876	Active
Mother and Child	0379-2617	Interrupted
PAFMJ - Pakistan Armed Forces Medical Journal	0030-9648	Active
Pakistan Heart Journal	0048-2706	Active
Pakistan Journal of Biochemistry	0300-8185	Interrupted
Pakistan Journal of Chest Medicine	N/A	Interrupted
Pakistan Journal of Clinical Psychology	1019-438X	Active
Pakistan Journal of Community Medicine [The]	N/A	Interrupted
Pakistan Journal of Health	N/A	Interrupted
Pakistan Journal of Medical and Health Sciences	1996-7195	Active
Pakistan Journal of Medical Ethics	N/A	Active
Pakistan Journal of Medical Sciences	1682-024X	Active
Pakistan Journal of Neurology	N/A	Interrupted
Pakistan Journal of Obstetrics and Gynaecology	N/A	Interrupted
Pakistan Journal of Orthodontics, Pediatric and Community Dentistry	1608-134X	Interrupted
Pakistan Journal of Otolaryngology - Head and Neck Surgery	0257-4985	Active
Pakistan Journal of Pathology	1024-6193	Active
Pakistan Journal of Pharmaceutical Sciences	1011-601X	Active
Pakistan Journal of Pharmacology	0255-7088	Interrupted
Pakistan Journal of Physiology	1819-270X	Active
Pakistan Journal of Psychology	0030-9869	Active
Pakistan Journal of Scientific and Industrial Research	0030-9885	Stopped
Pakistan Journal of Scientific and Industrial Research Series A: Physical Sciences	2221-6413	Active
Pakistan Journal of Scientific and Industrial Research Series B: Biological Sciences	2221-6421	Active
Pakistan Medical Journal	0031-000X	Interrupted
Pakistan Ophthalmology	0259-3661	Interrupted
Pakistan Oral and Dental Journal	1012-8700	Active

Journal	ISSN	Status
Pakistan Paediatric Journal	0304-4904	Interrupted
PJC - Pakistan Journal of Cardiology	1016-1244	Interrupted
PJMR - Pakistan Journal of Medical Research	0030-9842	Active
PJO - Pakistan Journal of Ophthalmology	0886-3067	Interrupted
PJPH - Pakistan Journal of Public Health	2225-0891	Active
PJS - Pakistan Journal of Surgery	0258-8552	Active
Proceedings	N/A	Interrupted
Professional Medical Journal - Quarterly [The]	1024-8919	Active
RMJ - Rawal Medical Journal	0303-5212	Interrupted
Palestine (3)		
Al-Quds Medical Journal	N/A	Interrupted
Annals of Alquds Medicine	1815-2635	Interrupted
PMJ - Palestinian Medical Journal	N/A	Interrupted
Qatar (4)		
Gulf Journal of Dermatology and Venereology [The]	N/A	Active
Heart Views	1995-705X	Active
JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care	1999-7086	Active
Qatar Medical Journal	0253-8253	Active
Saudi Arabia (29)		
Annals of Saudi Medicine	0256-4947	Active
Annals of Thoracic Medicine	1817-1737	Active
Hematology, Oncology and Stem Cell Therapy	1658-3876	Active
International Journal of Diabetes Mellitus	1877-5934	Active
International Journal of Health Sciences	1658-3639	Active
Joint Centre for Research in Prosthetics and Orthotics [The]	N/A	Interrupted
Journal of Family and Community Medicine	1319-1683	Active
Journal of Infection and Public Health	1876-0341	Active
Journal of King Abdulaziz University - Medical Sciences	1319-1004	Interrupted
Journal of Taibah University Medical Sciences	1658-3612	Active
Journal of the Saudi Heart Association	1016-7315	Active
MEAJO - Middle East African Journal of Ophthalmology	0974-9233	Active
Neurosciences	1319-6138	Active
Pan Arab Journal of Neurosurgery	1319-6995	Active
Rehabilitation International	N/A	Interrupted
Research Centre Bulletin	1019-5335	Interrupted

Journal	ISSN	Status
Saudi Epidemiology Bulletin	1319-3965	Interrupted
Saudi Heart Journal	1018-077X	Interrupted
Saudi Journal of Disability and Rehabilitation	1319-6499	Interrupted
Saudi Journal of Gastroenterology [The]	1319-3767	Active
Saudi Journal of Oto-Rhino-Laryngology Head and Neck Surgery [The]	1319-8491	Interrupted
Saudi Journal of Sports Medicine [The]	1319-6308	Interrupted
Saudi Medical Journal	0379-5284	Active
SDJ - Saudi Dental Journal [The]	1013-9052	Active
SGH Medical Journal	1658-2489	Interrupted
SJA - Saudi Journal of Anaesthesia	1658-354X	Active
SJO - Saudi Journal of Ophthalmology	1319-4534	Active
SPJ - Saudi Pharmaceutical Journal	1319-0164	Active
Urology Annals	0974-7796	Active
Sudan (9)		
Gezira Journal of Health Sciences	1810-5386	Active
JMJ - Juba Medical Journal	N/A	Interrupted
Khartoum Pharmacy Journal	N/A	Interrupted
Omdurman Journal of Pharmaceutical Sciences	N/A	Interrupted
SJPH - Sudanese Journal of Public Health	1990-7567	Active
Sudan Journal of Medical Sciences	1858-5051	Active
Sudan Medical Journal	0491-4481	Active
Sudan Medical Monitor	1858-5000	Active
Sudanese Journal of Dermatology	1815-3941	Interrupted
Syrian Arab Republic (9)		
Arab Journal of Pharmaceutical Sciences	1683-0369	Active
Arabic Journal of Forensic Medicine and Criminal Science	N/A	Interrupted
Damascus University Journal for Health Sciences	N/A	Active
JABHS - Journal of the Arab Board of Health Specializations	1561-0217	Active
JISHIM - Journal of the International Society for the History of Islamic Medicine	1303-667X	Interrupted
Journal of Clinical Laboratory [The]	1814-411X	Active
Journal of the Arab Board of Medical Specializations	1561-0217	Active
Journal of the Arab Dentist	N/A	Interrupted
Research Journal of Aleppo University - Medical Sciences Series	N/A	Interrupted

Journal	ISSN	Status
Tunisia (9)		
Archives de l'Institut Pasteur de Tunis	0020-2509	Active
Cahiers Medicaux de Tunisie	0300-5291	Interrupted
IDEES - Revue de Perfectionnement Medical et Paramedical	N/A	Interrupted
Maghreb Medical	0330-258X	Active
Revue Maghrebine de Pediatrie [La]	0330-7611	Active
Revue Maghrebine d'Endocrinologie - Diabete et de Reproduction [La]	N/A	Active
Revue Tunisienne d'Infectiologie	1737-8958	Active
SST - Sante et Securite au Travail	N/A	Active
Tunisie Medicale [La]	0041-4131	Active
United Arab Emirates (4)		
EMJ - Emirates Medical Journal	0250-6882	Active
International Journal of Diabetes and Metabolism	1606-7754	Active
IRCMJ - Iranian Red Crescent Medical Journal	1561-4395	Active
JMS - Journal of Medical Sciences	1996-3262	Active
Yemen (7)		
Journal of Tropical Nephro-Urology	N/A	Active
Sana'a University Journal of Medical Sciences	N/A	Interrupted
University of Aden Journal of Natural and Applied Sciences	1606-8947	Active
Yemeni Journal for Medical Sciences [The]	N/A	Interrupted
YHMRJ - Yemeni Health and Medical Research Journal	N/A	Interrupted
YJMHR-Yemeni Journal of Medical and Health Research	N/A	Interrupted
YMJ - Yemen Medical Journal	N/A	Interrupted

## Last update June 2012

## **Appendix III**

## List of EMR Journals Indexed in IMEMR

(by title)

1         AAMJ - Al-Azhar Assiut Medical Journal         1687-1693         Interrupted           2         ACES - Actualites Cliniques et Scientifiques         1683-8068         Active           3         Acta Medica Iranica         0044-6025         Active           4         Advances in Cognitive Science         1561-4174         Interrupted           5         AFJPH - Alghanistan Journal of Public Health         N/A         Active           6         African Journal of Urology         1110-5704         Active           7         Afro-Arab Liver Journal         1687-224X         Active           8         Ain-Shams Journal of Forensic Medicine and Clinical Toxicology         1687-1030         Active           9         Ain-Shams Medical Journal         0002-2144         Interrupted           10         AJAIC - Alexandria Journal of Medical Biotechnology         2008-2835         Active           11         AJMB - Avicenna Journal of Medical Biotechnology         2008-2835         Active           12         AJU - Arab Journal of Urology         N/A         Active           13         Al-Azhar Journal of Dental Science         1110-6751         Interrupted           14         Al-Azhar Medical Journal         1110-0400         Active           15	S/N	Journal	ISSN	Status
3         Acta Medica Iranica         0044-6025         Active           4         Advances in Cognitive Science         1561-4174         Interrupted           5         AFJPH - Afghanistan Journal of Public Health         N/A         Active           6         African Journal of Urology         1110-5704         Active           7         Afro-Arab Liver Journal         1687-224X         Active           8         Ain-Shams Journal of Forensic Medicine and Clinical Toxicology         1687-1030         Active           9         Ain-Shams Medical Journal         0002-2144         Interrupted           10         AJAIC - Alexandria Journal of Anaesthesia and Intensive Care         N/A         Interrupted           11         AJMB - Avicenna Journal of Medical Biotechnology         2008-2835         Active           12         AJU - Arab Journal of Urology         N/A         Active           13         Al-Azhar Journal of Dental Science         1110-6751         Interrupted           14         Al-Azhar Medical Journal         1110-0400         Active           15         Alexandria Dental Journal         1110-0450         Active           16         Alexandria Journal of Hepatogastroenterology         1687-3920         Interrupted           17 <td< td=""><td>1</td><td>AAMJ - Al-Azhar Assiut Medical Journal</td><td>1687-1693</td><td>Interrupted</td></td<>	1	AAMJ - Al-Azhar Assiut Medical Journal	1687-1693	Interrupted
4         Advances in Cognitive Science         1561-4174         Interrupted           5         AFJPH - Afghanistan Journal of Public Health         N/A         Active           6         African Journal of Urology         1110-5704         Active           7         Afro-Arab Liver Journal         1687-224X         Active           8         Ain-Shams Journal of Forensic Medicine and Clinical Toxicology         1687-1030         Active           9         Ain-Shams Medical Journal         0002-2144         Interrupted           10         AJAIC - Alexandria Journal of Anaesthesia and Intensive Care         N/A         Interrupted           11         AJMB - Avicenna Journal of Medical Biotechnology         2008-2835         Active           12         AJU - Arab Journal of Urology         N/A         Active           13         Al-Azhar Journal of Dental Science         1110-6751         Interrupted           14         Al-Azhar Medical Journal         1110-0400         Active           15         Alexandria Dental Journal         1110-015X         Interrupted           16         Alexandria Journal of Food Science and Technology         1687-3920         Interrupted           17         Alexandria Journal of Hepatogastroenterology         2090-1879         Interrupted	2	ACES - Actualites Cliniques et Scientifiques	1683-8068	Active
Active African Journal of Urology Afro-Arab Liver Journal And Shams Journal of Forensic Medicine and Clinical Toxicology Air-Shams Journal of Forensic Medicine and Clinical Toxicology Air-Shams Medical Journal AJAIC - Alexandria Journal of Anaesthesia and Intensive Care All AJAIC - Alexandria Journal of Medicial Biotechnology AJAIC - Alexandria Journal of Urology AJAIC - Alexandria Journal of Urology AJAIC - Alexandria Journal of Urology Alexandria Dental Science Alexandria Dental Science Alexandria Journal Alexandria Journal Alexandria Journal Alexandria Journal of Food Science and Technology Alexandria Journal of Hepatogastroenterology Alexandria Journal of Hepatogastroenterology Alexandria Journal of Hepatogastroenterology Alexandria Journal of Podiatrics Alexandria Journal of Pharmaceutical Sciences Alexandria Journal of Veterinary Science Alexandria Journal of Veterinary Science Alexandria Journal of Veterinary Science Alexandria Medicial Journal (The) Alexandria Medicial Journal Alexandria Journal Ale	3	Acta Medica Iranica	0044-6025	Active
African Journal of Urology  Afro-Arab Liver Journal  Afro-Arab Liver Journal  Afro-Arab Liver Journal  Afro-Arab Liver Journal  Ain-Shams Journal of Forensic Medicine and Clinical Toxicology  Ain-Shams Medical Journal  AJAIC - Alexandria Journal of Anaesthesia and Intensive Care  N/A Interrupted  JAJAIC - Alexandria Journal of Medical Biotechnology  N/A Active  AJAIB - Avicenna Journal of Medical Biotechnology  N/A Active  AI-Azhar Journal of Urology  N/A Active  AI-Azhar Journal of Dental Science  I1110-6751 Interrupted  AI-Azhar Medical Journal  AI-Azhar Medical Journal  AI-Azhar Medical Journal  Alexandria Journal of Food Science and Technology  Alexandria Journal of Food Science and Technology  Alexandria Journal of Hepatogastroenterology  Alexandria Journal of Pediatrics  Alexandria Journal of Pediatrics  Alexandria Journal of Pediatrics  Alexandria Journal of Pediatrics  Alexandria Journal of Veterinary Science  I1110-2047  Active  Alexandria Journal of Veterinary Science  I1110-2047  Active  Alexandria Medical Journal [The]  Alexandria Medical Journal  Al-Alexandria Medical Journal  Al-Coulege Medical Medical Centre - Karachi  N/A Interrupted  Annals of Alquds Medicine  Annals of Alquds Medicine  Annals of Alquds Medicine  Annals of Saudi Medical College  Annals of Hinandria Medical C	4	Advances in Cognitive Science	1561-4174	Interrupted
Afro-Arab Liver Journal 1687-224X Active 1687-1030 Active 179-1030 Active 1	5	AFJPH - Afghanistan Journal of Public Health	N/A	Active
8 Ain-Shams Journal of Forensic Medicine and Clinical Toxicology 1687-1030 Active 9 Ain-Shams Medical Journal 10 AJAIC - Alexandria Journal of Anaesthesia and Intensive Care N/A Interrupted 11 AJMB - Avicenna Journal of Medical Biotechnology 2008-2835 Active 12 AJU - Arab Journal of Urology N/A Active 13 Al-Azhar Journal of Dental Science 1110-6751 Interrupted 14 Al-Azhar Medical Journal 1110-0400 Active 15 Alexandria Dental Journal 1110-0400 Active 16 Alexandria Journal of Food Science and Technology 16 Alexandria Journal of Hepatogastroenterology 17 Alexandria Journal of Hepatogastroenterology 18 Alexandria Journal of Pediatrics 18 Alexandria Journal of Pediatrics 19 Alexandria Journal of Pediatrics 1110-1792 Interrupted 20 Alexandria Journal of Veterinary Science 1110-2047 Active 21 Alexandria Journal of Veterinary Science 22 Al-Kindy College Medical Journal 23 Almustansiriya Journal of Pharmaceutical Sciences 1110-2047 Active 24 Al-Quds Medical Journal 25 Anaesthesia, Pain and Intensive Care 26 Annals of Alquds Medicine 27 Annals of Alquds Medicine 28 Annals of Jinnah Postgraduate Medical Centre - Karachi 29 Annals of Fediatric Surgery 10 Annals of Pediatric Surgery 10 Annals of Pediatric Surgery 110 Annals of Saudi Medicine 110 Annals of Saudi Medicine 110 Annals of Saudi Medicine 110 Annals of Thoracic Medicine 1110-2047 Active 1110-2047	6	African Journal of Urology	1110-5704	Active
9 Ain-Shams Medical Journal 0002-2144 Interrupted 10 AJAIC - Alexandria Journal of Anaesthesia and Intensive Care N/A Interrupted 11 AJMB - Avicenna Journal of Medical Biotechnology 2008-2835 Active 12 AJU - Arab Journal of Urology N/A Active 13 Al-Azhar Journal of Dental Science 1110-6751 Interrupted 14 Al-Azhar Medical Journal 1110-0400 Active 1110-0400 Active 15 Alexandria Dental Journal 1110-0400 Interrupted 16 Alexandria Journal of Food Science and Technology 1687-3920 Interrupted 17 Alexandria Journal of Hepatogastroenterology 2090-1879 Interrupted 18 Alexandria Journal of Pediatrics 1687-9945 Active 19 Alexandria Journal of Pediatrics 1687-9945 Active 19 Alexandria Journal of Veterinary Science 1110-2047 Active 110-2047 Active 110-20	7	Afro-Arab Liver Journal	1687-224X	Active
AJAIC - Alexandria Journal of Anaesthesia and Intensive Care  N/A Interrupted  AJMB - Avicenna Journal of Medical Biotechnology  AJU - Arab Journal of Urology  N/A Active  AI-Azhar Journal of Urology  N/A Active  13 Al-Azhar Journal of Dental Science  1110-6751 Interrupted  14 Al-Azhar Medical Journal  1110-0400 Active  15 Alexandria Dental Journal  1110-015X Interrupted  16 Alexandria Journal of Food Science and Technology  1687-3920 Interrupted  17 Alexandria Journal of Hepatogastroenterology  2090-1879 Interrupted  18 Alexandria Journal of Pediatrics  1687-9945 Active  19 Alexandria Journal of Pharmaceutical Sciences  1110-1792 Interrupted  20 Alexandria Journal of Veterinary Science  1110-2047 Active  21 Alexandria Medical Journal [The]  Alexandria Medical Journal [The]  Alexandria Medical Journal of Pharmaceutical Sciences  1110-9543 Active  23 Almustansiriya Journal of Pharmaceutical Sciences  1815-0993 Interrupted  24 Al-Quds Medical Journal  N/A Interrupted  25 Anaesthesia, Pain and Intensive Care  Annals Abbassi Shaheed Hospital and Karachi Medical and Dental  College  26 Annals Abbassi Shaheed Hospital and Karachi Medical and Dental  College  Annals of Alquds Medicine  1815-2635 Interrupted  28 Annals of Jinnah Postgraduate Medical Centre - Karachi  N/A Interrupted  30 Annals of Fediatric Surgery  1687-4137 Interrupted  31 Annals of Saudi Medicine  32 Annals of He College of Medicine - Mosul  33 Annals of Thoracic Medicine  1817-1737 Active	8	Ain-Shams Journal of Forensic Medicine and Clinical Toxicology	1687-1030	Active
AJMB - Avicenna Journal of Medical Biotechnology  AJU - Arab Journal of Urology  N/A  Active  AJU - Arab Journal of Urology  N/A  Active  13 Al-Azhar Journal of Dental Science  1110-6751 Interrupted  14 Al-Azhar Medical Journal  1110-0400 Active  15 Alexandria Dental Journal  1110-015X Interrupted  16 Alexandria Journal of Food Science and Technology  1687-3920 Interrupted  17 Alexandria Journal of Hepatogastroenterology  2090-1879 Interrupted  18 Alexandria Journal of Pediatrics  1687-9945 Active  19 Alexandria Journal of Pharmaceutical Sciences  1110-1792 Interrupted  20 Alexandria Journal of Veterinary Science  1110-2047 Active  21 Alexandria Medical Journal [The]  22 Al-Kindy College Medical Journal  23 Almustansiriya Journal of Pharmaceutical Sciences  1815-0993 Interrupted  24 Al-Quds Medical Journal  N/A Interrupted  25 Anaesthesia, Pain and Intensive Care  Annals Abbassi Shaheed Hospital and Karachi Medical and Dental  College  26 College  Annals of Alquds Medicine  1815-2635 Interrupted  27 Annals of Alquds Medicine  28 Annals of King Edward Medical College  30 Annals of Fediatric Surgery  1687-4137 Interrupted  31 Annals of Saudi Medicine  32 Annals of Saudi Medicine  33 Annals of Thoracic Medicine - Mosul  34 Annals of Thoracic Medicine  1817-1737 Active	9	Ain-Shams Medical Journal	0002-2144	Interrupted
AJU - Arab Journal of Urology  AI-Azhar Journal of Dental Science  1110-6751 Interrupted  AI-Azhar Medical Journal  1110-0400 Active  Alexandria Dental Journal  1110-015X Interrupted  Alexandria Journal of Food Science and Technology  1687-3920 Interrupted  Alexandria Journal of Hepatogastroenterology  2090-1879 Interrupted  Alexandria Journal of Pediatrics  1687-9945 Active  Alexandria Journal of Pharmaceutical Sciences  1110-1792 Interrupted  Alexandria Journal of Veterinary Science  1110-2047 Active  Alexandria Medical Journal [The]  31 Alexandria Medical Journal [The]  Alexandria Medical Journal  N/A Interrupted  Annals of Alquds Medicine  Annals of Jinnah Postgraduate Medical Centre - Karachi  N/A Interrupted  Annals of King Edward Medical College  Annals of King Edward Medical College  Annals of Saudi Medicine  Annals of Saudi Medicine  Annals of Saudi Medicine  Annals of Thoracic Medicine - Mosul  Annals of Thoracic Medicine  Annals of Thoracic Medicine	10	AJAIC - Alexandria Journal of Anaesthesia and Intensive Care	N/A	Interrupted
Al-Azhar Journal of Dental Science 1110-6751 Interrupted Al-Azhar Medical Journal 1110-0400 Active Alexandria Dental Journal 1110-015X Interrupted Alexandria Journal of Food Science and Technology 1687-3920 Interrupted Alexandria Journal of Hepatogastroenterology 2090-1879 Interrupted Alexandria Journal of Pediatrics 1687-9945 Active Alexandria Journal of Pharmaceutical Sciences 1110-1792 Interrupted Alexandria Journal of Veterinary Science 1110-2047 Active Alexandria Medical Journal [The] 0516-5849 Interrupted Al-Kindy College Medical Journal 1810-9543 Active Al-Quds Medical Journal of Pharmaceutical Sciences 1815-0993 Interrupted Al-Quds Medical Journal N/A Interrupted Al-Quds Medical Journal N/A Interrupted Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College Annals of Alquds Medicine 1815-2635 Interrupted Annals of Saudi Medicine 1815-2635 Interrupted Annals of Fediatric Surgery 1687-4137 Interrupted Annals of Saudi Medicine 0256-4947 Active Annals of Saudi Medicine 0256-4947 Active Annals of Thoracic Medicine Mosul 0028-1446 Interrupted	11	AJMB - Avicenna Journal of Medical Biotechnology	2008-2835	Active
Al-Azhar Medical Journal 1110-0400 Active 15 Alexandria Dental Journal 1110-0400 Interrupted 16 Alexandria Journal of Food Science and Technology 1687-3920 Interrupted 17 Alexandria Journal of Hepatogastroenterology 2090-1879 Interrupted 18 Alexandria Journal of Pediatrics 1687-9945 Active 19 Alexandria Journal of Pharmaceutical Sciences 1110-1792 Interrupted 20 Alexandria Journal of Veterinary Science 1110-2047 Active 21 Alexandria Medical Journal [The] 0516-5849 Interrupted 22 Al-Kindy College Medical Journal 1810-9543 Active 23 Almustansiriya Journal of Pharmaceutical Sciences 1815-0993 Interrupted 24 Al-Quds Medical Journal N/A Interrupted 25 Anaesthesia, Pain and Intensive Care 1607-8322 Active 26 Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College 1563-3241 Active 27 Annals of Alquds Medicine 1815-2635 Interrupted 28 Annals of Jinnah Postgraduate Medical Centre - Karachi N/A Interrupted 29 Annals of King Edward Medical College 1684-6680 Interrupted 30 Annals of Pediatric Surgery 1687-4137 Interrupted 31 Annals of Saudi Medicine 0256-4947 Active 32 Annals of the College of Medicine - Mosul 0028-1446 Interrupted 33 Annals of Thoracic Medicine 1817-1737 Active	12	AJU - Arab Journal of Urology	N/A	Active
Alexandria Dental Journal Alexandria Journal of Food Science and Technology 1687-3920 Interrupted Alexandria Journal of Hepatogastroenterology 2090-1879 Interrupted Alexandria Journal of Pediatrics 1687-9945 Active Alexandria Journal of Pharmaceutical Sciences 1110-1792 Interrupted Alexandria Journal of Veterinary Science 1110-2047 Active Alexandria Medical Journal [The] O516-5849 Interrupted Al-Kindy College Medical Journal Almustansiriya Journal of Pharmaceutical Sciences Al-Quds Medical Journal Al-Quds Medical Journal Al-Quds Medical Journal Anaesthesia, Pain and Intensive Care Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College Annals of Alquds Medicine Annals of Jinnah Postgraduate Medical Centre - Karachi Annals of Sing Edward Medical College Annals of Pediatric Surgery 1687-4137 Interrupted Annals of Saudi Medicine 0256-4947 Active Annals of Thoracic Medicine - Mosul Annals of Thoracic Medicine - Mosul Annals of Thoracic Medicine - Mosul	13	Al-Azhar Journal of Dental Science	1110-6751	Interrupted
Alexandria Journal of Food Science and Technology 1687-3920 Interrupted Alexandria Journal of Hepatogastroenterology 2090-1879 Interrupted Alexandria Journal of Pediatrics 1687-9945 Active Alexandria Journal of Pharmaceutical Sciences 1110-1792 Interrupted Alexandria Journal of Veterinary Science 1110-2047 Active Alexandria Medical Journal [The] 0516-5849 Interrupted Al-Kindy College Medical Journal 1810-9543 Active Almustansiriya Journal of Pharmaceutical Sciences 1815-0993 Interrupted Al-Quds Medical Journal N/A Interrupted Al-Quds Medical Journal N/A Interrupted Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College Annals of Alquds Medicine 1815-2635 Interrupted Annals of Jinnah Postgraduate Medical Centre - Karachi N/A Interrupted Annals of King Edward Medical College 1684-6680 Interrupted Annals of Pediatric Surgery 1687-4137 Interrupted Annals of Saudi Medicine 0256-4947 Active Annals of the College of Medicine - Mosul 0028-1446 Interrupted Annals of Thoracic Medicine 1817-1737 Active	14	Al-Azhar Medical Journal	1110-0400	Active
Alexandria Journal of Hepatogastroenterology  Alexandria Journal of Pediatrics  1687-9945  Active  Alexandria Journal of Pediatrics  110-1792  Alexandria Journal of Pharmaceutical Sciences  1110-2047  Active  Alexandria Journal of Veterinary Science  1110-2047  Active  Alexandria Medical Journal [The]  21 Alexandria Medical Journal [The]  22 Al-Kindy College Medical Journal  33 Almustansiriya Journal of Pharmaceutical Sciences  1815-0993  Interrupted  Al-Quds Medical Journal  Annals of Alquds Medicine  Annals of Alquds Medicine  Annals of Jinnah Postgraduate Medical Centre - Karachi  N/A Interrupted  Annals of King Edward Medical College  Annals of Fediatric Surgery  Annals of Saudi Medicine  Annals of Saudi Medicine  Annals of Saudi Medicine  Annals of Saudi Medicine  Annals of He College of Medicine - Mosul  Annals of Thoracic Medicine  1817-1737  Active	15	Alexandria Dental Journal	1110-015X	Interrupted
Alexandria Journal of Pediatrics  Alexandria Journal of Pharmaceutical Sciences  1110-1792 Interrupted  Alexandria Journal of Veterinary Science  1110-2047 Active  Alexandria Medical Journal [The]  Alexandria Medical Journal [The]  Alexandria Medical Journal [The]  Alexandria Medical Journal  N/A Interrupted  Anaesthesia, Pain and Intensive Care  Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College  Annals of Alquds Medicine  Annals of Alquds Medicine  Annals of Jinnah Postgraduate Medical Centre - Karachi  N/A Interrupted  Annals of King Edward Medical College  1684-6680 Interrupted  Annals of Pediatric Surgery  1687-4137 Interrupted  Annals of Saudi Medicine  Annals of Saudi Medicine  Annals of Saudi Medicine  Annals of He College of Medicine - Mosul  Annals of Thoracic Medicine  1817-1737 Active	16	Alexandria Journal of Food Science and Technology	1687-3920	Interrupted
19 Alexandria Journal of Pharmaceutical Sciences 1110-1792 Interrupted 20 Alexandria Journal of Veterinary Science 11110-2047 Active 21 Alexandria Medical Journal [The] 0516-5849 Interrupted 22 Al-Kindy College Medical Journal 1810-9543 Active 23 Almustansiriya Journal of Pharmaceutical Sciences 1815-0993 Interrupted 24 Al-Quds Medical Journal N/A Interrupted 25 Anaesthesia, Pain and Intensive Care 1607-8322 Active 26 Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College 27 Annals of Alquds Medicine 1815-2635 Interrupted 28 Annals of Jinnah Postgraduate Medical Centre - Karachi N/A Interrupted 29 Annals of King Edward Medical College 1684-6680 Interrupted 30 Annals of Pediatric Surgery 1687-4137 Interrupted 31 Annals of Saudi Medicine 0256-4947 Active 32 Annals of the College of Medicine - Mosul 0028-1446 Interrupted 33 Annals of Thoracic Medicine 1817-1737 Active	17	Alexandria Journal of Hepatogastroenterology	2090-1879	Interrupted
Alexandria Journal of Veterinary Science 1110-2047 Active 21 Alexandria Medical Journal [The] 0516-5849 Interrupted 22 Al-Kindy College Medical Journal 1810-9543 Active 23 Almustansiriya Journal of Pharmaceutical Sciences 1815-0993 Interrupted 24 Al-Quds Medical Journal N/A Interrupted 25 Anaesthesia, Pain and Intensive Care 1607-8322 Active 26 Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College 1563-3241 Active 27 Annals of Alquds Medicine 1815-2635 Interrupted 28 Annals of Jinnah Postgraduate Medical Centre - Karachi N/A Interrupted 29 Annals of King Edward Medical College 1684-6680 Interrupted 30 Annals of Pediatric Surgery 1687-4137 Interrupted 31 Annals of Saudi Medicine 00256-4947 Active 32 Annals of the College of Medicine - Mosul 0028-1446 Interrupted 33 Annals of Thoracic Medicine 1817-1737 Active	18	Alexandria Journal of Pediatrics	1687-9945	Active
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Almustansiriya Journal of Pharmaceutical Sciences  1815-0993 Interrupted  Al-Quds Medical Journal  N/A Interrupted  Anaesthesia, Pain and Intensive Care  1607-8322 Active  Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College  Annals of Alquds Medicine  1815-2635 Interrupted  Annals of Jinnah Postgraduate Medical Centre - Karachi  Annals of King Edward Medical College  Annals of Pediatric Surgery  1687-4137 Interrupted  Annals of Saudi Medicine  20256-4947 Active  Annals of the College of Medicine - Mosul  Annals of Thoracic Medicine  1817-1737 Active	21	Alexandria Medical Journal [The]	0516-5849	Interrupted
Al-Quds Medical Journal  Anaesthesia, Pain and Intensive Care  Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College  Annals of Alquds Medicine  Annals of Jinnah Postgraduate Medical Centre - Karachi  Annals of King Edward Medical College  Annals of Pediatric Surgery  Annals of Saudi Medicine  Annals of Saudi Medicine  Annals of Shadi Medicine  Annals of Saudi Medicine  Annals of Saudi Medicine  Annals of Saudi Medicine  Annals of Thoracic Medicine  N/A Interrupted  1684-6680 Interrupted  1687-4137 Interrupted  Annals of Saudi Medicine  0256-4947 Active  32 Annals of Thoracic Medicine - Mosul  33 Annals of Thoracic Medicine	22	Al-Kindy College Medical Journal	1810-9543	Active
Annals of Saudi Medicine  1607-8322  Active  1563-3241  Active  1815-2635  Interrupted  N/A  Interrupted  1684-6680  Interrupted  1687-4137  Interrupted  Annals of Saudi Medicine  27 Annals of Saudi Medicine  28 Annals of Pediatric Surgery  1687-4137  Active  29 Annals of Pediatric Surgery  1687-4137  Active  17 Annals of Saudi Medicine  1817-1737  Active	23	Almustansiriya Journal of Pharmaceutical Sciences	1815-0993	Interrupted
Annals Abbassi Shaheed Hospital and Karachi Medical and Dental College Annals of Alquds Medicine Annals of Alquds Medicine Annals of Jinnah Postgraduate Medical Centre - Karachi Annals of King Edward Medical College Annals of Fediatric Surgery Annals of Saudi Medicine Annals of Saudi Medicine Annals of Saudi Medicine Annals of the College of Medicine - Mosul Annals of Thoracic Medicine Annals of Thoracic Medicine Annals of Thoracic Medicine	24	Al-Quds Medical Journal	N/A	Interrupted
College  College  Annals of Alquds Medicine  Ranals of Jinnah Postgraduate Medical Centre - Karachi  Annals of King Edward Medical College  Annals of Pediatric Surgery  Annals of Saudi Medicine  Annals of Saudi Medicine  Annals of the College of Medicine - Mosul  Annals of Thoracic Medicine  College  Ranals of Thoracic Medicine  Ranals of Thoracic Medicine  Ranals of Thoracic Medicine  College of Medicine - Mosul  College of Medicine - Mosul  Ranals of Thoracic Medicine	25		1607-8322	Active
Annals of Jinnah Postgraduate Medical Centre - Karachi  N/A Interrupted  Annals of King Edward Medical College  1684-6680 Interrupted  Annals of Pediatric Surgery  1687-4137 Interrupted  Annals of Saudi Medicine  0256-4947 Active  Annals of the College of Medicine - Mosul  Annals of Thoracic Medicine  1817-1737 Active	26		1563-3241	Active
Annals of King Edward Medical College  1684-6680 Interrupted  Annals of Pediatric Surgery  1687-4137 Interrupted  Annals of Saudi Medicine  20256-4947 Active  Annals of the College of Medicine - Mosul  Annals of Thoracic Medicine  1817-1737 Active	27		1815-2635	Interrupted
30 Annals of Pediatric Surgery 1687-4137 Interrupted 31 Annals of Saudi Medicine 0256-4947 Active 32 Annals of the College of Medicine - Mosul 0028-1446 Interrupted 33 Annals of Thoracic Medicine 1817-1737 Active	28	Annals of Jinnah Postgraduate Medical Centre - Karachi	N/A	Interrupted
31 Annals of Saudi Medicine 0256-4947 Active  32 Annals of the College of Medicine - Mosul 0028-1446 Interrupted  33 Annals of Thoracic Medicine 1817-1737 Active	29	Annals of King Edward Medical College	1684-6680	Interrupted
32     Annals of the College of Medicine - Mosul     0028-1446     Interrupted       33     Annals of Thoracic Medicine     1817-1737     Active	30	Annals of Pediatric Surgery	1687-4137	Interrupted
33 Annals of Thoracic Medicine 1817-1737 Active	31	Annals of Saudi Medicine	0256-4947	Active
	32	Annals of the College of Medicine - Mosul	0028-1446	Interrupted
24 ADMC Appale of Punish Medical College 4024 9040 Astrice	33	Annals of Thoracic Medicine	1817-1737	Active
Active Activities of Fulfilation intentical College	34	APMC -Annals of Punjab Medical College	1024-8919	Active
35 Applied Endocrinology in Egypt 1110-1776 Interrupted	35	Applied Endocrinology in Egypt	1110-1776	Interrupted

S/N	Journal	ISSN	Status
36	Arab Dental Journal	N/A	Interrupted
37	Arab Journal for Food and Nutrition	1608-8352	Interrupted
38	Arab Journal of Biotechnology	1110-6875	Active
39	Arab Journal of Gastroenterology	1687-1979	Active
40	Arab Journal of Laboratory Medicine [The]	1110-1822	Active
41	Arab Journal of Pharmaceutical Sciences	1683-0369	Active
42	Arab Journal of Psychiatry [The]	1016-8923	Active
43	Arabic Journal of Forensic Medicine and Criminal Science	N/A	Interrupted
44	Archives de l'Institut Pasteur de Tunis	0020-2509	Active
45	Archives of Iranian Medicine	1029-2977	Active
46	Armaghane-danesh	1728-6506	Active
47	ARYA Atherosclerosis Journal	1735-3955	Interrupted
48	Asian Journal of Sports Medicine	2008-000X	Active
49	ASJOG - Ain-Shams Journal of Obstetrics and Gynecology	1697-2193	Interrupted
50	ASNJ - Alexandria Scientific Nursing Journal	1687-3858	Active
51	Assiut Medical Journal	1110-0494	Active
52	Assiut University Bulletin for Environmental Researches	1110-6107	Active
53	Assiut Veterinary Medical Journal	N/A	Interrupted
54	Audiology	1735-1936	Active
55	Bahrain Medical Bulletin	1012-8298	Active
56	Bahria Journal of Professional Psychology	1816-0840	Active
57	Basic and Clinical Neurosciences	N/A	Active
58	Basrah Journal of Surgery	N/A	Interrupted
59	BCCR - Basic and Clinical Cancer Research	2228-6527	Active
60	Benha Medical Journal	1110-208X	Active
61	Bina Journal of Ophthalmology	1026-6399	Interrupted
62	Biomedica	1992-4852	Active
63	Bulletin Epidemiologique	0851-8238	Interrupted
64	Bulletin of Alexandria Faculty of Medicine	1110-0834	Active
65	Bulletin of Alexandria Thoracic Association	N/A	Interrupted
66	Bulletin of Endemic Disease - Baghdad	0007-4845	Interrupted
67	Bulletin of Faculty of Pharmacy - Cairo University	1110-0931	Interrupted
68	Bulletin of Faculty of Physical Therapy - Cairo University	1110-6611	Interrupted
69	Bulletin of High Institute of Public Health [The]	1110-0036	Active
70	Bulletin of Pharmaceutical Sciences - Assiut University	1110-0052	Active

S/N	Journal	ISSN	Status
71	Bulletin of the Faculty of Science - University of Alexandria	0568-9619	Interrupted
72	Bulletin of the Kuwait Institute for Medical Specialization	N/A	Active
73	Bulletin of the National Nutrition Institute of the Arab Republic of Egypt	N/A	Active
74	Bulletin of the National Research Centre	1110-0591	Active
75	Bulletin of the Ophthalmological Society of Egypt	0078-5342	Interrupted
76	Cahiers Medicaux de Tunisie	0300-5291	Interrupted
77	Cell Journal (Yakhteh)	2228-5806	Active
78	Challenge - Quarterly [The]	0528-7944	Interrupted
79	Childhood and Development Quarterly	1110-8681	Interrupted
80	Clinical Diabetes	0891-8929	Active
81	Community Medicine	0301-7265	Interrupted
82	Damascus University Journal for Health Sciences	N/A	Active
83	DARU - Journal of Pharmaceutical Sciences	1560-8115	Active
84	DENA - Quarterly Journal of Yasuj Faculty of Nursing and Midwifery	1735-8450	Interrupted
85	Dermatology and Cosmetic Quarterly	2008-7470	Active
86	Diabetes Digest	1369-7501	Active
87	Dirasat	1026-3772	Interrupted
88	DMJ - Derna Medical Journal	N/A	Active
89	DMJ - Dohuk Medical Journal	2071-7326	Active
90	DRJ - Dental Research Journal	1735-3327	Active
91	EDJ - Egyptian Dental Journal	0070-9484	Interrupted
92	Egyptian Heart Journal [The]	1110-2608	Interrupted
93	Egyptian Journal of Anatomy [The]	1110-2144	Interrupted
94	Egyptian Journal of Biomedical Engineering	1012-5558	Active
95	Egyptian Journal of Biophysics and Biomedical Engineering	1110-8525	Active
96	Egyptian Journal of Bronchology [The]	1687-8426	Active
97	Egyptian Journal of Cataract and Refractive Surgery [The]	N/A	Active
98	Egyptian Journal of Chemistry	0449-2285	Active
99	Egyptian Journal of Community Medicine [The]	1110-1865	Active
100	Egyptian Journal of Dermatology and Andrology	1110-7650	Interrupted
101	Egyptian Journal of Diabetes [The]	N/A	Interrupted
102	Egyptian Journal of Food Science	1110-0192	Active
103	Egyptian Journal of Genetics and Cytology	0046-161X	Interrupted
104	Egyptian Journal of Histology [The]	1110-0559	Active
105	Egyptian Journal of Hospital Medicine [The]	1687-2002	Interrupted

S/N	Journal	ISSN	Status
106	Egyptian Journal of Immunology [The]	1110-4902	Active
107	Egyptian Journal of Medical Human Genetics [The]	1110-8630	Active
108	Egyptian Journal of Medical Laboratory Sciences	1110-5593	Active
109	Egyptian Journal of Medical Microbiology	1110-2179	Interrupted
110	Egyptian Journal of Microbiology	0022-2704	Interrupted
111	Egyptian Journal of Neonatology [The]	1110-8991	Interrupted
112	Egyptian Journal of Neurology, Psychiatry and Neurosurgery [The]	1110-1083	Active
113	Egyptian Journal of Nutrition	1687-1235	Active
114	Egyptian Journal of Nutrition and Health	1687-7950	Active
115	Egyptian Journal of Occupational Medicine	1110-1881	Interrupted
116	Egyptian Journal of Otolaryngology [The]	1012-5574	Interrupted
117	Egyptian Journal of Paediatrics [The]	1687-1677	Interrupted
118	Egyptian Journal of Pediatric Allergy and Immunology	1687-1642	Active
119	Egyptian Journal of Pharmaceutical Sciences	0301-5068	Active
120	Egyptian Journal of Physiological Sciences	0301-8660	Interrupted
121	Egyptian Journal of Psychiatry [The]	1110-1105	Interrupted
122	Egyptian Journal of Schistosomiasis and Infectious and Endemic Diseases	1110-7278	Interrupted
123	Egyptian Journal of Surgery [The]	1110-1121	Active
124	Egyptian Journal of Urology	1110-5712	Interrupted
125	Egyptian Journal of Veterinary Science	1110-0222	Active
126	Egyptian Liver Journal	2090-6218	Active
127	Egyptian Medical Journal of the National Research Center	1687-1278	Interrupted
128	Egyptian Orthodontic Journal	N/A	Interrupted
129	Egyptian Orthopaedic Journal [The]	1110-1148	Interrupted
130	Egyptian Pharmaceutical Journal [National Research Center]	1687-4315	Active
131	Egyptian Population and Family Planning Review [The]	N/A	Interrupted
132	Egyptian Rheumatology and Rehabilitation	1110-161X	Active
133	Egyptian Science Magazine [The]	1687-3815	Active
134	EJB - Egyptian Journal of Biochemistry and Molecular Biology [The]	1687-1502	Active
135	EJENTAS - Egyptian Journal of ENT and Allied Sciences	2090-0740	Interrupted
136	EMHJ - Eastern Mediterranean Health Journal	1020-3397	Active
137	EMJ - Emirates Medical Journal	0250-6882	Active
138	Endovascular Journal	2008-1812	Active
139	Feyz - Journal of Kashan University of Medical Sciences	1029-7855	Active
140	Food and Nutrition Bulletin	N/A	Active

S/N	Journal	ISSN	Status
141	Garyounis Medical Journal	0254-7198	Interrupted
142	Gastroenterology and Hepatology from Bed to Bench	2010-2258	Active
143	Gazette of the Egyptian Paediatric Association [The]	1110-6638	Interrupted
144	Genetics in the 3rd Millennium	1728-6182	Active
145	Gezira Journal of Health Sciences	1810-5386	Active
146	GJMS – Gomal Journal of Medical Sciences	1819-7973	Active
147	GJO - Gulf Journal of Oncology [The]	2078-2101	Active
148	Govaresh	1560-7186	Active
149	Gulf Journal of Dermatology and Venereology [The]	N/A	Active
150	HAKIM Research Journal	1561-252X	Active
151	Hamdard Medicus	0250-7188	Active
152	HAYAT - Journal of Faculty of Nursing and Midwifery [The]	1735-2215	Active
153	Health Information Management	1735-7853	Active
154	Health Services Journal of the Eastern Mediterrenean Region	1014-9899	Interrupted
155	Heart Views	1995-705X	Active
156	Hematology, Oncology and Stem Cell Therapy	1658-3876	Active
157	Hepatitis Monthly	1735-143X	Active
158	Homa-ye-Salamat	2008-2002	Active
159	Hormozgan Medical Journal	1735-2223	Active
160	Hospital - Journal of Iranian Scientific Hospital Association	2008-1982	Active
161	IBJ - Iranian Biomedical Journal	1028-852X	Active
162	IDEES - Revue de Perfectionnement Medical et Paramedical	N/A	Interrupted
163	IEJ - Iranian Endodontic Journal	1735-7497	Active
164	IHJ - Iranian Heart Journal	1735-7306	Active
165	IJB - Iranian Journal of Biotechnology	1728-3043	Active
166	IJBC - Iranian Journal of Blood and Cancer	2008-4595	Active
167	IJCN - Iranian Journal of Child Neurology	1735-4668	Active
168	IJEM - Iranian Journal of Endocrinology and Metabolism	1683-4844	Active
169	IJFS - International Journal of Fertility and Sterility	2008-076X	Active
170	IJHOSCR - International Journal of Hematology-Oncology and Stem Cell Research	2008-2207	Active
171	IJI - Iranian Journal of Immunology	1735-1383	Active
172	IJKD - Iranian Journal of Kidney Diseases	1735-8582	Active
173	IJM - Iranian Journal of Microbiology	2008-3289	Active
174	IJME - Iranian Journal of Medical Education	1608-9359	Active
175	IJMS - Iranian Journal of Medical Sciences	0253-0716	Active

S/N	Journal	ISSN	Status
176	IJO - Iranian Journal of Orthodontics	1735-5087	Interrupted
177	IJOH - International Journal of Occupational Hygiene	2008-5109	Active
178	IJPM - International Journal of Preventive Medicine New	2008-7802	Active
179	IJPR - Iranian Journal of Pharmaceutical Research	1735-0328	Active
180	IJRM - Iranian Journal of Reproductive Medicine	1680-6433	Active
181	IMJ - Iraqi Medical Journal	0304-4564	Interrupted
182	Infectious Diseases Journal of Pakistan	1027-0299	Interrupted
183	International Journal of Diabetes and Metabolism	1606-7754	Active
184	International Journal of Diabetes Mellitus	1877-5934	Active
185	International Journal of Endocrinology and Metabolism	1726-913X	Active
186	International Journal of Environmental Research	1735-6865	Active
187	International Journal of Environmental Science and Technology	1735-1472	Active
188	International Journal of Health Sciences	1658-3639	Active
189	International Journal of Occupational and Environmental Medicine	2008-6520	Active
190	International Journal of Organ Transplantation Medicine	2008-6490	Active
191	International Journal of Pathology	1810-0155	Active
192	INTJVR - International Journal of Veterinary Research	2008-2533	Active
193	IOJ - Iraqi Orthodontic Journal	1816-0581	Interrupted
194	IPMJ - Iraqi Postgraduate Medical Journal	1608-8360	Active
195	Iran Journal of Nursing	2008-5923	Active
196	Iran Occupational Health	1735-5133	Active
197	Iranian Cardiovascular Research Journal	1735-885X	Active
198	Iranian Journal of Allergy, Asthma and Immunology	1735-1502	Active
199	Iranian Journal of Arthropod-Borne Diseases	1735-7179	Active
200	Iranian Journal of Basic Medical Sciences	2008-3866	Active
201	Iranian Journal of Cancer Prevention	2008-2398	Active
202	Iranian Journal of Clinical Infectious Diseases	1735-5109	Active
203	Iranian Journal of Dermatology	0021-082X	Active
204	Iranian Journal of Diabetes and Lipid Disorders	1726-7544	Interrupted
205	Iranian Journal of Diabetes and Obesity	2008-6792	Active
206	Iranian Journal of Environmental Health Science and Engineering	1735-1979	Active
207	Iranian Journal of Epidemiology	1735-7489	Active
208	Iranian Journal of Health and Environment	2008-2029	Active
209	Iranian Journal of Medical Microbiology	1735-8612	Active
210	Iranian Journal of Medical Physics	1735-160X	Active

S/N	Journal	ISSN	Status
211	Iranian Journal of Nuclear Medicine	1681-2824	Active
212	Iranian Journal of Nursing and Midwifery Research [IJNMR]	1735-9066	Interrupted
213	Iranian Journal of Nutrition Sciences and Food Technology	1735-7756	Active
214	Iranian Journal of Obstetric, Gynecology and Infertility [The]	1680-2993	Active
215	Iranian Journal of Ophthalmology	1735-4153	Active
216	Iranian Journal of Otorhinolaryngology	1560-1293	Active
217	Iranian Journal of Parasitology	1735-7020	Active
218	Iranian Journal of Pediatrics	2008-2142	Active
219	Iranian Journal of Psychiatry	1735-4587	Interrupted
220	Iranian Journal of Psychiatry and Behavioral Sciences	1735-8639	Active
221	Iranian Journal of Psychiatry and Clinical Psychology (IJPCP)	1735-4315	Active
222	Iranian Journal of Public Health	0304-4556	Active
223	Iranian Journal of Radiation Research	1728-4554	Active
224	Iranian Journal of Radiology	1735-1065	Active
225	Iranian Journal of Veterinary Research	1728-1997	Active
226	Iranian Rehabilitation Journal	1735-3602	Active
227	Iraqi Army Medical Journal	N/A	Interrupted
228	Iraqi Journal of Agriculture	1818-6645	Active
229	Iraqi Journal of Biotechnology	N/A	Interrupted
230	Iraqi Journal of Community Medicine	1684-5382	Interrupted
231	Iraqi Journal of Medical Sciences	1681-6579	Interrupted
232	Iraqi Journal of Microbiology	N/A	Interrupted
233	Iraqi Journal of Pharmaceutical Sciences	N/A	Interrupted
234	Iraqi Journal of Tropical Disease Researches	1814-0823	Interrupted
235	IRCMJ - Iranian Red Crescent Medical Journal	1561-4395	Active
236	Isra Medical Journal	2073-8285	Active
237	JABHS - Journal of the Arab Board of Health Specializations	1561-0217	Active
238	JAMC - Journal of Ayub Medical College - Abbotabad - Pakistan	1025-9589	Active
239	JBMS - Journal of the Bahrain Medical Society	1015-6321	Active
240	JBUMS - Journal of Babol University of Medical Sciences	1561-4107	Interrupted
241	JCPSP - Journal of the College of Physicians and Surgeons Pakistan	1022-386X	Active
242	JDT - Journal of Dentistry Tehran University of Medical Sciences	1735-2150	Interrupted
243	JDUHS - Journal of the Dow University of Health Sciences	1995-2198	Active
244	JEMTAC - Journal of Emergency Medicine, Trauma and Acute Care	1999-7086	Active
245	JESN - Journal of Egyptian Society of Nephrology [The]	N/A	Interrupted

JISHIM - Journal of the International Society for the History of Islamic Medicine  JKCD - Journal of Khyber College of Dentistry  2220-2633 Active  JLDA - Journal of the Lebanese Dental Association  1810-9632 Active  JLDA - Journal of the Liaquat University of Medical Health Sciences  JLDA - Journal of the Liaquat University of Medical Health Sciences  JMJ - Jamahiriya Medical Journal  N/A Active  JMJ - Juba Medical Journal  N/A Interrupted  JMR - Journal of Medical Research  1728-1962 Interrupted  JMR - Journal of Medical Sciences  JMR - Journal of Medical Sciences  JMR - Journal of Medical Sciences  1996-3262 Active  JNP - Journal of Nephropathology New  2251-8363 Active  JOPDAK - Journal of Heakistan Dental Association Karachi  N/A Interrupted  JOPDAK - Journal of the Pakistan Dental Association Karachi  N/A Interrupted  Jordan Journal of Pharmaceutical Sciences  Jordan Medical Journal  Journal of Pharmaceutical Sciences  Journal of Vafé-9283 Active  Journal of Parak University of Medical Sciences - Rahavard Danesh  Journal of Basic And Applied Sciences  Journal of Basic Medical Sciences  N/A Interrupted  Journal of Basic Medical Sciences  N/A Interrupted  Journal of Childhood Studies  Journal of Childhood Studies  Journal of Community Medicine  N/A Interrupted  Journal of Dental Research, Dental Clinics, Dental Prospects  Journal of Dental Research, Dental Clinics, Dental Prospects  Journal of Dental School - Shahid Beheshti University of Medical  Journal of Dental School - Shahid Beheshti University of Medical  Journal of Dental School - Shahid Beheshti University of Medical  Journal of Dental School - Shahid Beheshti University of Medical  Journal of Dental School - Shahid Beheshti University of Medical  Journal of Dental School - Shahid Beheshti University of Medical  Journal of Dental School - Shahid Beheshti University of Medical  Journal of Dental School - Shahid Beheshti University of Medical  Journal of Dental School - Shahid Beheshti University of Medical  Journal of Dental Research, Dental Prospec
JLDA - Journal of the Lebanese Dental Association  1810-9632 Active  249 JLUMHS - Journal of the Liaquat University of Medical Health Sciences  1729-0341 Interrupted  250 JMJ - Jamahiriya Medical Journal  N/A Active  251 JMJ - Juba Medical Journal  N/A Interrupted  252 JMR - Journal of Medical Research  1728-1962 Interrupted  253 JMS - Journal of Medical Sciences  1996-3262 Active  254 JNP - Journal of Nephropathology New  2251-8363 Active  255 Joint Centre for Research in Prosthetics and Orthotics [The]  N/A Interrupted  256 JOPDAK - Journal of the Pakistan Dental Association Karachi  N/A Interrupted  257 Jordan Journal of Pharmaceutical Sciences  1995-7157 Active  258 Jordan Medical Journal  259 Journal du Practicien  1113-5667 Interrupted  260 Journal of Arak University of Medical Sciences - Rahavard Danesh  1735-5338 Active  261 Journal of Basic and Applied Sciences  1814-8085 Active  262 Journal of Childhood Studies  263 Journal of Childhood Studies  264 Journal of Childhood Studies  265 Journal of Childhood Studies  266 Journal of Community Medicine  N/A Interrupted  267 Journal of Dental Research, Dental Clinics, Dental Prospects  268 Journal of Dental Research, Dental Clinics, Dental Prospects  269 Journal of Dental School - Shahid Beheshti University of Medical  260 Journal of Dental School - Shahid Beheshti University of Medical  260 Journal of Dental School - Shahid Beheshti University of Medical  261 Journal of Dental School - Shahid Beheshti University of Medical
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JMJ - Jamahiriya Medical Journal  N/A Active    251
JMJ - Juba Medical Journal  N/A Interrupted  JMR - Journal of Medical Research  JMS - Journal of Medical Sciences  JMS - Journal of Medical Sciences  JNP - Journal of Nephropathology New  Joint Centre for Research in Prosthetics and Orthotics [The]  N/A Interrupted  JOPDAK - Journal of the Pakistan Dental Association Karachi  N/A Interrupted  Jordan Journal of Pharmaceutical Sciences  Jordan Medical Journal  Journal du Practicien  Journal of Arak University of Medical Sciences - Rahavard Danesh  Journal of Basic and Applied Sciences  Journal of Basic Medical Sciences  N/A Interrupted  Journal of Childhood Studies  Journal of Childhood Studies  Journal of Community Medicine  M/A Interrupted  Journal of Dental Medicine - Tehran University of Medical Sciences  Journal of Dental Research, Dental Clinics, Dental Prospects  Journal of Dental School - Shahid Beheshti University of Medical  Journal of Dental School - Shahid Beheshti University of Medical  Journal of Dental School - Shahid Beheshti University of Medical  Journal of Dental School - Shahid Beheshti University of Medical  Journal of Dental School - Shahid Beheshti University of Medical  Journal of Dental School - Shahid Beheshti University of Medical  Journal of Dental School - Shahid Beheshti University of Medical
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JMS - Journal of Medical Sciences  1996-3262 Active  254 JNP - Journal of Nephropathology New  2251-8363 Active  255 Joint Centre for Research in Prosthetics and Orthotics [The]  N/A Interrupted  256 JOPDAK - Journal of the Pakistan Dental Association Karachi  N/A Interrupted  257 Jordan Journal of Pharmaceutical Sciences  1995-7157 Active  258 Jordan Medical Journal  O446-9283 Active  259 Journal du Practicien  1113-5667 Interrupted  260 Journal of Arak University of Medical Sciences - Rahavard Danesh  1735-5338 Active  261 Journal of Basic and Applied Sciences  1814-8085 Active  262 Journal of Basic Medical Sciences  N/A Interrupted  263 Journal of Childhood Studies  2090-0619 Active  264 Journal of Clinical Laboratory [The]  1814-411X Active  265 Journal of Community Medicine  N/A Interrupted  266 Journal of Dental Medicine - Tehran University of Medical Sciences  1024-641X Active  267 Journal of Dental Research, Dental Clinics, Dental Prospects  2008-210X Active
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Journal du Practicien  260 Journal of Arak University of Medical Sciences - Rahavard Danesh  261 Journal of Basic and Applied Sciences  262 Journal of Basic Medical Sciences  263 Journal of Childhood Studies  264 Journal of Clinical Laboratory [The]  265 Journal of Community Medicine  266 Journal of Dental Medicine - Tehran University of Medical Sciences  267 Journal of Dental Research, Dental Clinics, Dental Prospects  268 Journal of Dental School - Shahid Beheshti University of Medical  269 Journal of Dental School - Shahid Beheshti University of Medical  260 Journal of Dental School - Shahid Beheshti University of Medical  261 Journal of Dental School - Shahid Beheshti University of Medical  260 Journal of Dental School - Shahid Beheshti University of Medical
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Journal of Basic and Applied Sciences  1814-8085 Active  262 Journal of Basic Medical Sciences  N/A Interrupted  263 Journal of Childhood Studies  2090-0619 Active  264 Journal of Clinical Laboratory [The]  1814-411X Active  265 Journal of Community Medicine  N/A Interrupted  266 Journal of Dental Medicine - Tehran University of Medical Sciences  1024-641X Active  267 Journal of Dental Research, Dental Clinics, Dental Prospects  2008-210X Active
262     Journal of Basic Medical Sciences     N/A     Interrupted       263     Journal of Childhood Studies     2090-0619     Active       264     Journal of Clinical Laboratory [The]     1814-411X     Active       265     Journal of Community Medicine     N/A     Interrupted       266     Journal of Dental Medicine - Tehran University of Medical Sciences     1024-641X     Active       267     Journal of Dental Research, Dental Clinics, Dental Prospects     2008-210X     Active       268     Journal of Dental School - Shahid Beheshti University of Medical     1735-7893     Active
Journal of Childhood Studies  2090-0619 Active  264 Journal of Clinical Laboratory [The] 1814-411X Active  265 Journal of Community Medicine N/A Interrupted  266 Journal of Dental Medicine - Tehran University of Medical Sciences 1024-641X Active  267 Journal of Dental Research, Dental Clinics, Dental Prospects 2008-210X Active  268 Journal of Dental School - Shahid Beheshti University of Medical
264     Journal of Clinical Laboratory [The]     1814-411X     Active       265     Journal of Community Medicine     N/A     Interrupted       266     Journal of Dental Medicine - Tehran University of Medical Sciences     1024-641X     Active       267     Journal of Dental Research, Dental Clinics, Dental Prospects     2008-210X     Active       269     Journal of Dental School - Shahid Beheshti University of Medical     1735-7693     Active
Journal of Community Medicine  N/A Interrupted  Journal of Dental Medicine - Tehran University of Medical Sciences  Journal of Dental Research, Dental Clinics, Dental Prospects  Journal of Dental School - Shahid Beheshti University of Medical
266 Journal of Dental Medicine - Tehran University of Medical Sciences 1024-641X Active  267 Journal of Dental Research, Dental Clinics, Dental Prospects 2008-210X Active  268 Journal of Dental School - Shahid Beheshti University of Medical 1735 7693 Active
267 Journal of Dental Research, Dental Clinics, Dental Prospects 2008-210X Active  268 Journal of Dental School - Shahid Beheshti University of Medical 1735 7693 Active
Journal of Dental School - Shahid Beheshti University of Medical
269 Journal of Dentistry - Shiraz University of Medical Sciences 1728-3426 Active
270 Journal of Dohuk University 1812-7568 Interrupted
271 Journal of Drug Research of Egypt 0085-2406 Active
272 Journal of Environmental Studies 1025-8620 Active
273 Journal of Family and Community Medicine 1319-1683 Active
274 Journal of Family and Reproductive Health 1735-8949 Active
275 Journal of Fundamentals of Mental Health [The] 1028-6918 Active
276 Journal of Gorgan University of Medical Sciences 1562-4765 Active
277 Journal of Guilan University of Medical Sciences 2008-4048 Active
278 Journal of Health Administration 2008-1200 Active
279 Journal of Hepatology, Gastroenterology and Infectious Diseases 1110-0796 Interrupted
280 Journal of Hygiene and Health 1735-2363 Interrupted

S/N	Journal	ISSN	Status
281	Journal of Infection and Public Health	1876-0341	Active
282	Journal of Injury and Violence Research	2008-2053	Active
283	Journal of Iranian Anatomical Sciences	1728-6158	Active
284	Journal of Isfahan Dental School	1735-255X	Interrupted
285	Journal of Isfahan Medical School	1027-7595	Interrupted
286	Journal of Islamic Dental Association of Iran [The] - JIDA	1024-6428	Active
287	Journal of Jahrom University of Medical Sciences	1735-5168	Active
288	Journal of Karbala University	1813-0410	Interrupted
289	Journal of Kerman University of Medical Sciences	1023-9510	Active
290	Journal of Kermanshah University of Medical Sciences (JKUMS)	2251-9068	Active
291	Journal of King Abdulaziz University - Medical Sciences	1319-1004	Interrupted
292	Journal of Lasers in Medical Sciences	2008-9783	Active
293	Journal of Legal Medicine and Forensic Sciences [The]	1110-6468	Interrupted
294	Journal of Mashhad Dental School	1560-9286	Active
295	Journal of Mazandaran University of Medical Sciences	1735-9260	Active
296	Journal of Medical Council of Islamic Republic of Iran	1562-1073	Active
297	Journal of Medical Education	1735-3998	Interrupted
298	Journal of Medical Science - Islamic Azad University of Mashhad	1735-7594	Active
299	Journal of Medical Sciences	1997-3438	Active
300	Journal of Medical Sciences	1682-4474	Interrupted
301	Journal of Medicinal Plants	1684-0240	Active
302	Journal of Modern Rehabilitation	2008-2576	Active
303	Journal of Nephrology Urology and Transplantation	N/A	Interrupted
304	Journal of Nursing and Midwifery Quarterly - Shaheed Beheshti University of Medical Sciences and Health Services	1605-8941	Active
305	Journal of Ophthalmic and Vision Research	2008-2010	Active
306	Journal of Periodontology and Implant Dentistry	N/A	Active
307	Journal of Qazvin University of Medical Sciences [The]	1561-3666	Active
308	Journal of Rafsanjan University of Medical Sciences	1735-3165	Active
309	Journal of Rehabilitation	1607-2960	Active
310	Journal of Reproduction and Infertility	2228-5482	Active
311	Journal of Research in Behavioural Sciences	1735-2029	Active
312	Journal of Research in Dental Sciences	2008-4676	Active
313	Journal of Research in Health Sciences [JRHS]	1682-2765	Active
314	Journal of Research in Medical Sciences	1735-5311	Active
315	Journal of Sabzevar School of Medical Sciences	1606-7487	Interrupted

S/N	Journal	ISSN	Status
316	Journal of School of Public Health and Institute of Public Health Research	1735-7586	Active
317	Journal of Shaheed Sadoughi University of Medical Sciences and Health Services	1562-272X	Active
318	Journal of Shahrekord University of Medical Sciences	1735-1448	Active
319	Journal of Surgery [The]	1681-4517	Interrupted
320	Journal of Taibah University Medical Sciences	1658-3612	Active
321	Journal of Tehran University Heart Center [The]	1735-8620	Active
322	Journal of the Arab Board of Medical Specializations	1561-0217	Active
323	Journal of the Arab Dentist	N/A	Interrupted
324	Journal of the Arab Neonatology Forum	1812-1756	Iterrupted
325	Journal of the Arab Society for Medical Research	1687-4293	Active
326	Journal of the College of Dentistry - Baghdad	N/A	Interrupted
327	Journal of the Egyptian Medical Association [The]	0013-2411	Interrupted
328	Journal of the Egyptian National Cancer Institute	1110-0362	Interrupted
329	Journal of the Egyptian Public Health Association [The]	0013-2446	Active
330	Journal of the Egyptian Society of Endocrinology, Metabolism and Diabetes [The]	1110-1245	Active
331	Journal of the Egyptian Society of Obstetrics and Gynecology [The]	0258-3216	Interrupted
332	Journal of the Egyptian Society of Parasitology	1110-0583	Active
333	Journal of the Egyptian Society of Pharmacology and Experimental Therapeutics [The]	N/A	Interrupted
334	Journal of the Egyptian Society of Toxicology	1110-127X	Active
335	Journal of the Faculty of Medicine - Baghdad	0041-9419	Interrupted
336	Journal of the Medical Research Institute - Alexandria University	1110-0133	Interrupted
337	Journal of the Royal Medical Services	2078-8703	Active
338	Journal of the Saudi Heart Association	1016-7315	Active
339	Journal of Tropical Nephro-Urology	N/A	Active
340	Journal of Veterinary Research	2008-2525	Active
341	Journal of Zahedan University of Medical Sciences and Health Services	1735-076X	Active
342	Journal of Zanjan University of Medical Sciences and Health Services	1606-9366	Active
343	JPAD - Journal of Pakistan Association of Dermatologists	1560-9014	Active
344	JPC - Journal of Pediatric Club [The]	N/A	Active
345	JPDA - Journal of the Pakistan Dental Association	1680-2292	Active
346	JPIMS - Journal of Pakistan Institute of Medical Sciences	1683-6928	Interrupted
347	JPMA - Journal of Pakistan Medical Association	0030-9982	Active
348	JPMI - Journal of Postgraduate Medical Institute	1013-5472	Active
349	JPPS - Journal of Pakistan Psychiatric Society	1726-8710	Active
350	JRMS - Journal of Research in Medical Sciences	1735-1995	Active

S/N	Journal	ISSN	Status
351	JRRS - Journal of Research in Rehabilitation Sciences	1735-7519	Active
352	JSP - Journal of Surgery Pakistan International	1817-0242	Active
353	Jundishapur Journal of Microbiology [JJM]	2008-3645	Active
354	Jundishapur Scientific Medical Journal	1026-8960	Active
355	Kasr El Aini Journal of Surgery	0022-9237	Interrupted
356	Kasr El-Aini Medical Journal New	N/A	Active
357	Khartoum Pharmacy Journal	N/A	Interrupted
358	Kidney Forum	1369-3050	Interrupted
359	KMJ - Kuwait Medical Journal	0023-5776	Active
360	KMUJ - Khyber Medical University Journal	2072-7763	Active
361	KOOMESH - Journal of the Semnan University of Medical Sciences	1608-7046	Active
362	Kufa Medical Journal	N/A	Interrupted
363	Lahore Journal of Public Health	N/A	Interrupted
364	Lebanese Science Journal	1561-3410	Active
365	Libyan Journal of Infectious Diseases [The]	N/A	Active
366	LJM - Libyan Journal of Medicine	1993-2820	Interrupted
367	LMJ - Lebanese Medical Journal	0023-9852	Active
368	Maghreb Medical	0330-258X	Active
369	Mansoura Journal of Pharmaceutical Sciences	1110-1318	Interrupted
370	Mansoura Medical Bulletin New	N/A	Active
371	Mansoura Medical Journal	1110-211X	Active
372	Maroc Medical	0025-4053	Active
373	MEAJO - Middle East African Journal of Ophthalmology	0974-9233	Active
374	Medical Arabization	N/A	Active
375	Medical Channel	1681-5491	Interrupted
376	Medical Forum Monthly	1029-385X	Active
377	Medical Journal of Ahmed Maher Teaching Hospital [The]	N/A	Interrupted
378	Medical Journal of Basrah University [The]	0253-0759	Active
379	Medical Journal of Cairo University [The]	0045-3803	Active
380	Medical Journal of Islamic World Academy of Sciences	1016-3360	Active
381	Medical Journal of Mashad University of Medical Sciences	1735-4013	Active
382	Medical Journal of Tabriz University of Medical Sciences and Health Services	1608-5671	Interrupted
383	Medical Journal of Teaching Hospitals and Institutes [The]	1110-2039	Interrupted
384	Medical Journal of the Islamic Republic of Iran	1016-1430	Active
385	Medical Journal of Tikrit University [The]	N/A	Interrupted

S/N	Journal	ISSN	Status
386	Medical Principles and Practice	1011-7571	Active
387	Medical Sciences Journal of Islamic Azad University	1023-5922	Active
388	Medical Spectrum [The]	0254-8534	Interrupted
389	Medicine Today	1813-9876	Active
390	MEJC - Middle East Journal of Cancer	2008-6709	Active
391	Middle East Journal of Anesthesiology	0544-0440	Active
392	Middle East Journal of Digestive Diseases	2008-5230	Active
393	Middle East Journal of Family Medicine	N/A	Interrupted
394	Minoufia Medical Journal	1110-2098	Active
395	MJFCT - Mansoura Journal of Forensic Medicine and Clinical Toxicology	1110-5437	Interrupted
396	Modares Journal of Medical Sciences, Pathobiology	1562-9554	Active
397	Mother and Child	0379-2617	Interrupted
398	Neonatology	1687-0492	Interrupted
399	Neurosciences	1319-6138	Active
400	New Egyptian Journal of Medicine [The]	1110-1946	Active
401	New Iraqi Journal of Medicine [The]	1817-5562	Active
402	Nursing and Midwifery Research	1753-5001	Interrupted
403	Ofogh-E-Danesh	1735-1855	Active
404	Oman Journal of Ophthalmology	0974-620X	Active
405	Oman Medical Journal	1999-768X	Active
406	Omdurman Journal of Pharmaceutical Sciences	N/A	Interrupted
407	PAFMJ - Pakistan Armed Forces Medical Journal	0030-9648	Active
408	Pakistan Heart Journal	0048-2706	Active
409	Pakistan Journal of Biochemistry	0300-8185	Interrupted
410	Pakistan Journal of Chest Medicine	N/A	Interrupted
411	Pakistan Journal of Clinical Psychology	1019-438X	Active
412	Pakistan Journal of Community Medicine [The]	N/A	Interrupted
413	Pakistan Journal of Health	N/A	Interrupted
414	Pakistan Journal of Medical and Health Sciences	1996-7195	Active
415	Pakistan Journal of Medical Ethics	N/A	Active
416	Pakistan Journal of Medical Sciences	1682-024X	Active
417	Pakistan Journal of Neurology	N/A	Interrupted
418	Pakistan Journal of Obstetrics and Gynaecology	N/A	Interrupted
419	Pakistan Journal of Orthodontics, Pediatric and Community Dentistry	1608-134X	Interrupted
420	Pakistan Journal of Otolaryngology - Head and Neck Surgery	0257-4985	Active

422 I 423 I	Pakistan Journal of Pathology Pakistan Journal of Pharmaceutical Sciences	1024-6193	Active
423 I	Pakistan Journal of Pharmaceutical Sciences		
		1011-601X	Active
	Pakistan Journal of Pharmacology	0255-7088	Interrupted
424 I	Pakistan Journal of Physiology	1819-270X	Active
425 I	Pakistan Journal of Psychology	0030-9869	Active
426 I	Pakistan Journal of Scientific and Industrial Research	0030-9885	Stopped
	Pakistan Journal of Scientific and Industrial Research Series A: Physical Sciences	2221-6413	Active
428 I	Pakistan Journal of Scientific and Industrial Research Series B: Biological Sciences	2221-6421	Active
429 I	Pakistan Medical Journal	0031-000X	Interrupted
430 I	Pakistan Ophthalmology	0259-3661	Interrupted
431 I	Pakistan Oral and Dental Journal	1012-8700	Active
432 I	Pakistan Paediatric Journal	0304-4904	Interrupted
433 I	Pan Arab Journal of Neurosurgery	1319-6995	Active
434 I	Pan Arab Journal of Orthopaedic and Trauma [The]	1607-4912	Active
435 I	Pan Arab Medical Journal	N/A	Interrupted
436 I	Payavard - Salamat	1735-8132	Active
437 I	Payesh - Health Monitor	1680-7626	Active
438 I	Pejouhandeh: Bimonthly Research Journal	1735-1022	Active
439 I	PJC - Pakistan Journal of Cardiology	1016-1244	Interrupted
440 I	PJMR - Pakistan Journal of Medical Research	0030-9842	Active
441 I	PJO - Pakistan Journal of Ophthalmology	0886-3067	Interrupted
442 I	PJPH - Pakistan Journal of Public Health	2225-0891	Active
443 I	PJS - Pakistan Journal of Surgery	0258-8552	Active
444 I	PMJ - Palestinian Medical Journal	N/A	Interrupted
445 I	Population Bulletin of ESCWA	0258-1914	Interrupted
446 I	Population Researches and Studies	N/A	Active
447 I	Population Sciences	N/A	Interrupted
448 I	Population Studies	1110-1342	Interrupted
449 I	Proceedings	N/A	Interrupted
450 I	Professional Medical Journal - Quarterly [The]	1024-8919	Active
451 I	PUJ - Parasitologists United Journal	1687-7942	Active
452	Qatar Medical Journal	0253-8253	Active
453	Qom University of Medical Sciences Journal	1735-7799	Active
454	Quarterly Journal of Medical Ethics	2008-4374	Active
455	Quarterly Journal of Medical Law	N/A	Active

S/N	Journal	ISSN	Status
456	Quarterly Journal of Relief and Rescue	4544-2008	Active
457	Razi Journal of Medical Sciences	2228-7043	Active
458	Rehabilitation International	N/A	Interrupted
459	Research Centre Bulletin	1019-5335	Interrupted
460	Research Journal of Aleppo University - Medical Sciences Series	N/A	Interrupted
461	Revue Maghrebine de Pediatrie [La]	0330-7611	Active
462	Revue Maghrebine d'Endocrinologie - Diabete et de Reproduction [La]	N/A	Active
463	Revue Marocaine de Chirurgie Orthopedique et Traumatologique	N/A	Interrupted
464	Revue Marocaine de Medecine et Sante	0251-0758	Interrupted
465	Revue Marocaine des Maladies de L'Enfant	N/A	Interrupted
466	Revue Tunisienne d'Infectiologie	1737-8958	Active
467	Risafa Medical Journal	N/A	Interrupted
468	RMJ - Rawal Medical Journal	0303-5212	Interrupted
469	Salmand - Iranian Journal of Aging	1735-806X	Active
470	Sana'a University Journal of Medical Sciences	N/A	Interrupted
471	Saudi Epidemiology Bulletin	1319-3965	Interrupted
472	Saudi Heart Journal	1018-077X	Interrupted
473	Saudi Journal of Disability and Rehabilitation	1319-6499	Interrupted
474	Saudi Journal of Gastroenterology [The]	1319-3767	Active
475	Saudi Journal of Oto-Rhino-Laryngology Head and Neck Surgery [The]	1319-8491	Interrupted
476	Saudi Journal of Sports Medicine [The]	1319-6308	Interrupted
477	Saudi Medical Journal	0379-5284	Active
478	Scientific and Research Journal of Army University of Medical Sciences - J.A.U.M.S.	1727-1789	Active
479	Scientific Journal of Al-Azhar Medical Faculty [Girls] [The]	1110-2381	Interrupted
480	Scientific Journal of El-Minia Faculty of Medicine [The]	1110-2446	Interrupted
481	Scientific Journal of Forensic Medicine	1027-1457	Interrupted
482	Scientific Journal of Iranian Blood Transfusion Organization [The]	1027-9520	Active
483	Scientific Journal of Kurdistan University of Medical Sciences	1560-652X	Active
484	Scientific Medical Journal	1110-5607	Active
485	Scientific Nursing Journal	1812-2388	Interrupted
486	SDJ - Saudi Dental Journal [The]	1013-9052	Active
487	SGH Medical Journal	1658-2489	Interrupted
488	SJA - Saudi Journal of Anaesthesia	1658-354X	Active
489	SJO - Saudi Journal of Ophthalmology	1319-4534	Active
490	SJPH - Sudanese Journal of Public Health	1990-7567	Active

S/N	Journal	ISSN	Status
491	Smile Dental Journal	2072-473X	Active
492	Social Welfare Quarterly	1735-8191	Interrupted
493	Sohag Medical Journal New	1110-7529	Active
494	South Valley Medical Journal	1110-7529	Interrupted
495	SPJ - Saudi Pharmaceutical Journal	1319-0164	Active
496	SQUMJ - Sultan Qaboos University Medical Journal	2075-051X	Active
497	SST - Sante et Securite au Travail	N/A	Active
498	Strides in Development of Medical Education	1735-4242	Active
499	Sudan Journal of Medical Sciences	1858-5051	Active
500	Sudan Medical Journal	0491-4481	Active
501	Sudan Medical Monitor	1858-5000	Active
502	Sudanese Journal of Dermatology	1815-3941	Interrupted
503	Suez Canal University Medical Journal	1110-6999	Active
504	Tabib Attifil Alarabi	N/A	Interrupted
505	Tanaffos	1735-0344	Active
506	Tanta Medical Journal	1110-1415	Interrupted
507	Tanta Medical Sciences Journal	1687-5788	Interrupted
508	Teb Va Tazkie New	1608-2397	Active
509	Tehran University Medical Journal [TUMJ]	1683-1764	Active
510	Toloo-e-Behdasht	1728-5127	Interrupted
511	Tunisie Medicale [La]	0041-4131	Active
512	University of Aden Journal of Natural and Applied Sciences	1606-8947	Active
513	Urology Annals	0974-7796	Active
514	Urology Journal	1735-1308	Active
515	Veterinary Medical Journal	1110-1423	Active
516	Yafteh Journal	1563-0773	Active
517	Yemeni Journal for Medical Sciences [The]	N/A	Interrupted
518	YHMRJ - Yemeni Health and Medical Research Journal	N/A	Interrupted
519	YJMHR-Yemeni Journal of Medical and Health Research	N/A	Interrupted
520	YMJ - Yemen Medical Journal	N/A	Interrupted
521	Zagazig Journal of Forensic Medicine and Toxicology	1687-160X	Interrupted
522	Zagazig Journal of Pharmaceutical Sciences	1110-5089	Interrupted
523	Zagazig Medical Association Journal	1110-2322	Interrupted
524	Zagazig University Medical Journal	1110-1431	Interrupted
525	Zanco Journal of Medical Sciences	1995-5588	Active

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