#### 74. Al Sabbagh M. Hypertension: Prevalence of Selected Risk Factors and Blood Pressure Control. Middle East Journal of Family Medicine. 2012;10(10):29-39.

Background and Objectives: Hypertension is highly prevalent worldwide. The objectives of this study were to investigate the prevalence of selected risk factors and the degree of blood pressure control in hypertensive patients.

Methods: All hypertensive patients attending the Non-Communicable Diseases Clinic in Northern Muharraq Health Centre in a period of three weeks, were included. Data were extracted from patient records and questionnaires.

Results: Among hypertensive patients, around a half had satisfactory blood pressure control. Systolic blood pressure was statistically significantly directly correlated with age (p=.033), a positive family history of hypertension in parent(s) (p=.018) and diastolic blood pressure (p=.000). Diastolic blood pressure was statistically significantly directly correlated with smoking (p=.008), positive family history of hypertension in sibling(s) (p=.024), and systolic blood pressure (p=.000). It was also statistically significantly inversely correlated with age (p=.018). As for systolic blood pressure, and according to linear regression, age (p=.000) and a positive family history of hypertension in parents (p=.017) were found to be significant predictor variables. For diastolic blood pressure, age (p=.000), smoking (p=.005) and systolic blood pressure (p=.000) were found to be significant predictor variables.

Conclusion: Blood pressure control among hypertensive patients was improved.

#### 75. Alani R, Alsada A, Murphy JF. Ovarian ectopic pregnancy managed laparoscopically. Bahrain Medical Bulletin. 2012 //;34(4).

Ovarian pregnancy is a rare type of ectopic pregnancy. We report an ovarian ectopic pregnancy at the right ovary. A thirty-eight year old woman presented with amenorrhea for six weeks and lower abdominal pain. Betahuman chorionic gonadotropin (BHCG) was 2290 IU. Imaging revealed a mass at the right adnexa about 3x2.5 cm and blood clots were adherent to the uterus. The mass was removed through emergency laparoscopy. Pathology revealed ovarian pregnancy. Serial monitoring of BHCG level to confirm the complete removal of placental tissue was done.

#### 76. Alsad AE, Murphy JF. The value of cervical cerclage in preventing pregnancy loss. Bahrain Medical Bulletin. 2012 //;34(3).

Objective: To determine the value of cervical cerclage in preventing pregnancy loss in patients with presumed cervical incompetence. Design: Retrospective study. Setting: Department of Obstetrics and Gynecology, Bahrain Defense Force Hospital. Method: The study was performed from 1 January 2009 to 30 May 2010. Fifty-six patients with a history of previous pregnancy loss, and patients with multiple pregnancies following assisted conceptions were included in the study. Obstetrics data were obtained from clinical and surgical record. The McDonald technique cerclage was used. The gestational age at cerclage insertion was recorded. The cerclage was removed electively at 36-37 weeks or sooner as events detected. Result: Thirteen (23.2%) patients had multiple pregnancies following assisted conception. Three (5.4%) had spontaneous abortion, twenty-two (39.3%) had preterm delivery, before 37 weeks, of these nine were the result of pregnancies following assisted conceptions, Thirty-one (55.3%) reached term (37+weeks), thirty-four (60.7%) had vaginal delivery of which seven (20.6%) had their labor induced between 38-41 weeks. Nineteen (33.9%) patients were delivered by Caesarian section. Sixty-one babies were delivered in this period; nine neonates required intubation and admitted to intensive care unit because of prematurity and one death due to extreme prematurity of 26 weeks. In patients who had the cerclage removal electively, 24 (42.9%) went into labor within 24 hours; and 30 (53.6%) went into labor between 24 hours and 33 days. Conclusion: Cervical cerclage is preventive in singleton pregnancy with short and incompetent cervix or in patients who had obstetric history. No benefit was observed for the use of cerclage in multiple pregnancies following assisted conceptions.

77. Babiker R, Merghani TH, Elmusharaf K, Badi RM, Lang F, Saeed AM. Effects of gum Arabic ingestion on body mass index and body fat percentage in healthy adult females: Two-arm randomized, placebo controlled, double-blind trial. Nutrition Journal. 2012 //;11(1).

Background: Gum Arabic (acacia Senegal) is a complex polysaccharide indigestible to both humans and animals. It has been considered as a safe dietary fiber by the United States, Food and Drug Administration (FDA) since the 1970s. Although its effects were extensively studied in animals, there is paucity of data regarding its quantified use in humans. This study was conducted to determine effects of regular Gum Arabic (GA) ingestion

on body mass index and body fat percentage among healthy adult females. Methods. A two-arm randomized, placebo controlled, double-blind trial was conducted in the Department of Physiology at the Khartoum University. A total of 120 healthy females completed the study. They were divided to two groups: A test group of 60 volunteers receiving GA (30 gm /day) for 6 weeks and a placebo group of 60 volunteers receiving pectin (1 gm/day) for the same period of time. Weight and height were measured before and after intervention using standardized height and weight scales. Skin fold thickness was measured using Harpenden Skin fold caliper. Fat percentage was calculated using Jackson and Pollock 7 caliper method and Siri equation. Results: Pre and post analysis among the study group showed significant reduction in BMI by 0.32 (95% CI: 0.17 to 0.47; P<0.0001) and body fat percentage by 2.18% (95% CI: 1.54 to 2.83; P<0.0001) following regular intake of 30 gm /day Gum Arabic for six weeks. Side effects caused by GA ingestion were experienced only in the first week. They included unfavorable viscous sensation in the mouth, early morning nausea, mild diarrhea and bloating abdomen. Conclusions: GA ingestion causes significant reduction in BMI and body fat percentage among healthy adult females. The effect could be exploited in the treatment of obesity. © 2012 Babiker et al.; licensee BioMed Central

# 78. Drennan J. Masters in nursing degrees: an evaluation of management and leadership outcomes using a retrospective pre-test design. Journal of nursing management. 2012 Jan;20(1):102-12. PubMed PMID: 22229906. Epub 2012/01/11. eng.

AIM: The aim of the present study was to measure the leadership and management abilities of graduates who had completed a master's degree in nursing. BACKGROUND: A number of reports have recommended that leadership competencies be integrated into education programmes for nurses at a master's level. In spite of the growth in the number of graduates from higher degrees in nursing, there is a paucity of evidence on the management and leadership outcomes that develop as a result of undertaking a master's degree. METHODS: A cross-sectional survey using a retrospective pre-test design was used to measure self-reported leadership and management outcomes from the graduates' educational programmes. RESULTS: Results found that graduates had gained significantly on their ability to change practice, communicate and work as part of a team and to problem solve as an outcome of completing a master's degree in nursing. CONCLUSION: Graduates make substantial gains in leadership and management capabilities as a consequence of their higher degree. These capabilities are necessary as nurses take the lead in many areas of healthcare. IMPLICATIONS FOR NURSING MANAGEMENT: The masters in nursing degree now has a pivotal role in providing effective continuing education to the nursing profession; especially for those who occupy or intend to occupy senior positions within clinical, management or education branches of the profession.

### 79. Gaynor D, Griffith DM. The prevalence of metal-based drugs as therapeutic or diagnostic agents: Beyond platinum. Dalton Transactions. 2012 //;41(43):13239-57.

Metal complexes and metal salts have a wide range of medicinal applications and are extensively administered to patients or purchased over the counter as a matter of routine. The abundance and variety of non-platinum metal complexes, which are approved for use as therapeutic or diagnostic agents, are highlighted. Current insights into the mechanism of action or indeed lack thereof of a selection of metallodrugs are discussed. Ultimately this perspective seeks to inspire chemists to tackle new challenges and raise awareness of opportunities in the area of inorganic therapeutic and diagnostic medicine. This journal is © 2012 The Royal Society of Chemistry.

# 80. Henari FZ, Al-Saie A, Culligan KG. Optical limiting behavior of bromophenol blue and its dependence on pH. Journal of Nonlinear Optical Physics and Materials. 2012 //;21(1).

The nonlinear properties and optical limiting performance of Bromophenol indicator solution were investigated using continuous wave laser beam at 488 nm and 514 nm. A z-scan technique was used to measure the nonlinear refractive index. The optical limiting was investigated by monitoring the output transmission through the samples at different concentrations and at different pH values. The results show the dependence of the optical limiting threshold on concentration as well as on the pH values of the solution. The investigation shows that bromophenol blue is a potential candidate for optical limiting. Results also show that the optical limiting values can be used as a pH indicator. © 2012 World Scientific Publishing Company.

#### 81. Henari FZ, Cassidy S. Non-linear optical properties and all optical switching of Congo red in solution. Optik. 2012 //:123(8):711-4.

We present the results from investigations of the nonlinear properties of Congo red solutions using Z-scan technique with a continuous wave argon ion laser at 514 nm. The magnitude and sign of the third-order nonlinear refractive index n 2 of aqueous solution of Congo red were determined. The nonlinear refractive index was found to vary with concentration. Third-order nonlinearity is dominated by nonlinear refractive index, which leads to

strong self-defocusing and self diffraction in the samples studied. A pump and probe technique was used to investigate the origin of nonlinearity. Furthermore the nonlinear refractive index effect was utilized to demonstrate all optical switching. The optical limiting behavior based on nonlinear refractive index was investigated. © 2011 Elsevier GmbH. All rights reserved.

### 82. Henari FZ, Gaynor D, Griffith DM, Mulcahy C, Marmion CJ. Non-linear optical measurement of Iron(III) Tris(pyridinehydroxamate) complexes. Chemical Physics Letters. 2012 //;552:126-9.

We present results of the nonlinear refractive index and nonlinear absorption coefficient [Fe III(3-pyha) 3] and [Fe III(4-pyha) 3] water solutions, using Z-scan technique with a low power continuous wave laser at 633 nm. No qualitative differences were observed in absorption and refractive index nonlinear processes for both samples. We propose that the nonlinear absorption involves two photon absorption. The two photon absorption cross sections for both samples at 633 nm were calculated. Pump and probe technique was used to record triplet state absorption spectrum. The band gap of the triplet state was estimated from the spectrum. The use of these complexes in photo-dynamic therapy is discussed. © 2012 Elsevier B.V. All rights reserved.

### 83. Hubail AR, Culligan KG. Current prospectus on obesity in Bahrain and determination of percentage body fat range. Bahrain Medical Bulletin. 2012 //;34(1):1-9.

Background: Obesity and its related disorders are becoming an overburden on healthcare systems worldwide. Objective: To evaluate the current status of obesity in Bahrain and predict percentage body fat. Setting: Shopping mall in Bahrain. Design: Prospective cross-sectional study. Method: Four hundred fourteen volunteers were recruited; each provided informed consent. A range of physical measurements were collected from each individual and used to calculate the parameters obtained. Result: The average body mass index (BMI) for males was 28.2 kg/m 2 and for females was 28.6 kg/m 2. This increased with age, showing a biphasic increase for females. Linear transformation of BMI data showed greater significance in correlating BMI versus percent body fat. However, prediction equations for calculation of percent body fat were more accurate without linear transformation of data. Percent body fat ranges for Bahrain, corresponding to BMI categories were derived. Conclusion: Prevalence rates for obesity in Bahrain are higher than predicted and are increasing at a higher rate than the global average. This mirrors the alarming increase in the prevalence of Type 2 Diabetes Mellitus in Bahrain.

# 84. Nasaif HA. Knowledge and attitudes of primary care physicians toward the nurse practitioner role in the Kingdom of Bahrain. Journal of the American Academy of Nurse Practitioners. 2012 //;24(3):124-31.

Purpose: The Kingdom of Bahrain is facing a number of challenges, including an escalating cost of health services, increasing incidence of chronic diseases, and shortage of primary care physicians (PCPs). Introducing the nurse practitioner (NP) specialty in the primary care setting is one way to meet these challenges. The purpose of this quasi-experimental study was to examine the knowledge and attitudes of PCPs about the NP role prior to and following an educational intervention. Data sources: The modified Northern Emergency Nurse Practitioner Staff Survey was used to measure the PCPs' attitudes and knowledge. A total of 90 PCPs completed the pretest and posttest. Conclusions: The study findings showed that PCPs had poor understanding of the NP role. Their knowledge and attitudes changed significantly after the educational intervention. Also, posttest data indicated a positive correlation between knowledge and attitudes toward the NP role. Implications for practice: More educational preparation and orientation to the NP role for PCPs and other healthcare professionals are needed before the implementation of the role in the primary care setting in Bahrain. There is a need for the role to be clearly defined prior to implementation to help gain understanding and acceptance. © 2012 The Author(s) Journal compilation © 2012 American Academy of Nurse Practitioners.

### 85. Parsanezhad ME, Forooghinia L, Parsa-Nezhad M. Hyperreactio Luteinalis after IVF. 2012. p. 409-11.

Hyperreactio luteinalis is a benign ovarian lesion that results from exaggerated physiological follicle stimulation. It is associated with high serum level of HCG and bilateral moderately to massively enlarged cystic ovaries. The diagnosis is based on ultrasonographic findings of bilateral ovarian enlargement that is containing multiple cysts with various sizes. The condition may be difficult to clinically differentiate in the first trimester from ovarian hyperstimulation syndrome following IVF treatment. Since the condition is self-limiting and usually undergoes spontaneous regression, conservative management is recommended. © 2012 Blackwell Publishing.

# 86. Tawash E, Cowman S, Anunciacion E. A triangulation study: Bahraini nursing students' perceptions of nursing as a career. Journal of Nursing Education and Practice. 2012;2(3):81-92.

Background: There is a broad international literature examining the perceptions, experiences and values of nursing students with very little investigative work from the Gulf region and no published work on the perceptions of student nurses from Bahrain. The literature shows that students have a wide range of pre-existing perceptions about nursing and that those early perceptions have a profound influence on their decision to continue with their nursing studies. Historically, in a context of migration, Bahrain has been attractive to expatriate nurses and this has created an overreliance on external manpower which leads to the detriment of developing an indigenous nursing profession. This study aims to identify the perceptions and experiences of student nurses in Bahrain about nursing as a career choice and generate an understanding of the factors influencing recruitment to nursing from the Bahraini population. Methods: A triangulation research design engaging quantitative and qualitative data collection methods was used in the study. Data were obtained through student nurses' written reflections, self-reporting questionnaires and focus groups collected during their nursing programme. The study participants were the first ever cohort of 38 Bahraini nursing students attending the first private University in Bahrain where the study took place. Qualitative data was analyzed using Colaizzi's methodology and quantitative data was analyzed using SPSS Version 17.

Results: The participants perceived nursing as caring, helping people and a humanitarian job. Nursing was considered to be a tough job and not well accepted socially with cultural issues impacting on the values attached to nursing as a career choice. Participants prior to entering nursing used the internet as the most potent source of information and they were also motivated by their parents and friends to join nursing. Participants stated their commitment to a nursing career, and their plans to continue with participation in higher education. Conclusions: Some of the issues raised in the study are reflective of the international literature; however there are fundamental issues particular to the Gulf region, which will require attention in a context of an overall national nursing recruitment strategy.