23rd International Conference on Healthcare & Life-Science Research (ICHLSR), 13-14 Oct 2017, Dubai, UAE

13-14 Oct 2017

Conference Venue
Flora Grand Hotel, Near Al Rigga Metro Station, Deira, Dubai, United Arab Emirates
KEYNOTE SPEAKER

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PLENARY SPEAKER

Dr Betty Bagyam Daniel
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Interaction of almond cystatin with pesticides: Structural and functional analysis

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Abstract

Pesticides are chemical substances which eliminate or control a variety of agricultural pests that damage crops and livestock. They not only affect the targeted pests but also affect the non-targeted systems raising more concerns for their effect on both plant and animal system. Cystatins (cysteine protease inhibitor) are ubiquitously present in all living cells and show variety of important physiological functions. Present study shows the effect of different pesticides (pendimethalin, methoxyfenozide, cu(II)hydroxide) on purified almond cystatin. Almond cystatin showed concentration dependent loss in papain inhibitory activity on interaction with the pesticides showing maximum loss in the presence of Cu(II)hydroxide and minimum in case methoxyfenozide. Native-PAGE, showed maximum degradation of purified cystatin in the presence of Cu(II)hydroxide and minimum in case methoxyfenozide. Native-PAGE, showed maximum degradation of purified cystatin in the presence of Cu(II)hydroxide with insignificant effect in the presence of methoxyfenozide. Structural alterations were significant in case of Cu(II)hydroxide and less in case of methoxyfenozide as revealed by UV and fluorescence spectral studies. Secondary structural alterations were further conformed by CD and FTIR spectroscopy. α-helix content of almond cystatin decreases from 35.64% (native) to 34.83%, 30.79% and 29.62% for methoxyfenozide, pendimethalin and Cu(II)hydroxide treated cystatin respectively. FTIR study shows amide I band shift for almond cystatin from 1649.15 ± 0.5 cm⁻¹ to 1646.48 ± 0.6 cm⁻¹, 1640.44 ± 0.6 cm⁻¹, and 1635.11 ± 0.3 cm⁻¹ for methoxyfenozide, pendimethalin and Cu(II)hydroxide respectively. Values obtained for different thermodynamic parameters (ΔH0, ΔG0, N and ΔS0) by ITC experiments reveals maximum binding of almond cystatin with Cu(II)hydroxide followed by pendimethalin and little interaction with methoxyfenozide. Keywords: Almond cystatin; pesticide; pendimethalin; methoxyfenozide; spectroscopy

Binding of λ-carrageenan (a food additive) to almond cystatin: An insight involving spectroscopic and thermodynamic approach

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Abstract

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Carrageenan is a high molecular weight linear sulphated polysaccharide, primarily used in food industry as gelling, thickening, and stabilizing agent. Almond milk prepared from almonds is low in fat, but high in antioxidants, energy, proteins, lipids and fibre. Purified almond cystatin was incubated with increasing concentrations of carrageenan at 250°C for different time interval and significant loss in inhibitory activity was observed. Interaction between carrageenan and cystatin resulted in complex formation as depicted by the decrease in fluorescence intensity with increase in the concentration of carrageenan. Stern-volmer analysis of fluorescence quenching data showed binding constant to be 1.84±0.20 x10^4 M^-1 and number of binding sites close to unity. These results were further confirmed by supporting results obtained in UV-visible spectroscopy. FTIR analysis shows significant shift in the peak intensity and this change clearly depict change in the structure of cystatin from that of α helix to β-sheet. CD spectra further confirmed the structural transition of the cystatin from α helix to β-sheet structure on interaction with increased concentrations of carrageenan. The contributing thermodynamic parameters were determined by ITC. The negative ΔH0 and positive TΔS0 values suggest involvement of electrostatic forces and hydrophobic interaction in the formation of the λ-carrageenan-cystatin complex.

Keywords: Phytocystatin, λ-Carrageenan, Almond milk, spectroscopy, ITC

Isolation and purification of phytocystatin from almond: Biochemical, biophysical and immunological Characterization

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Abstract
It is well known that fruit nuts contain wide variety of flavonoids and various proteins, consumption of which has been associated with the reduced risk of chronic diseases. Cystatins, a family of cysteine proteinase inhibitors, ubiquitously present in all cells serve various important and critical physiological functions. In this study a phytocystatin with molecular mass of 63.4 kDa was purified to homogeneity by a three-step process including ammonium sulfate fractionation (50–70%), acetone precipitation, and gel filtration chromatography on Sephacryl S100-HR column. The purified inhibitor migrated as single band under native and SDS-PAGE. The Ki values for purified inhibitor with papain, ficin, and bromelain were found to be 45.45, 83.33, and 90.9 nM, respectively, suggesting higher affinity of the inhibitor for papain as compared to ficin and bromelain. Phytocystatin was stable in broad pH and temperature range. Purified cystatin appeared to be antigenic as observed in western blot analysis. ITC assay data show a binding stoichiometry of 0.870 ± 0.03 sites for cystatin and papain interaction which indicated that cystatin is surrounded by nearly one papain molecule. FTIR, UV, and fluorescence studies showed significant conformational changes on cystatin–papain complex formation. Purified cystatin was found to possess 36.8% α-helical content as observed by CD spectroscopy.

Keywords: Phytocystatin, almond, spectroscopy, kinetics, CD, FTIR, ITC

Association of drug resistance to phylogenetic groups of Escherichia coli isolated from chicken faeces and patient with urinary tract infection

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**Abstract**  
Background: Escherichia coli strains are commonly found in the gut microflora of warm-blooded animals. These strains can be assigned to one of the four main phylogenetic groups, A, B1, B2 and D, according to the combination of the three genetic markers chuA, yjaA and DNA fragment TspE4.C2. Commensal strains placed into group A and B1, While pathogenic strains into group B2 and D. The main ambition of this study was to determine relationship between phylogenetic groups and antibiotic resistance patterns in E. coli isolated from urine samples and chicken faeces.  

**Material and Methods:** Fifty E. coli samples from urine of Urinary Tract Infection (UTI) patients and 50 from chicken faeces were isolated and identified by using standard microbiology techniques under aseptic environment. Antibiotic sensitivity was determined against commonly used antibiotics by disc diffusion method and phylogenetic groups (A, B1, B2, and D) were identified through triplex PCR technique.  

**Results:** In the current study the frequency of phylogenetic groups of E. coli recovered from UTI patients was as followed A=52%, B1=20%, B2 =15% and D=13% whereas in chicken A=40% B1=48%, B2=10% and D=2%. Group A and B1 represent commensal, while B2 and D represent pathogenic E. coli. Antibiotic susceptibility results showed that ampicillin, erythromycin, tetracycline, ciprofloxacin and streptomycin were more resistant while gentamicin showed relatively less resistance in E. coli from human urine and chicken faeces samples. As for as association of phylogenetic group with antibiotic resistance is concerned, Gentamicin showed resistance only in phylogenetic group B1 (Commensal) in E. coli recovered from human, but in chicken Gentamicin showed resistance in both group A and B2, commensal and pathogenic respectively. Similarly Imipenem, amikacin and meropenem were most effective drug for human E. coli whereas in E. coli recovered from chicken resistance have been developed against these last–resort antibiotic. Over all commensal E. coli also showed high level of antibiotic resistance along with the pathogenic E. coli.  

**Conclusion:** This study suggests that there is an ultimate relationship between the drug resistance and phylogenetic groups of E. coli in both human and chicken. Furthermore presence of Imepenem resistance in pathogenic E. coli recovered from chicken, potentially may spread the resistance in human E. coli.  

**Keyword:** Pathogenic and Non-pathogenic E. coli, Antibiotic resistance, Phylogenetic groups

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GICICHLSR1712062  
Effects of household water purifier on drinking water quality in Meram Konya, 2017  

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Abstract

Objective: In this study, it was aimed to determine the preferences and reasons of drinking water for the people aged 18 years in Meram district.

Methods: This cross-sectional study was conducted between 1 April and 1 June 2016 in Meram. The sample size was calculated as 810 homes with the program G-power 3.1.9.2. 810 homes were selected which were sampled from the neighborhoods of Meram district. A questionnaire was applied to the participants who agree to participate, by face to face interview. Analyzes of the data were studied in the IBM SPSS 24.0 program on the computer.

Results: 514 women (63.5%) and 296 men (36.5%) participated in the study. Median of participants' daily drinking water consumption was 1.00 L (0.1 to 6.0).11.7% of the respondents stated that they consumed 2.5 L or more water. The drinking water preference percents of the participants: 1.2% water purification devices of residential complexes, 4% spring water, 8.3% home water treatment device, 19.4% network water, 22% packed water, 45.2% street fountain. The rate of using home water treatment device and of consuming packaged water was found significantly higher for those whose income was over 2000 TL (p:0,0001). The causes of not preferring network water are: 45.8% taste and odor problem, 30.3% because it's limy, 24.8% because it's dirty, 11.8% not to accustomed to the network water, 8.7% excess chlorine.

Conclusion: Median of participants' daily water consumption and the rate of drinking water over 2.5 L are low. The usage rate of network water as drinking water is also low. Economic reasons come to the forefront in the preference of drinking water. It is seen that the main reason of not to prefer network water is taste and odor problem.

Keywords: Drinking water preference, Daily water consumption, Meram Konya
Abstract

Objectives: People have thought that organ and tissue transplantation can be done since ancient times. Various studies have shown that education, socioeconomic level, culture and religion are important factors in shaping the views of people on organ transplantation. The purpose of this study is to evaluate the attitudes and behaviors of individuals aged 18 years and older about organ donation.

Materials and Methods: This cross-sectional study was conducted between 2 January 2017 and 5 April 2017 in adults who are treated at the hemodialysis unit of Meram Medical Faculty and who applied to Family Health Centers (FHC) for any reason. A questionnaire form was prepared and applied to individuals who gave verbal approval under observation by the researchers. The data was analyzed with IBM SPSS 24.0. P <0.05 was accepted as the level of significance.

Results: 128 Individual from FHC's and 111 people from dialysis unit were included to study. 57.8% (44 persons) of ASM participants and 52.3% of dialysis group were female. The answers given to 'Do you know about organ donation', 'Do you think to donate organs', 'Do you accept organ transplant when you need it', 'Do you have an organ donation card', ' Do you donate the organ for someone you do not recognize', 'Why do not you want to donate your organs' questions were similar in both two group (p>0.05). When asked ' In which case do you donate your organs', 'when I am alive' answer was given in a higher proportion in dialysis group and 'After I died' answer was given in a higher proportion in FHC group. The proportion of people who gave 'No' answer to 'Do you donate your organs to a person who belongs to another religion?' question was significantly higher in dialysis group than FHC group (p=0.02). The proportion of people who gave 'Yes' answer to 'Is the personality of donor important', 'Is it important that who you will donate your organs' questions was significantly higher in dialysis group than FHC group (p=0.03, p=0.02).

Conclusion: The majority of participants were willing or undecided about organ donation. Nonetheless, most participants have said that they will accept organ transplants when they need donations. Religion was found to be an effective factor on organ donation.

Malnutrition prevalence in 65 year old individuals in Meram Region

Abstract

Objectives: In this study, it was aimed to determine the malnutrition prevalence and...
sociodemographic and medical characteristics that may be related to nutritional status in the elderly people aged 65 years and older living in Meram.

Method: This cross-sectional study was conducted in Meram district between April 1st and July 1st, 2016. The universe of the study is composed of 26249 individuals aged 65 years and over who are listed in the Family Health Centers (FHC) of Meram region. With the appropriate sampling method, the sample size was calculated as 138 persons. Because the cluster sampling method was used in the study, the design effect was accepted as 2 and the sample size was calculated as 276. Family Health Centers (FHC) located in Meram District were accepted as clusters and 5 FHCs were chosen randomly. In the selected FHCs, sociodemographic characteristics and medical history questionnaire prepared by researcher, Mini Nutritional Assessment (MNA) and Geriatric Depression Scale (GDS) and Mini Mental State Examination (MMSE) in order to answer objectively depression and cognitive disorder questions in MNA were applied with face-to-face interview method to subjects aged 65 years or older who apply to the FHC for various reasons and accepted to participate in the study. Analyzes of the data were performed by the IBM SPSS 23.0 program.

Results: According to the MNA, malnutrition was found in 1.1% of the participants and malnutrition risk was found in 38.4% of the participants were found, and 60.5% of the participants were found to have good nutritional status. In subjects who have at least 1 chronic disease (91.3 %) (p=0.017), use at least 1 drug regularly (87.6 %) (p=0.016), have 'definite depression' according to GDS (27.9 %) (p<0.001) and have cognitive impairment according to MMSE (19.6 %) (p <0.001), malnutrition and the risk of malnutrition were significantly higher.

Conclusions: A significant proportion of the elderly were found to have malnutrition and malnutrition risk, and those with cognitive impairment and depression had a higher ratio of malnutrition and risk of malnutrition.

Key words: Elderly, Malnutrition, Cognitive impairment, Depression

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Abstract

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Preference Of Delivery Method And Sexual- Reproductive Health Knowledge-Attitude Status In Women

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INTRODUCTION: Sexual Health and Reproductive Health services cover subjects such as reproductive rights, family planning, safe maternity, and sexually transmitted infections (1, 2). Place in which the birth is given and method of delivery is among the subjects of safe maternity (3). In the study, it has been aimed to determine the preference of delivery method and productive health-application status of women between 18 and 49 who have applied to family health centers in city centers.

MATERIAL – METHOD: The province of Konya is among metropolises of Turkey. Target population of the study is women between 18 and 49 in Konya city center. Sample size was calculated and after the number of women to be reached was determined by weighing women population of each county to the population. Data was collected by survey to women having applied to Family Health Centers randomly selected. Descriptive statistics and suitable statistical tests were used in its analysis. p<0.05 was considered statistically significant.

FINDINGS: Age average of woman was 35.3±7.5 years and number of children was 2.09±1.0. The rate for educational status of high school or above was 49.1% and 83.9% of them were nuclear family. The rates of knowing and using any family planning method respectively were 69.7% and 47.8%. The rates for having the age for vaginal smear were 32.1%; the rates for knowing the age of mammography screening correctly and having the mammography were respectively 23.0% and 15.8%. If they were to give birth and in case that their preference was asked, the rates of preference of normal delivery and caesarean section respectively were 54.9% and 24.9%, whereas the rest had no preference. Ideal delivery method was normal in 70.7% of participants unless there was a risky condition. The rate of having vaginal smear and knowing mammography age for those living in a family [respectively (χ2=4.79, p=0.02), (χ2=10.39, p=0.001)], those working [respectively (χ2=21.39, p<0.001), (χ2=28.26, p<0.001)], and those graduated from high school/above [respectively (χ2=8.68, p=0.003), (χ2=44.29, p=0.001)] was high.

DISCUSSION AND RESULT: The rate of knowing family planning method is higher than percentage of using the same. The rate of knowing the age of vaginal smear and mammography is low. Number of women having had mammography scan is low. The rate of having vaginal smear and knowing the age of mammography for those living in nuclear families, those working, and those graduated from high school/above is higher than the rate for the others. Even though most of them say that the ideal delivery method is normal delivery, only half of them state that they shall prefer normal delivery. Besides the studies in which delivery methods are examined (4, 5, 6, 7), we are of the opinion that increasing the awareness related to the subject and conducting periodical information studies within the scope of reproductive health shall be beneficial.

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GICICHLSR1712067

The Impact And Practice Of Community Pharmacy On Public Health Management In Enugu Metropolis, Nigeria

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Abstract

The increasing impact and practice of Community Pharmacy in strategic public health activities, management and administration in Nigeria in general and Enugu State metropolis in particular define the overall need for integral, participatory, and inclusive public health best management practices in Nigeria. Systematically, the burgeoning gap between real Community Pharmacy practice and Public Health management and administration in Nigeria suffice the raison d’être for a deliberate, collaborative, targeted, proactive and integrated health management policy as advocated by this study. The unprecedented rise in prevalence of chronic diseases has
led to an increased pressure in the Nigeria public health delivery systems, hospitals and health research. Community pharmacy practice as such, provides a somewhat basic one-stop health care integrated system to impact conscionable health practice among the ailing public; to improve the health status of the public proactively and sufficiently with coordinated referral system. The study also aims to identify and determine the capability of the community pharmacists to carry out public health activities effectively; identify and assess the basic health activities that are feasible to be carried out in community pharmacies including the timely dispensation of targeted interventions that will encourage and boost the practice of public health activities sufficiently and efficiently; enhance the overall health indices and economic ecology of community pharmacy practice as cogent public health outfit in the state; to identify barriers and milestones that will assist policy makers/regulators to allocate and utilize resources prudently; to accelerate and improve the grossly insufficient or dilapidating public health infrastructure in Enugu metropolis and Nigeria in general. The study consisted of a cross sectional study after which a Delphi study (of three rounds) was carried out. Pre-tested and validated questionnaires were the instruments of data collection. Comprehensive spread sheet analyses of cross-sectional data were determined by SPSS among other un/structured scientific methods to reach consensus. The results indicate and implicate the urgent need for inclusive health policy in Nigeria; barriers identified include: inadequate funding and staff, public corruption and regulation, insufficient knowledge, lack of time and space, poor cooperation of clients and poor or dearth of interoperability measures etc. 81 feasible public health activities and 18 interventions were identified from the Delphi study. 11 experts participated in each round of the Delphi study. Out of the 88 items suggested to be feasible by the experts in the first round of the Delphi study, consensus was reached for 81 items by the end of the third round. By the end of the third round, consensus was reached for 18 out of 20 interventions that were suggested by the experts in the first round. The study concluded that the overall health system gap (impact and implication) between community pharmacy practice and public/primary health care delivery system in Enugu-Nigeria is grave and needed urgent public-private conscionable, collaborative, articulated and practicable intervention. The time is now!

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GICICHLRSR1712072
Potential therapeutic effects of banana peel extracts against food borne pathogens

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Abstract
Food borne illness occurs because of some infectious pathogens, their action change the entire metabolism of human beings and create the adverse condition which causing
numerous deaths each year. So its prevention and control is extremely important. This frightening situation has encouraged quest of fresh and natural antimicrobial substances with efficient bioactivity and no side effects. The present research was planned to study the anti-microbial potential of aqueous and ethanolic extracts of banana peel against food borne pathogens. In this study the aqueous and ethanolic extracts of banana peel were prepared in various combinations of water and ethanol. These extracts were evaluated for different phenolic components and antimicrobial potential against (food borne pathogens) Staphylococcus aureus, Bacillus subtilis, Salmonella typhus and Escherichia coli, through disk diffusion method. The results of this study were statistically analyzed. The results showed that, amongst all bacterial strains the aqueous and ethanolic extracts of banana peel indicated maximum antibacterial efficiency against Staphylococcus aureus and Salmonella typhus with mean zones of inhibitions of 19mm and 22mm, respectively. These results were comparable with some of the regular antibiotics (Ciprofloxacin and Amoxicillin). So this study concluded that banana peel have effective medicinal property (antimicrobial) and can be used by traditional medical physicians. The impression of using banana waste particularly peels as a consistent remedy of infectious diseases may be an assertive developing technology but still it necessities further studies.

Key words: Banana peel, Infectious disease, antimicrobial, Alcoholic and aqueous extracts

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GICICHLSR1712073

In-vitro assessment of antimicrobial potential of mango Seed kernel against food borne pathogens

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Abstract

Continues spread of microbial infectious diseases which affect almost 50,000 people every day have become a leading global problem and the main reason is the emergence of drug resistance in bacterial strains. So this alarming condition has necessitated search of new and natural antimicrobial substances with higher bioactivity and no side effects. The present study was aimed to explore the natural antimicrobial potential of mango seed kernel against different food borne pathogens. The aqueous and ethanolic extracts of mango seed kernel were obtained with different combinations of solvent concentrations and their antimicrobial activity was examined by disc diffusion assay against Gram-positive (Staphylococcus aureus and Bacillus subtilis) and Gram-negative (Escherichia coli and Salmonella typhi) bacterial strain. The results obtained during study showed that, Gram’s positive bacteria were found to be more susceptible to antibacterial potentials of mango seed kernel extract, while Gram’s negative bacteria showed relative resistance against extracts. The results further revealed that the mango seed kernel extract possessed significant antimicrobial potential against the tested microorganisms. The zones of inhibition were ranged from 6.60 mm to 24.33 mm and
were comparable to the antibacterial potential of standard antibiotics. On the basis of these results it was concluded that the mango seed kernel is not only a waste material instead it has hidden benefits like antimicrobial potential and its extracts in this way can be used as a natural source for control of microorganisms.

Keywords: Mango seed kernel, food borne diseases, antimicrobial, pathogens

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GICICHLSR1712074  
Efficacy of Methanolic Crude Extracts of Pseuduvaria Macrophylla on the Human Breast Cancer Cell Line (MCF7) - effect of concentration

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Abstract
Preliminary study on the anti-oxidant and anti-cancer activities have been done on different parts of Pseuduvaria macrophylla (Annonaceae) in methanolic and hexanolic crude extracts. This species is a Malaysian local plant naturally found at montane forest area and traditionally has been used to treat clinical symptoms. Previous study demonstrated promising anti-cancer potential in methanolic crude extracts using single concentration especially on breast cancer cells under 24 hours treatment. The present study investigate the efficacy concentration of bark and leaf methanolic extract on MCF-7 breast cancer cell line under 48 and 72 hours of treatment. The method employed was MTT assay to determine the half maximal inhibitory concentration (IC50) of both extracts at different concentration under 48 & 72 hours of treatment. The IC50 was obtained by plotting the concentration (µg/mL) versus the percentage of inhibition of each extracts. The MCF7 cell line had decrease response to both extracts within 72 hours but showing promising cytotoxicity within 48 hours especially for leaf methanolic extracts at concentration of 140 µg/mL to inhibit 50% of tested cancer cell line, meanwhile the medium inhibitory concentration (IC50) of bark methanolic extract on MCF7 cells was 160 µg/mL. The results showed that the the IC50 of leaf methanolic extracts was comparably lower than the IC50 of bark methanolic extracts. In fact, leaf methanolic extracts demonstrated better efficacy on the MCF7 after been treated within 48 hours compared to 72 hours. In other words, leaf methanolic extract more potent than bark methanolic extracts.

Keywords Annonaceae, MTT assay, IC50, MCF-7 cell line

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GICICHLSR1712075  
Prevalence of Neuro-Musculoskeletal Complications in Patients with T2DM

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Abstract
Diabetes mellitus affects normal metabolizing body function and causes long term organs dysfunctions like blindness, kidney failure, neuropathy and autonomic dysfunction. The musculoskeletal is also affected by T2DM and causes pain, dysfunctions, and disabilities. Thus, this study is to find the prevalence of neuro-musculoskeletal complications in patients with T2DM. This cross sectional survey was conducted in various public and private sector hospitals of four major cities of Pakistan (Islamabad, Karachi, Lahore, and Sargodha) from 1st May to 31st December 2015. The patients of type II diabetes mellitus with both gender and age above 40 were included, and patients with active systemic disease of bones and soft tissues were excluded. A self-structured questionnaire was developed, reviewed by experts, and finalized after calculating their recommendations. The questionnaire was distributed among 600 patients, out of whom 500 patients responded. The non-probability convenient sampling technique was used for data collection. The data was analyzed by SPSS and percentages were calculated to estimate the neuro-musculoskeletal complications in patients with T2DM. The prevalence of neuro-musculoskeletal complication in type II Diabetes mellitus was 100%, while the frozen shoulder, tingling sensations and ants crawling sensations (61%) were equally the most common neuro-musculoskeletal complications followed by knee pain (53%), low back pain (43%). The most involved age group was 61 to 65 years and 58% patients were with positive family history. The most commonly used way of treatment was medications (90%) and physical therapy (10%). It was proved in study that frozen shoulder, altered sensations, knee pain and back pain have high association with long duration of T2DM. There is association between long duration of diabetes mellitus and neuro-musculoskeletal complications. It is concluded that the prevalence of neuro-musculoskeletal complications is high among patients of T2DM and commonly affects shoulder, back, knee, and altered sensation in legs. These are most commonly managed with medications followed by physical therapy.

Keywords: T2DM, neuro-musculoskeletal, complications, frozen shoulder, Range of motion

Effect of maternal body mass index on pregnancy outcome

Anupama Noojibail
GICICHLRSR1712076

Introduction: Optimum maternal weight gain in pregnancy is a topic well known as a result of its relation to better health in pregnancy. Adequate gestational weight-gain contributes for better pregnancy outcomes in both mother and infants for short and long term health. Several complications like post-partum haemorrhage, preterm delivery and macrosomia which were found to increase linearly with a rise in body mass index. Material and methods: This study was a retrospective observational study conducted over 1 year period on 300 pregnant women in their second trimester attending antenatal clinic. Study was done after obtaining Ethical clearance from the institution and written informed consent form the pregnant subjects. BMI was calculated after measuring the height and weight. BMI from 25-29.5 was considered over weight; 30 and above was taken as obese. Data was analyzed using SPSS version 13 by chi-square test. P<0.05 was considered statistically significant. Result: Out of 300 subjects 162 underwent Cesarean section. Among them 67 were in overweight and obese category, which was highly significant (P<0.0001). Out of 300 subjects 82 developed postoperative wound infection. Among them 41 were in overweight and obese category, which was highly significant (P<0.0001). Out of 300 subjects 49 developed preterm labours. Among them 46 were in underweight and normal category.
Rekha Kini  
GICICHLSR1712078

Comparative study of Peak expiratory flow rate to body mass index between exercising and non-exercising firstyear students

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Abstract

Peak expiratory flow rate (PEFR) is a measure of airflow in bronchial tree and it provides idea of bronchial tone. It is affected by age, sex, height, body weight, and other physical activity. There is evidence that obesity has a link to bronchial hyperresponsiveness. Thus, this study was conducted to find out the relation between PEFR and body mass index (BMI) in exercising and non-exercising young adults. Material & Methods: The study was conducted on 101 healthy young medical students in the age group of 17-19 years. Subjects were divided into two group (exercising and non-exercising) and 3 subgroups under each based on BMII (as per WHO Asian guidelines). Those with BMI between 18.5 to 22.9 kg/m² were considered as normal weight individuals, those having a BMI of 23-24.9 kg/m² were taken as overweight individuals and those with a BMI more than 25 were considered as obese. Anthropometric measurements such as height and weight were recorded. Body mass index was calculated using Quetelet formula (BMI = weight in kilograms / height in m²). PEFR was recorded with Wright’s peak flow meter and the best of three readings was considered. The data obtained was statistically analyzed using one-way ANOVA followed by Tukey’s test and students T test and P-value less than 0.05 was considered as significant. Results: There was significant (P<0.001) higher value of PEFR was seen in normal weight compared to overweight & obese students both in exercising and non-exercising group. Between exercising and non-exercising group, exercising group showed significantly higher PEFR value. Conclusion: Thus, this study was proposed to observe the change in PEFR with respect to BMI and find the relationship between BMI and PEFR in exercising and non-exercising students. Implication of the study: Based on the result of the study it is implicated that lifestyle modification will definitely helpful in better respiratory functioning in middle as well as old age

Key words: PEFR, BMI, Obesity, Exercise

Chidimma Chukwunwejim  
GICICHLSR1712081

Detection Of Community Acquired Extended Spectrum Beta-Lactamase Producing Bacteria Amongst Asymptomatic University Students In Anambra State-Nigeria

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Abstract

Aim: This study was conducted to investigate the prevalence of community acquired
extended spectrum β-lactamase (ESBL)-producing bacteria amongst asymptomatic university students in South-Eastern Nigeria. Methods: Fecal samples collected from students of Nnamdi Azikiwe University, Awka-Nigeria were cultured and bacterial isolates identified using standard microbiological procedures. A total of 102 non-duplicate strains of Escherichia coli, Klebsiella pneumoniae and Pseudomonas aeruginosa were isolated. Confirmation of ESBL production was carried out by double disc synergy test as described by the CLSI. Molecular characterization of the ESBL-producing isolates was carried out using PCR. Results: The prevalence of the E. coli, K. pneumoniae and P. aeruginosa isolates from the fecal samples were 63 (61.76%), 20 (19.61%) and 19 (18.63%) respectively. Again 22 (21.57%) out of the total 102 community isolates were ESBL-producing. ESBL producing strains were more common among E. coli (90.9%) and K. pneumoniae (9.09%). Of the total ESBL-producing isolates, 77.27 % were from females and 13.63 % from males. Although there was no significant difference (P>0.05) in the distribution of ESBL-producing E. coli and K. pneumoniae among the male and female students, there was a significant difference (P<0.05) in the numbers of ESBL-producing and non ESBL-producing isolates among the test organisms. PCR results showed that CTX-M and CTX-M 15 genes were responsible for the resistance expressed by the ESBL-producing organisms. Conclusion: The study showed that there is a high prevalence of ESBL-producing E. coli and K. pneumoniae among university students in South-Eastern Nigeria. The high prevalence of ESBL-producing organisms will create significant therapeutic problems in the near future. There is therefore the need to better define strategies to reduce their spread in communities and hospitals. Keywords: Extended spectrum β-lactamase (ESBL), prevalence, asymptomatic, double disc synergy test.

Dr. Pratik Kumar Chatterjee
GICICHLSR1712082

Moringa Oleifera Attenuates The Toxicity Induced By Cadmium On Total Platelet Count An Experiment On Adult Wistar Albino Rat Model

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Vinodini Nithyanandamodom Anantharaya
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Abstract
Background:Cadmium (Cd) is an environmental metallic toxicant that causes varying degrees of toxicity as it exists in different oxidational or transitional states and causes various blood disorders. Cadmium (Cd) also affects various organs on both acute and chronic exposures. Experimental evidences have shown that the most important tissue in body in which metabolic alterations are mainly reproduced is the blood. Moringa oleifera is originally from India & has been scientifically documented for its huge medicinal potentials, including alterations in platelet count. Aims and Objective: To examine the effect of Moringa oleifera aqueous leaf extract on total platelet count (TPC) in cadmium-treated rats. Materials and Methods: Twenty-four adult Wistar Albino rats of weights between (180-200) gm were broadly divided into four groups with each group consisting of six animals. Group I & Group IV was the control & those which were pretreated with the extract and then cadmium chloride orally for 1 day.
respectively. Data were presented as mean ± SEM and p≤0.05 was considered statistically significant Results: Findings of the present study revealed that the pretreatment with Moringa oleifera aqueous leaf extract, 100 mg/kg/bw, earlier to the cadmium administration exhibited a significant increase (p≤0.001) in the total platelet count (T-PC) in comparison with the cadmium-exposed group, which might have a role in clotting mechanisms also.

Key Words: Cadmium; Platelet Count; Clotting Mechanisms

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**Nayanatara Arun Kumar**
GICICHLSR1712083

**Effect Of Stress - Induced Tissue Malondialdehyde Level In Different Tissues In Selective Subcortical LesionedWistar Rats**

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**Abstract**

Subcortcial structures are known to influence stress responses. Among them, the amygdala nucleus and the paraventricular nucleus (PVN) of the hypothalamus has been linked in the regulation of stress responses. Stress is an unavoidable phenomenon. Stressful situations can lead to many physiological and psychological alterations. Oxidative stress induced by excessive formation of free radicals is considered to be crucial in cell injury in a variety of diseases. Impaired physiological responses to stress have been associated with major depressive illness and post-traumatic stress disorders. Stress has also been implicated as a mitigating factor in neuropathological processes. The idea that the brain categorizes stressors and uses response pathways that vary according to the category has gained significant support in the recent years. The present study was aimed to elucidate the comparative role of amygdala and paraventricular nucleus in regulating the stress-induced malondialdehyde level in heart, liver and kidneys. The present study was designed to elucidate the possible role of amygdala and PVN nucleus on chronic physical and chronic psychological stress induced tissue lipid peroxidation level. All procedures in this present study was performed in accordance with the guidelines established by the Institutional Animal Ethics Committee and of the Society for Neuroscience Policy on the Use of Animals in Research. Adult albino rats (150 to 250 g) of Wistar strain were divided into amygdala lesioned and PVN lesioned groups. Each group was further subdivided into lesioned control group and lesioned stress group. The lesioned stress group animals were subjected to chronic swimming and immobilization stress with bilateral lesions of nucleus of amygdala and PVN. Each subgroup contained ten animals. MDA levels of heart, liver, kidneys were estimated. Exposure to chronic swimming stress in PVN lesioned groups showed a significant (P< 0.001) increase in the tissue lipid peroxidation level when compared to the amygdala lesioned swimming stress groups. Further, exposure to chronic immobilization stress in amygdala lesioned groups showed a significant (P< 0.001) increase in the tissue lipid peroxidation level when compared to the PVN lesioned immobilization stress groups. The present study supports the definite role of PVN and amygdala in stress tolerance. Amygdala nucleus appears to play a potent role in minimizing the stress induced formation of lipid peroxidation in liver, kidneys and heart during the exposure to the psychological type of stress rather than a physical type of stress. Whereas, PVN nucleus appears to play an important role in minimizing physical type of stress. The data of the present study support the hypothesis.
that the brain recognizes at least two major categories of stressor, which has been referred to as physical and psychological.
Key words: Subcortical areas, stress, PVN, Amygdala

| Faical Boutlib  
GICICHLRSR1712085 | Demography Of Wild Barbary Macaque In Eastern Middle Atlas  
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Jad Tahouri  
Laboratory Of Geodynamic And Natural Resources, Faculty Of Sciences Dhar Mahraz, Sidi Mohamed Ben Abdellah University, Morocco  
Raja Guemmouh  
Laboratory Of Biotechnology And Preservation Of Naturels Ressource (Bprn), Faculty Of The Science Dhar ElMaharaz,University Sidi Mohamed Ben Abdelah,Fez, Morocco  
Camille Marie Florence Deman  
Laboratory Of Comparative Cognition, Institute Of Biology, Faculty Of Sciences, University Neuchâtel, Switzerland  
Abstract  
The Barbary Macaque (Macaca sylvanus) lives in the forest biotopes of Algeria and Morocco. It is found mostly in the cedar forests of the Middle Atlas Mountains, where it lives in structured groups. In the Eastern Middle Atlas, in addition to cedar forests, it also lives on the rocks. In these places, the groups are not isolated by habitat degradation and caves are used as dormitories. In the Eastern Middle Atlas, We counted the existing monkeys by simple scan. The study showed that the remaining populations of monkeys have a large turnover of individuals. The high proportion of young individuals explains why there is neither strong anthropization of the groups nor poaching of the young macaques, what explains its good preservation in the Eastern Middle Atlas.  
Keywords: Barbary macaque, demography, Morocco, Middle Atlas, Anthropization, Preservation.  
| How is Psychological sexual problems in women with Multiple Sclerosis?  
Kowsar Qaderi  
Nursing and Midwifery,Tehran University of Medical Sciences,Tehran  
Abstract  
Introduction: The majority of women with Multiple Sclerosis (MS) suffer from sexual dysfunction that can be shown by physical, indirectly physical and psychological symptoms. The aim of this study was to investigate psychological sexual problems (SP) in female patients with MS.Methods: 132 married women with MS in Iranian MS society, between November 2010 and February 2011, filled out Multiple Sclerosis Intimacy and Sexuality Questionnaire-19 (MSISQ-19). To determine psychological sexual problems in women with MS the questionnaire consist of questions about concerning about partner's sexual satisfaction, feeling less feminine due to MS, fear of being sexually rejected, feeling that my body is less attractive and feeling less confident about sexuality.Results: 91 (68.9%) of participants reported at least one of the psychological sexual problems. Concern about partner's sexual satisfaction was the most frequent symptoms of psychological SP (64 people, 48%). Of participants 37 had feeling less feminine due to MS (28%), 35 had fear of being sexually rejected (26%), 47 had feeling that my body is less attractive (36%) and 46 had feeling less confident about sexuality (35%).Conclusion: Besides the physical sexual problems symptoms
which most of the previous studies sharply emphasizes, the important role of psychological SP should be kept in mind. The results of the study emphasize the need for sexual counseling in care-treatment programs in MS patients.

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<td>House Of Hope For Street Children (Punks) In Order To Create A Healthy Younger Generation And Their FutureBright</td>
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<td>Mahrus Aldiansyah</td>
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<td>Department Of Public Health, University Of Jember, Jember, Indonesia</td>
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**Abstract**

The disease of HIV/AIDS has become a serious problem for teenagers who seem to never find the solution and prevention efforts. As is the case in the area of Jember, based on data compiled statistics Indonesia, East Java, the distribution of the HIV cases that occurred in Jember peaked four se-East Java. The disease of HIV/AIDS in teenagers started from a level of awareness of the youth against the disease are low. This raises an issue that often comes up and has been familiar in the ears of society Indonesia especially in urban environment which would be of minimal concern for one another. Basically a variety of programs to prevent the disease has been repeatedly encouraged by the Government with the hope that these programs will be able to prevent the occurrence of disease, but it is currently not many shows the result. Families and communities are less likely to care about the State of the teens that occurred at this time, the teenagers who lack concern and scrutiny of the families and communities concerned about negative activities in the fall can cause the disease HIV/AIDS. According to a survey we did, in Jember are still widely found in socialization of teenagers unhealthy and places of localization that is very close to the lives of teenagers, this thing certainly became one of the causes of the large number of cases of HIV occur in Jember. Then to cope growing worsening of the HIV/AIDS problem that occurs naturally need a preventative program designed which can increase awareness and concern of teens on the importance of understanding the disease and can provide stimulation to the family and the community to always watch over and care for the teenagers. With the existence of “House Of Hope” expected future teenagers can have a high concern to the environment and have a positive activity so as to avoid conscious and alert on activities that could be the cause of disease of HIV/AIDS.

**Keywords**: Disease Of HIV/AIDS, Youth, Prevention

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<th>Bhagyalakshmi Kodavanji</th>
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<td>Correlative Analysis Of Rh Blood Groups And Heart Rate Variability During Normal And Deep Breathing</td>
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<td>Bhagyalakshmi Kodavanji</td>
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<td>Professor And Head, Department Of Physiology, Kasturba Medical College, Manipal University, Bejai- Mangalore, India</td>
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**Abstract**

Background and Aim: Studies have revealed a relationship between erythrocytic antigens of the ABO and Rh blood systems and cardiovascular pathology. Reduced heart rate variability (HRV) indicates an increased risk factor for the development of cardiovascular diseases. The present study was aimed to do correlative analysis of Rh blood groups and HRV in normal individuals. Materials and Methods: This cross sectional study includes 120 healthy medical students (18 - 22 years) of both sexes, from Kasturba Medical College, Mangalore. The study was approved by institutional ethical committee and study is carried out with written informed consent of students. All the subjects were grouped in to Rh positive blood group and Rh negative blood groups based on the result of standard slide haem agglutination technique. ECG of all the subjects was recorded in lead II for a period of five minutes and HRV was analysed by measuring the R- R intervals using a software “HRV soft 1.1”
Version" software package. The HRV was analyzed both by the time domain method and frequency domain analysis during normal breathing. HRV is also analysed by deep breathing test for one minute and analyzed by the time domain method. In the time domain method, RMSSD- the square root of the mean squared differences of successive RR intervals (in milliseconds) SDNN-Standard deviation of RR intervals (in milliseconds) , pNN50 - percentage of differences between adjacent normal RR intervals exceeding 50 milliseconds were analyzed. In frequency domain method LF nu - Low frequency in normalized units, HF nu - High frequency in normalized units, LF/ HF - Ratio between low frequency and high frequency was measured. Statistical tests included in this study were ANOVA and student’s unpaired t-test. P-value was taken as statistically significant at 5 percent confidence level (P<0.05).

Results: The time domain analysis and the frequency domain analysis of HRV among Rh positive blood group and Rh negative blood group subjects during normal breathing did not show any statistically significant changes. Further, comparison of HRV between Rh positive blood group and Rh negative blood groups during deep breathing using time domain method did not show any statistically significant results.

Conclusions: The present study, concludes that there were no significant change in the heart rate variability of Rh positive blood group and Rh negative blood groups subjects. Further research is needed including in a larger sample size to confirm these findings and to show the correlation of Rh groups and heart rate variability.

Key words: Heart rate Variability, Time domain method, Frequency domain method, Rh blood group, deep breathing.
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Eman Sutrisna
Doctoral, Department of Pharmacology, Jenderal Soedirman University

Abstract

Scabies is a skin disease caused by ectoparacite, specifically Sarcoptes scabiei. Various problems in treating scabies such as drug side effects and drug resistance have triggered alternative to find better scabies treatment, for example by using herbal medicine. Nerium oleander is a herbal substance which contains acaricidal (mite repellent) and insecticidal (insect repellent) components. The aim of this study was to investigate the scabicidal effect of oleander (Nerium oleander) for Sarcoptes scabiei in vitro test. Thirty adult Sarcoptes scabiei alive was divided into 5 groups treatment, given Ivermectin, distilled water, Nerium oleander extract 50 ppm, Nerium oleander extract 100ppm, and Nerium oleander extract 200 ppm. Each treatment was observed for Sarcoptes scabiei's death per 4 hour until all the mite died. The result of experiment showed Nerium oleander extract 100 ppm had killed Sarcoptes scabiei with LC50 (Lethal Concentration 50) at 8 hours, significantly different compared to negative control group (p value<0,05). Survival rate of Sarcoptes scabiei achieved by extract Nerium oleander 100 ppm treatment at 9,33 hour. It was concluded that there was scabicidal effect in Nerium oleander for Sarcoptes scabiei on in vitro test at 100 ppm dosage and survival rate of Sarcoptes scabiei in extract Nerium oleander 100 ppm was 9,33 hours. Keywords : Scabies, Nerium Oleander, LC 50, Survival rate

Wiem Guissouma
GICICHLSR1712060

Fluoride Exposure In Drinking Water: Modeling Approach For Risk Assessment

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Jamila Tarhouni
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Carthage, Tunis, Tunisia

Abstract

The presence of fluoride in drinking water is known to reduce dental cavities among consumers, but an excessive intake of this anion might leads to dental and skeletal fluorosis. We develop a new model to assess the health risk of fluoride in drinking water and apply it to real samples taken from 100 water consumption points in Tunisia. Our results show that fluoride concentrations in tap water were between 0 and 2.4 mg L⁻¹. An empirical model was developed describing the safety limit and the daily fluoride exposure via tap water depending on the subject’s age; the model was calibrated to minimize the error between referenced data and calculated values. After calibration, obtained results were compared with those obtained with the ConsExpo simulation tool. Statistical analysis showed the mean-square error, correlation (r), and determination coefficient (R²) tended to 0, 1, and 1, respectively. As a result, the developed model was valid and suitable for fluoridated-water health-risk assessment and could be used by the scientific community and health organizations to prevent adverse health effects due to tap-water fluoridation.

KEY WORDS: fluoride, tap water, daily exposure, risk assessment, ConsExpo, empirical model.
Abstract

Objective: In this study, it was aimed to determine the preferences of drinking water for the people aged 18 years in Meram district.

Methods: This cross-sectional study is conducted in Konya province Meram district between dates April 1-June 1, 2016. Sample size is calculated as 810 people by G-Power 3.1.9.2 sample volume calculation program and as stated in the Turkish Demographic Health Survey (TNSA) 2013, the prevalence of network water use is taken as 50%, 95% confidence interval (α = 0.05), 7% deviation, 80% power and design effect 2. A questionnaire prepared by the researcher was given to the participants. Questionnaires were giving to the participants during face-to-face interview and they were all agreed to participate into study verbally. Analyses of the data were studied in the IBM SPSS 24.0 program on the computer.

Results: 514 women (63.5%) and 296 men (36.5%) participated in the study. Daily water consumption average is founded as 1.40 ± 0.81 L. It is found that %9.5 (77) of the participants choose water purifier equipment, %19.4 of the participants (157) choose tap water, %22.0 of participants choose packaged water, %49.1 of participants choose fresh water fountain as drinking water. In 2000 TL and above group, house type water purification and packaged water preference ratio were found to be significantly higher (p = 0.001). It is determined that 653 participants (80.6%) who did not prefer tap water didn’t prefer it because of these factors: 45.8% (299) from the taste and odor problem, 30.3% (198) from limy water, 24.8% (162) were thought water was dirty, 11.8% (77) because of the habit, 8.7% (57) of them was disturbed by chlorinated water.

Conclusions: Participants' daily water consumption and the proportion of water drinkers above 2L are low. It has been
determined that the usage rate of tap water as drinking water is also low. The purifier and packaged water usage rate is higher in the higher income group. Economic reasons come to the forefront in the preference of drinking water. It is seen that the main reason of not using tap water is due to unpleasant taste and odor problem.

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<th>Mehmet Uyar</th>
<th>Attitudes and behaviors of individuals about organ donation.</th>
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Abstract

Objectives: People have thought that organ and tissue transplantation can be done since ancient times. Various studies have shown that education, socioeconomic level, culture and religion are important factors in shaping the views of people on organ transplantation. The purpose of this study is to evaluate the attitudes and behaviors of individuals aged 18 years and older about organ donation.

Materials and Methods: This cross-sectional study was conducted between 2 January 2017 and 5 April 2017 in adults who are treated at the hemodialysis unit of Meram Medical Faculty and who applied to Family Health Centers (FHC) for any reason. A questionnaire form was prepared and applied to individuals who gave verbal approval under observation by the researchers. The data was analyzed with IBM SPSS 24.0. P <0.05 was accepted as the level of significance. Results: 128 Individual from FHC's and 111 people from dialysis unit were included to study. 57.8% (44 persons) of ASM participants and 52.3% of dialysis group were female. The answers given to 'Do you know about organ donation', 'Do you think to donate organs', 'Do you accept organ transplant when you need it', 'Do you have an organ donation card', 'Do you donate the organ for someone you do not recognize', 'Why do not you want to donate your organs' questions were similar in both two group (p>0.05). When asked 'In which case do you donate your organs', 'when I
am alive' answer was given in a higher proportion in dialysis group and 'After I died' answer was given in a higher proportion in FHC group. The proportion of people who gave 'No' answer to 'Do you donate your organs to a person who belongs to another religion?' question was significantly higher in dialysis group than FHC group (p=0.02). The proportion of people who gave 'Yes' answer to 'Is the personality of donor important', 'Is it important that who you will donate your organs' was significantly higher in dialysis group than FHC group (p=0.03, p=0.02).

Conclusion: The majority of participants were willing or undecided about organ donation. Nonetheless, most participants have said that they will accept organ transplants when they need donations. Religion was found to be an effective factor on organ donation.

Tahir Kemal Sahin  
GICICHLRSR1712064  
Malnutrition prevalence in 65 year old individuals in Meram Region

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Mehmet Uyar  
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Tahir Kemal Sahin  
Meram Faculty of Medicine/Department of Public Health, Konya Necmettin Erbakan University, Konya, Turkey

Abstract

Objectives: In this study, it was aimed to determine the malnutrition prevalence and sociodemographic and medical characteristics that may be related to nutritional status in the elderly people aged 65 years and older living in Meram.

Method: This cross-sectional study was conducted in Meram district between April 1st and July 1st, 2016. The universe of the study is composed of 26249 individuals aged 65 years and over who are listed in the Family Health Centers (FHC) of Meram region. With the appropriate sampling method, the sample size was calculated as 138 persons. Because the cluster sampling method was used in the study, the design effect was accepted as 2 and the sample size was calculated as 276. Family Health Centers (FHC) located in Meram District were accepted as clusters and 5 FHCs were chosen randomly. In the selected FHCs, sociodemographic characteristics and medical history questionnaire prepared by researcher, Mini Nutritional Assessment (MNA) and Geriatric Depression Scale (GDS) and Mini Mental State Examination (MMSE) in order to answer objectively depression and cognitive disorder questions in MNA were applied with face-to-face interview method to subjects aged 65 years or older who apply to the FHC for various reasons and accepted to participate in the study. Analyzes of the data were performed by the IBM SPSS 23.0 program.

Results: According to the MNA, malnutrition was found in 1.1% of the participants and malnutrition risk was found in 38.4% of the participants were found, and 60.5% of the participants were found to have good nutritional status. In subjects who have at least 1 chronic disease (91.3 %) (p=0.017), use at least 1 drug regularly (87.6 %) (p=0.016), have 'definite depression' according to GDS (27.9 %) (p<0.001) and have cognitive impairment according to MMSE (19.6 %) (p <0.001), malnutrition and the risk of malnutrition were significantly higher. Conclusions: A significant proportion of the elderly were found to have malnutrition and malnutrition risk, and those with cognitive impairment and depression had a higher ratio of malnutrition and risk of malnutrition.

Key words: Elderly, Malnutrition, Kognitive impairment, Depression

Yasemin Durduran  
GICICHLRSR1712065  
Preference Of Delivery Method And Sexual- Reproductive Health Knowledge-Attitude Status In Women

23rd International Conference on Healthcare & Life-Science Research (ICHLSR), 13-14 Oct 2017, Dubai, UAE  
Flora Grand Hotel, Near Al Rigga Metro Station, Deira, Dubai, United Arab Emirates23 HBSRA
Abstract

Sexual Health and Reproductive Health services cover subjects such as reproductive rights, family planning, safe maternity, and sexually transmitted infections (1, 2). Place in which the birth is given and method of delivery is among the subjects of safe maternity (3). In the study, it has been aimed to determine the preference of delivery method and productive health-application status of women between 18 and 49 who have applied to family health centers in city centers. The province of Konya is among metropolises of Turkey. Target population of the study is women between 18 and 49 in Konya city center. Sample size was calculated and after the number of women to be reached was determined by weighing women population of each county to the population. Data was collected by survey to women having applied to Family Health Centers randomly selected. Descriptive statistics and suitable statistical tests were used in its analysis. p<0.05 was considered statistically significant.

Age average of woman was 35.3±7.5 years and number of children was 2.09±1.0. The rate for educational status of high school or above was 49.1% and 83.9% of them were nuclear family. The rates of knowing and using any family planning method respectively were 69.7% and 47.8%. The rates for having the age for vaginal smear were 32.1%; the rates for knowing the age of mammography screening correctly and having the mammography were respectively 23.0% and 15.8%. If they were to give birth and in case that their preference was asked, the rates of preference of normal delivery and caesarean section respectively were 54.9% and 24.9%, whereas the rest had no preference. Ideal delivery method was normal in 70.7% of participants unless
there was a risky condition. The rate of having vaginal smear and knowing mammography age for those living in a family \((\chi^2=4.79, \ p=0.02)\), those working \((\chi^2=10.39, \ p=0.001)\), those graduated from high school/above \((\chi^2=8.68, \ p=0.003)\), \((\chi^2=44.29, \ p=0.001)\) was high. The rate of knowing family planning method is higher than percentage of using the same. The rate of knowing the age of vaginal smear and mammography is low. Number of women having had mammography scan is low. The rate of having vaginal smear and knowing the age of mammography for those living in nuclear families, those working, and those graduated from high school/above is higher than the rate for the others. Even though most of them say that the ideal delivery method is normal delivery, only half of them state that they shall prefer normal delivery. Besides the studies in which delivery methods are examined \((4, 5, 6, 7)\), we are of the opinion that increasing the awareness related to the subject and conducting periodical information studies within the scope of reproductive health shall be beneficial.

### Abstract

**INTRODUCTION:** Approximately 30-50% of hospital-acquired infections can be prevented through better compliance with hand hygiene \((1-3)\). **MATERIALS AND METHODS:** This study was conducted with 892 students studying in Selçuk University Medical School, 243 research assistants and 149 faculty members working in our faculty. The questionnaire was prepared by the investigators after a literature review and was administered to the participants. The data were analyzed using the Chi-square test, Kruskal Wallis Variance analysis and Bonferroni Corrected Mann Whitney U test. The level of significance was set at 0.05. **RESULTS:** Of those who took part in the study, 663 (51.6%) were male and 612 (48.4%) female. The mean age of the participants was 26.8±9.4. From the participants, 132 were 1st year students, 179 were 2nd year, 156 were 3rd year, 153 were 4th year 130 were 5th year and 142 were 6th year students. Besides these, 243 research assistants, 18 specialists, 34 assistant professors, 53 associate professors and 44 professors took part in our study. The knowledge level of students was found higher than that of research assistants and faculty members \((p=0.01)\). From these, the 1st and 4th year students had the highest level of knowledge. The knowledge level of research assistants was lower than that of students but higher than that of faculty members \((p=0.033)\). When the difference of knowledge level was assessed among the faculty members, no difference was found between professors, associate professors and assistant professors \((p=0.05)\). **DISCUSSION:** Our study also revealed that the level of knowledge on hand hygiene was higher in the 1st and 4th year students and the research assistants who had

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received training recently. By contrast, those participants who had never received training or who had received training long time ago had lower levels of hand hygiene knowledge. This shows the importance of repetitive trainings.

| Anupama Noojibail  
GICICHLSR1712076 | Effect of maternal body mass index on pregnancy outcome  
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Abstract  
Introduction: Optimum maternal weight gain in pregnancy is a topic well known as a result of its relation to better health in pregnancy. Adequate gestational weight-gain contributes for better pregnancy outcomes in both mother and infants for short and long term health. Several complications like post-partum haemorrhage, preterm delivery and macrosomia which were found to increase linearly with a rise in body mass index. Material and methods: This study was a retrospective observational study conducted over 1year period on 300 pregnant women in their second trimester attending antenatal clinic. Study was done after obtaining Ethical clearance from the institution and written informed consent form the pregnant subjects. BMI was calculated after measuring the height and weight. BMI from 25-29.5 was considered overweight; 30 and above was taken as obese. Data was analyzed using SPSS version 13 by chi-square test. P<0.05 was considered statistically significant.  
Result: Out of 300 subjects 162 underwent Cesarean section. Among them 67 were in overweight and obese category, which was highly significant (P<0.0001). Out of 300 subjects 82 developed postoperative wound infection. Among them 41 were in overweight and obese category, which was highly significant (P<0.0001). Out of 300 subjects 49 developed preterm labour. Among them 46 were in underweight and normal category, which was highly significant (P<0.0001).  
Conclusion: This study shows higher incidence of Cesarean section and delayed postoperative wound healing in high BMI subjects.  
Key words: BMI, Cesarean section, Postoperative wound healing, Preterm delivery |
| --- | --- |
| Rekha D Kini  
GICICHLSR1712078 | Comparative study of Peak expiratory flow rate to body mass index between exercising and non-exercising first year students  
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Abstract:
Peak expiratory flow rate (PEFR) is a measure of airflow in bronchial tree and it provides idea of bronchial tone. It is affected by age, sex, height, body weight, and other physical activity. There is evidence that obesity has a link to bronchial hyper responsiveness. Thus, this study was conducted to find out the relation between PEFR and body mass index (BMI) in exercising and non-exercising young adults  
Material & Methods: The study was conducted on 101 healthy young medical students in the age group of 17-19 years. Subjects were divided into two group (exercising and non-exercising) and 3 subgroups under each based on BMI (as per WHO Asian guidelines). Those with BMI between 18.5 to 22.9 kg/m2 were considered as normal weight individuals, those having a BMI of 23-24.9 kg/m2 were taken as overweight individuals and those with a BMI more than 25 were considered as obese. Anthropometric measurements such as height and weight were recorded. Body mass index was calculated using Quetelet formula (BMI = weight in kilograms / height in m2). PEFR was recorded with Wright’s peak flow meter and the best of three readings was considered. The data obtained was statistically analyzed using one way ANOVA followed by Tukeys test and students T test and P-value less than 0.05 was considered |

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as significant. Results: There was significant (P<0.001) higher value of PEFR was seen in normal weight compared to overweight & obese students both in exercising and non-exercising group. Between exercising and non-exercising group, exercising group showed significantly higher PEFR value. Conclusion: Thus, this study was proposed to observe the change in PEFR with respect to BMI and find the relationship between BMI and PEFR in exercising and non-exercising students. Implication of the study: Based on the result of the study it is implicated that lifestyle modification will definitely helpful in better respiratory functioning in middle as well as old age.

Key words: PEFR, BMI, Obesity, Exercise

Pratik Kumar Chatterjee  
GICICHLSR1712082

Moringa oleifera Attenuates the Toxicity Induced by Cadmium on Total Platelet Count: An Experiment on Adult Wistar Albino Rat Model

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Abstract

Background: Cadmium (Cd) is an environmental metallic toxicant that causes varying degrees of toxicity as it exists in different oxidational or transitional states and causes various blood disorders. Cadmium (Cd) also affects various organs on both acute and chronic exposures. Experimental evidences have shown that the most important tissue in body in which metabolic alterations are mainly reproduced is the blood. Moringa oleifera is originally from India & has been scientifically documented for its huge medicinal potentials, including alterations in platelet count. Aims and Objective: To examine the effect of Moringa oleifera aqueous leaf extract on total platelet count (T-PC) in cadmium-treated rats. Materials and Methods: Twenty-four adult Wistar Albino rats of weights between (180-200) gm were broadly divided into four groups with each group consisting of six animals. Group I& Group IV was the control & those which were pretreated with the extract and then cadmium chloride orally for 1 day, respectively. Data were presented as mean ± SEM and p ≤ 0.05 was considered statistically significant Results: Findings of the present study revealed that the pretreatment with Moringa oleifera aqueous leaf extract, 100 mg/kg/bw, earlier to the cadmium administration exhibited a significant increase (p≤0.001) in the total platelet count (T-PC) in comparison with the cadmium-exposed group, which might have a role in clotting mechanisms also. Key Words: Cadmium; Platelet Count; Clotting Mechanisms

Dr Betty Bagyam Daniel  
GICICHLSR1712084

Bacterial Opportunistic Infections Are Commonly Seen Among Immunocompromised Patients. Antibiotic Resistance Hinders Efforts To Treat Such Infections

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Abstract

The objectives are; To detect the prevalence of some opportunistic pathogens in immunocompromised HIV patients, To analyze the antibiogram of isolated organisms,
To correlate antibiotic resistance with the presence of plasmids, to identify crucial antibiotic resistance genes and understand their connectivity with MGEs. Bacterial strains were collected from HIV+ve patients. Pure cultures of Staphylococcus aureus, Pseudomonas aeruginosa and Streptococcus pyogenes were isolated. Their Antibiogram was analysed using Antibiotic Sensitivity discs and Staphylococcus aureus clones were selected for further studies. Plasmids were isolated from S. aureus strains and subjected to Agarose gel electrophoresis. The Plasmid profile was correlated with antibiotic resistance of isolated strains. Vancomycin resistant strains were selected to identify the presence of Van A gene. Both gDNA and plasmids were isolated separately and PCR was conducted to trace the presence of Van A. There wasn’t much correlation between antibiotic resistance and plasmid profile. The most resistant strains didn’t have high copy number plasmids than the less resistant ones. Plasmids weren’t the sole determinants of antibiotic resistance. This led us to explore other MGEs that could aid in conferring antibiotic resistance, a MGE that could possibly be stationed on both gDNA & Plasmids. Literature indicates that b-lactam resistance is due to transposon. A Tn3 family that’s non-constitutive, replicative DNA transposon. This transposon stays on the gDNA further lowering the possibilities of losing it via vertical gene transfer. VanA is a part of similar transposon Tn 1546 of the Tn3 family. PCR for Van A on Vancomycin resistant strains showed positive results both on gDNA and plasmids. The outcomes open up other possible routes of tackling MDR strains than solely antibiotics.

Sapna Marpalli
GICICHLSR1712087

Short Saphenous Vein Replaced By Two Veins With Variant Course And Terminations- A Rare Anatomical Finding

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Abstract
The dorsal venous arch of the foot lies on the dorsum of the distal part of the metatarsal bones. It receives dorsal digital and dorsal metatarsal veins and communicates with proximally located dorsal venous network. The medial and lateral marginal veins drain the corresponding borders of the foot and open into respective ends of the dorsal venous arch. The short or small saphenous vein (SSV) begins by the union of lateral marginal vein and lateral end of the dorsal venous arch. It passes posterior to the lateral malleolus and then on the lateral side of the tendocalcaneous to ascend along the middle of the calf and pierces the deep fascia in the lower part of the popliteal fossa to end in the popliteal vein. During routine dissection for undergraduate medical students, we encountered a case where the SSV was replaced by 2 veins which had variant course and termination in the right lower limb of an approximately 60-year-old male cadaver. The area of short saphenous vein was drained by 2 veins. One of them was beginning from lateral end of dorsal venous arch about 1cm anterior to the lateral malleolus crossing from lateral to medial side in the lower part of the front.
of the leg. It terminated by draining into the great saphenous vein at the lower one third of the leg. The lateral marginal vein instead of joining with the lateral end of venous arch, ran posterior to the lateral malleolus. It crossed the middle part of back of the leg from lateral to medial side to drain into the great saphenous vein at the level of upper one third of the leg. Understanding of lower extremity venous anatomy and its variations is essential for the diagnosis of pathogenesis and surgical treatments of the varicosity of veins of the leg.

Key words: Small saphenous, Varicosity, Dosal venous arch

Bhagyalakshmi Kodavanji
GICICHLSR1712090
Correlative Analysis of Rh Blood Groups and Heart Rate Variability during Normal and Deep Breathing

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Background and Aim: Studies have revealed a relationship between erythrocytic antigens of the ABO and Rh blood systems and cardiovascular pathology. Reduced heart rate variability (HRV) indicates an increased risk factor for the development of cardiovascular diseases. The present study was aimed to do correlative analysis of Rh blood groups and HRV in normal individuals.

Materials and Methods: This cross sectional study includes 120 healthy medical students (18 - 22 years) of both sexes, from Kasturba Medical College, Mangalore. The study was approved by institutional ethical committee and study is carried out with written informed consent of students. All the subjects were grouped into Rh positive blood group and Rh negative blood groups based on the result of standard slide haemagglutination technique. ECG of all the subjects was recorded in lead II for a period of five minutes and HRV was analysed by measuring the R-R intervals using a software “HRV soft 1.1 Version” software package. The HRV was analyzed both by the time domain method and frequency domain analysis during normal breathing. HRV is also analysed by deep breathing test for one minute and analyzed by the time domain method. In the time domain method, RMSSD - the square root of the mean squared differences of successive RR intervals (in milliseconds) SDNN - Standard deviation of RR intervals (in milliseconds) ,pNN50 - percentage of differences between adjacent normal RR intervals exceeding 50 milliseconds were analyzed. In frequency domain method LF nu - Low frequency in normalized units, HF nu - High frequency in normalized units, LF/ HF - Ratio between low frequency and high frequency was measured. Statistical tests included in this study were ANOVA and student’s unpaired t-test. P-value was taken as statistically significant at 5 percent confidence level (P<0.05).

Results: The time domain analysis and the frequency domain analysis of HRV among Rh positive blood group and Rh negative blood group subjects during normal breathing did not show any statistically significant changes. Further, comparison of HRV between Rh positive blood group and Rh negative blood groups during deep breathing using time domain method did not show any statistically significant changes. Further research is needed including in a larger sample size to confirm these findings and to show the correlation of Rh groups and heart rate variability.

Key words: Heart rate Variability, Time domain method, Frequency domain method, Rh blood group, deep breathing.

Dr Kunal
GICICHLSR1712091
Impact of Regularly Supervised Training of Pranayama and Omkar Meditation on the Cardiao-Respiratory Parameters and Short-Term Memory of Persons with Special Needs

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23rd International Conference on Healthcare & Life-Science Research (ICHLSR), 13-14 Oct 2017, Dubai, UAE
Flora Grand Hotel, Near Al Rigga Metro Station, Deira, Dubai, United Arab Emirates29
# Abstract

Background: Yogic practices are known to affect the cardiac, respiratory and mental status of people.

Objective: To investigate if the regularly supervised training of pranayama and meditation affects the basic cardio-respiratory parameters and short-term-memory (STM) of mentally challenged young adults.

Material and method: 80 mentally challenged young adults attending a special school were randomly divided into the control group and Yoga group. Yoga group performed Naadishodhan, Kapalbhati pranayama and Aum Chanting under total supervision for 30 minutes daily for 3 weeks, except on Sundays. Control group was involved with the regular school curriculum. The parameters were measured twice, before (baseline) and after (follow-up) the study period. STM was evaluated under two subcategories, first by the ability to repeat the numbers in reverse order and second, repeating the words in the same order. Respiratory rate, pulse, systolic and diastolic blood pressures were measured as cardio-respiratory parameters.

Results: Both groups had similar baseline scores. At follow-up, highly significant improvements were observed in Yoga group as compared to control. In the Yoga group scores of both the sub-categories of STM were higher, respiratory-rate and heart-rate were lower but was within normal range. However, both systolic and diastolic blood pressures of Yoga group showed no changes as compared to control.

Conclusion: The pranayama and meditation has beneficial influences on heart rate, breathing rate and STM of mentally-challenged people.

| Rajaa Essadik | Assessing the prevalence of protein-energy wasting in haemodialysis patients: A cross-sectional monocentric study. |
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Abstract

Research Objectives: Protein-Energy Wasting (PEW) is a strong predictive factor for morbidity and mortality in haemodialysis (HD) patients. The present study aimed to assess the nutritional status of patients on chronic HD by use of different nutritional assessment parameters, and to investigate predictors of nutritional status in a hemodialysis center in Morocco.

Methodology: This is a cross-sectional analysis performed on 126 patients aged 44.82 ± 14.01 years, undergoing maintenance HD in the Department of Nephrology of the University Hospital Centre of Casablanca, Morocco. Energy and nutrients intake assessment was obtained by a three-day period food recall. Biochemical parameters, bioelectric impedance analysis, and subjective global assessment (SGA), have been performed to assess nutritional status.

Findings: According to SGA the prevalence of PEW was 74.62%. However, when using the ISRMN malnutrition criteria only 36.50% of the patients were diagnosed with PEW. Pearson correlation showed a negative association between the degree of malnutrition evaluated by SGA and serum prealbumin (r = -0.54; p = 0.0001), serum albumin (r = -0.50; p = 0.001), energy (r = -0.34; p = 0.002), protein intake (r = -0.41; p = 0.0001), and a significant positive correlation with CRP (r = 0.65; p = 0.0001) was determined, but not with anthropometric measurements nor lipids profile. The areas under the receiver operating characteristic curve were 0.841 (95% CI = 0.751 – 0.932) for serum prealbumin, and 0.737 (95% CI = 0.634 – 0.840) for serum albumin.

Research Outcomes: Our results showed a high prevalence of PEW among Haemodialysis patients. Also, our findings suggest that SGA, serum albumin and prealbumin may be relative appropriate and practical markers for assessing nutritional status in HD patients.

Future Scope: Our finding highlights the need to implement and evaluate prevention strategies and management of PEW to increase the quality of life and decrease the morbidity and mortality of the HD patients.

Keywords: Chronic kidney Disease, Dietary intake, Nutritional assessment, Prealbumin, Protein-energy intake.

A New Single-Nucleotide Polymorphisms in TNF-α193 (G/A) in Moroccan Patients with Gastric Pathology

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23rd International Conference on Healthcare & Life-Science Research (ICHLSR), 13-14 Oct 2017, Dubai, UAE
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Research Objectives: The polymorphisms in tumor necrosis factor alpha (TNF-α) gene are emerging as key determinants of gastric diseases. The TNF- α−308 (G/A) and TNF- α−238 (G/A) single-nucleotide polymorphisms SNPs are the most extensively studied. However, all these studies are conducted in Caucasian and Asian populations. Thus, for the first time in Africa, we sought to investigate whether polymorphisms in TNF-α gene were associated with the development of gastric pathology in Morocco.

Methodology: A fragment of 266pb were genotyped (position −106 to position −372), by sequencing, in 244 individuals (93 patients with GC, 56 patients with chronic gastritis, and 21 patients suffering from ulcer and controls group consisted of 74 healthy volunteers, without any gastric disorders). Odds ratios (ORs) and 95% confidence intervals (CI) were estimated using logistic regression analysis. Evidence for deviation from Hardy-Weinberg equilibrium of alleles at individual loci was assessed by exact tests.

Findings: Despite the disparity of −308 SNPs in the world, it’s absent in our population. The TNF-α−238 (G/A) genotype was significantly associated with a high risk of gastritis and gastric cancer (GC) (p = 0.001 and p = 0.002, respectively). Furthermore, a new polymorphism located in the promoter region at position −193 in TNF-α gene was identified. This is a transition from guanine to adenine G/A. The distribution of this SNP was markedly different in patients suffering from ulcers. The association between TNF-α−193 (G/A) genotype and high risk of ulcer was significant (p = 0.03).

Research Outcomes: Taken together, these results strongly support the hypothesis suggesting that TNF-α−238 (G/A) polymorphism may be involved in gastritis susceptibility, which progresses in adenocarcinoma.

Future Scope: Based on the correa cascade, we suggest that the TNF-α−193 (G/A) allele has a protective function against gastric cancer by developing ulcer.

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