

*Proceedings of Annual Undergraduate Mentor Research Symposium
[PAUMRS] 2015-16. 1st Ed., Al-Ahsa: College of Medicine, KFU;*



**PROCEEDINGS OF
ANNUAL UNDERGRADUATE
MENTOR RESEARCH SYMPOSIUM
[PAUMRS] 2015-16**

Prepared by:

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

***IN THE NAME OF ALLAH, THE MOST
GRACIOUS, THE MOST MERCIFUL***



GMCA 2012

COLLEGE OF MEDICINE, KING FAISAL UNIVERSITY

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Preface

It is my honor and joy to present the “**Proceedings of Annual Undergraduate Mentor Research Symposium**” [PAUMRS]. This booklet is an impression of the considerable efforts done by the students, medical college resources and review by external evaluators. As the college of medicine receiving problem based learning (PBL) curriculum which is self-incorporated driven by subjects, thoughts by the students and coordinated and upheld by the faculty provide baseline to all students for conducting such kind of researches.

The impression of the quality and the exertion spent in such researches done by undergraduates during this PBL curriculum reflected as best by the external evaluators has motivated the college of medicine to gather them in a booklet. It is a paramount dedication from all those who deserved to be published indeed to be preserved for the historical background of KFU records.

Trusting this manner of devotion will encourage the establishment of the future college journal and continue publishing broadly and globally.

Dr. Hatem O. Qutub, MD

Dean,
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Preface

The “**Proceedings of Annual Undergraduate Mentor Research Symposium**” [PAUMRS] is designed as an abstract book, intended for any reader with an interest in undergraduate level medical research. The idea of this book was conceived with an aim to motivate our students towards research and to publicize their efforts. It consists of abstracts of scientific studies done by medical students in our college during the academic year 2015-2016. The studies are of high standard and meets criteria for scientific research of the University of Groningen, Holland.

This book is a glimpse of hard work of the students and their mentors and reflecting enthusiasm toward scientific research even at this level. I thank Dr Imran Sabri [Editor, PAUMRS], Dr Muhammad Talha Khan [Assistant Editor Male, PAUMRS], and Dr Sujatha Tejavat [Assistant Editor Female, PAUMRS], of my team as they have done hard work in the publication of this booklet in an high standard format.

Dr. Ibrahim Khalid Adbdulaziz Al Jabr

Editor in Chief,

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Forward

As we belong to a medical curriculum, which has become restructured to place greater emphasis on understanding the basic concept of medicine and also promoting scientific quest, I appreciate this publication titled **“Proceedings of Annual Undergraduate Mentor Research Symposium”** (PAUMRS). This is an interesting way of sharing all the mentor research topics, which will serve as a guideline for future graduates to pursue their research.

I appreciate all the mentors and students who successfully able to relate experimental results using relevant study models. For students, I feel this publication will serve as a guide to learn how to present the scientific investigation. I firmly believe that this concise publication will address the perceived needs of both medical school and undergraduate curricula. I owe many thanks to all the faculty of medicine who contributed for the successful outcome of PAUMRS magazine.

Dr. Abdul Rahman Saleh Al- Mulhim
Chairman, Mentor-Line Committee,
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A message

Conducting researches while you are student in any discipline is highly appreciated today. A flash back of medical education 20 years ago, I found emphasis primarily on grasping knowledge about diseases and its management. However, on the cusp of the new era the horizon of medical education is increased tremendously and the medical education became competency based. A change that has brought so many changes in teaching and learning strategies as well.

Consequently, now research became an important component of medical education and it is one of the focal requirements for getting postgraduate residency program all over the world and so as in Kingdom of Saudi Arabia also. Thus it is instantly not potential to get graduation without doing research at medical colleges.

Henceforth, we also have integrated; a competency-based curriculum, which is centered on problem-based learning adopted from University of Groningen, Netherlands and research is the major component of our curriculum. Our students understand shepherding research in first year and emerging a proposal in third year, which leads their thesis to be completed in final year.

This advancing is grounded on the researches shepherded by our first year students and presented in a symposium. I value this pursuit excessively such as to record the research activities in a form of booklet, which might be a very helpful resource for the forthcoming students for their research activities and becomes a motivational gizmo too.

In the end, toast to the entire team of editorial board for developing such a virtuous booklet for keeping record of our students' researches.

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Message

"Research is to see what everybody else has seen, and to think what nobody else has thought."

Albert Szent-Gyorgyi

Every doctor, by default, is a researcher. It is therefore important that a medical student understands and starts applying the basic principles of research from an early stage of his or her career.

Thomas Berger once said that "The art and science of asking questions is the source of all knowledge" The ability of formulating meaningful and relevant questions is the first step towards effective research...but it does not stop there. It is equally important to try to find solutions for your research questions through well designed ethical studies, accurate analysis of data and finally sharing the results effectively through publications.

The mentor group activities under the GMCA 2012 curriculum in the college of medicine, King Faisal University aims to provide a solid foundation for the medical students in all basic aspects of research- right from the stage of choosing and formulating a research question to the stage of publication. The mentor group activities are aligned with the philosophy of a student centered, competency and problem based curriculum which is the crux of the GMCA 2012 curriculum. These activities will ensure that a student graduating from this curriculum can independently carry out effective medical research for the benefit of the society.

I congratulate the students and supervising mentors whose abstracts in this booklet are testimony to the wonderful efforts that they have put in. For the students, I sincerely hope that God-willing, this is only the first step in a life-long journey of successful research.

I will end with this quote by the famous scientist Carl Sagan- "Somewhere, something incredible is waiting to be known."!

All the best!

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From the Editors Desk

Each year the students of the college of medicine conduct simple and precious researches under their mentor as a part of their Mentorship Line Activity. The Mentor line committee, coordinated by Dr Ossama Zakaria, is very cooperative in helping the student to conduct the researches. The idea of this program is to develop the scholarly and research skills in the students or doctors of the future.

A committee headed by Vice-Dean Dr Ibrahim Al-Jabr under the patronage of the Dean Dr Hatem O. Qutub was constituted, with the aim of publishing the Abstract Book titled “**Proceedings of Annual Undergraduate Mentor Research Symposium**” [PAUMRS]. The subsidiary aims of the committee are to provide a platform to the students to publish their research, to highlight the students researches in front of Saudi Commission for health Specialties and to motivate the student to develop scholarly/research skills.

Dr Abdul Rahman Abdulhadi Alsultan, Vice-Dean; Dr Mohammad Al-Farhan, Vice-Dean; and Dr Fahd Al-Wadaani, Chairman Medical Education Department played a vital role in initializing and motivating the team to deliver the best output. Dr Abdul-Rahman Saleh Al- Mulhim Chairman Mentorline Committee was very excited about the publication of Abstract Book and also provide valuable inputs time to time.

I will be wrong if I do not mention the name of Mr Bryan Kim J. Pascua and Ms Sara Alrashed, GMCA Unit Producer who were very cooperative during the process. Dr Mohammad Talha Khan and Dr Sujatha Tejavat, Assistant Editors of this abstract book are very committed to the work. This will not be completed without this hard work.

The “**Proceedings of Annual Undergraduate Mentor Research Symposium**” [PAUMRS] is dedicated to the Student Researchers of the College of Medicine.

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Abstract M1-Group 1

Vitamin D level in non-diabetic and type II diabetic patients in King Faisal University health center: A cross sectional study.

Alsubie MA, Alkhamees AW, Alhuwaiyshil AH, Alhuwaiyshil MA, Alhassan AA.

Introduction:

Widespread Vitamin D deficiency has been documented globally by various studies including a recent study in the Saudi Arabia, which revealed an incidence reaching up to 100%. Similarly, an incidence of diabetes mellitus is also increasing dramatically, and the prevalence in Saudi Arabia was observed to be highest than rest of the world in 2015. Interestingly, there are many studies which showed high association between Vitamin D deficiency and increased incidence of diabetes. Hence, this study was designed to observe an incidence of vitamin D deficiency in non-diabetic and type II diabetic patients in the King Faisal University health center.

Methods:

Our study was a cross-sectional study comprising 860 patients' data of: plasma 25 hydroxyl vitamin D3, fasting blood glucose, and HbA1c levels.

Results:

Our results showed that 89.53% of patients have vitamin D level below normal. There was higher incidence of vitamin D deficiency in females (81.67%) than in males (65.27%). The incidence of vitamin D deficiency was greater in Saudi (82.19%) than non-Saudi (68.40%) and in diabetics (89.68%) than non-diabetics (76.12%) patients. Within each group, the incidence of vitamin D deficiency was higher in females than in males. Incidence of vitamin D deficiency was highest in the 21 – 40 years group (86.19%) and lowest in the 1 – 20 years group (66.1%). The present results showed inverse relationship between vitamin D level and both fasting blood glucose and HbA1c. The mean fasting glucose was higher in the deficiency group (165.55) as compared to the insufficiency group (118.67). Also, the mean HbA1c was higher in deficiency group (8.06) as compared to the insufficiency group (7.23).

Conclusion:

There is high incidence of vitamin D deficiency among the King Faisal University health center patients. Vitamin D level was inversely proportional to the level of fasting glucose and HbA1c.

Keywords: Vitamin D, diabetes, glucose level.

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Abstract M2-Group 1

Incidence of primary palmar creases variants and their correlation to academic performance in college of medicine students of KFU: A descriptive study.

Alkhoufi AM, Alamer AA, Alyahya AA, Alrashed AW, Alateeg AE

Introduction:

Most human hands present 3 primary creases, but some represent only one or 2 creases. There are 21 variants described in the PIC model depending on crease number, presence or absence of intersection and/or complete transverse creases. This study was conducted to describe the incidence of different PIC model variants among students, and assesses if there is a relationship between variants types, and the students' academic achievement.

Material and Methods:

Our research is a cross-sectional study conducted on the 175 King Faisal University, college of medicine male students in year 1, 2, 3 and 4. Each student signed the data collection form and recorded his GPA, academic number, all finding related to PIC pattern of the right and left hands were recorded and a photograph of his palms was picked. The data was entered in SPSS program for analysis.

Results:

Out of the PIC 21 variants, we found only 10 variants in the students' palms [310, 300, 311a, 311b, 312, 321(variant c), 321 (variant d), 200, 201, 211]. Our study revealed new variants (PIC 320, 400, 410 and 510), which are not previously described. There was high incidence of bilateral symmetrical variants in both hands. The commonest variant was PIC 310 followed by PIC 300. The academic performance was highest in students having bilateral symmetrical variants and was highest in PIC 300 – 300 followed by 310 – 310. Within bilateral PIC 310, the highest performance was present in the students having symmetrical meeting points. The academic performance of students having bilateral 2 crease variants (4.69/5) was higher than those having this variant unilaterally (3.67/5).

Conclusions:

The most frequent variants are those having 3 creases. Typical similarity of variants in the 2 hands was associated with higher academic performance that was more confirmed by analyzing similarity in minor details as points of meeting between the primary lines. Presence of new variants in our study raise the importance of performing further studies to find any other un-described variants.

Keywords: Palmar creases, PIC, academic performance

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Abstract M3- Group 2

Effect of studying from one or multiple sources on the student's grades in medical school in King Faisal University

Al-Makeynah MA, Al- Katali NA, Buhlaigah AM, Al Rowaished BB, Al Wesaibi HA.

Introduction:

At the beginning of their journey, medical students all over the world feel lost, they don't know how should they study, and where to study from to get high grades. To find out by which way a student can get better results whether from studying from a single reference, or from multiple references.

Materials and methods:

We carried out this cross-sectional study by using questionnaires distributed to medical students (males and females) in the college of medicine, King Faisal University, Al-Ahsa, Saudi Arab. The response rate for this study was 19.18%.

Results:

Most of the students who study from multiple references got 4 grade-point-average, and above. The most useful resource remains lectures, which are given by the faculty members in the college, as compared to books advised by the college administration. These two resources are the most important sources for preparation for the exams.

Conclusion:

It was concluded that students who study from multiple sources tend to have higher grade-point- average than students who study from one source only.

Keywords: Learning source, student grades, grade point average.

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Abstract M4-Group 2

Smoking among male medical students, of the new PBL curriculum, in King Faisal University.

Almohammedsaleh AH, Aljaiban AF, Alsayed MA, Alshawaf YY, Alomran HI.

Mohammed-Elfatih Twfieg

Introduction:

Tobacco use is the leading preventable cause of death worldwide, and according to the latest estimates, more than 80% of the 8.3 million tobacco attributable deaths in the year 2030 will occur in low and middle income countries.

Method:

This is a cross-sectional study on smoking prevalence among male medical students from year one to year four, enrolled in the Problem based learning curriculum, within the medical college of King Faisal University. The data was taken by using a questionnaire during one month period.

Results:

A total number of 118 out of 354 students participated in this study, which makes a response rate of 33.3%. 98.3% of the students were single, and 1.7% were married. Cigarette smoking prevalence was found to be 16.1%. Friends who smoke are the major risk factor for initiating the habit of smoking among nonsmoker. There was no significant difference of smoking prevalence observed between the four different educational levels.

Conclusion:

The results of this study showed that cigarette smoking is a noticeable problem among male medical students.

Keywords: Smoking, Tobacco, Saudi

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Abstract M5-Group 3

Status of blood pressure in young, adult, overweight, and obese males of Al-Ahsa

Almulhim A, Aldandan N, Aldulami A, Alghafilie M, Alquhays I.

Introduction:

In 2014 more than 1.9 billion adults were overweight, and out of these over 600 million were obese. Similarly, in the Kingdom of Saudi Arab the percentage of obesity among adults is 35.5%. There are many studies that showed an association between obesity and hypertension. Therefore, we conducted this study with a main aim to observe the prevalence of hypertension among obese and overweight adult males in Al Ahsa.

Materials and method:

A cross sectional descriptive study was conducted to see the status hypertension among obese and overweight adult males in Al-Ahsa, by using a validated questionnaire.

Results:

We found that nearly half of the obese and overweight are pre-hypertensive, and being obese is four times more likely to be hypertensive comparing with being overweight.

Conclusion:

As observed in this study, the prevalence of hypertension appears to be more among obese than overweight adult males in Al Ahsa. Hence, there is need of increasing awareness among the people for the prevention and control of obesity and hypertension.

Keywords: Obesity, Overweight, High blood pressure, Al-Ahsa, Adult males.

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Abstract M6- Group 3

Self – perception of weight in overweight/obese young adult males of the Al-Hasa region

Bosror S, Alabdullah M, Alhijji M, Aboshabeeb F, Boudi A

Introduction:

Obesity is one of the most complex disorders that involve an extreme amount of body fat accumulation. It is not just a concern of appearance, but obese people are also at high risk for cardiovascular disease, diabetes, and metabolic syndrome. Citizens of developing countries such as the Saudi Arabia are at risk for obesity as a result of industrialization and accessibility to fast foods. The purpose of this study was to examine the self-perception of weight in overweight and obese young adult males of the Al-Hasa region.

Materials and methods:

A total of 332 adult Saudi males aged 18-39 were randomly selected from schools, malls, gyms, companies, and colleges in Al-Hasa. Obese and overweight participants were divided into four categories based on self-perception of their body weight: obese accurate perceivers, obese misperceivers, overweight accurate perceivers, and overweight misperceivers.

Results:

41.8% of obese and 35.7% of overweight were misperceivers. 76.5% of obese accurate perceivers and 75% of overweight accurate perceivers reported that they are working on weight reduction, while slight proportion of misperceivers reported that they are engaged in weight loss programs.

Conclusion:

Weight misperception is common among both obese and overweight young adult males in Al-Hasa. Accurate perception is greatly associated with involvement in weight reduction behaviors.

Key words: Al-Hasa, obese, overweight, body mass index.

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Abstract M7-Group 4

Protective effect of epigallocatechin against paracetamol nephrotoxicity in rats

AL-Sowayigh OM, Al-Hamrani AM, Al-Omairin AH, Al-Omran QA, Al kalifah SN, Fouad AA.

Introduction:

Our aim is to investigate the potential protective effect of epigallocatechin against paracetamol nephrotoxicity in rats.

Materials and method:

Rats were given a single intraperitoneal injection of paracetamol (350mg/kg). Epigallocatechin treatment was administered for two days (10mg/kg/day).

Results:

Significant increases in serum creatinine and kidney tissue levels of Malondialdehyde and Nitric Oxide were found in the group, which was given paracetamol in comparison to the control group. The administration of epigallocatechin significantly decreased serum creatinine and kidney tissue levels of Malondialdehyde and Nitric Oxide in comparison to the paracetamol only group. Additionally, the pathological kidney tissue damage induced by paracetamol was markedly reduced by epigallocatechin.

Conclusion:

Through its antioxidant and anti-inflammatory effects, epigallocatechin significantly protected against paracetamol nephrotoxicity in rats.

Keywords: Epigallocatechin, nephrotoxicity, paracetamol.

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Abstract M8- Group 4

Protective effect of naringenin against paracetamol nephrotoxicity in rats

Alkhars A, Alhaddad S, Alabdrabalnabi H, Almulhem M, Almohammedsaleh A,
Al-khars N, Fouad AA.

Introduction:

The protective effect of naringenin, a flavonoid compound from citrus fruits, was investigated against nephrotoxicity induced by paracetamol in rats.

Method:

A single overdose of paracetamol was administrated in the first day (350 mg/kg, given, intraperitoneally). Naringenin treatment (50 mg kg / day, intraperitoneally) was administered for two days.

Results:

Paracetamol caused significant elevation of serum creatinine, and kidney tissue levels of malondialdehyde, nitric oxide as compared with the control group. Naringenin caused significant decreased of serum creatinine, and kidney tissue levels of malondialdehyde, nitric oxide as compared with the paracetamol non-treated group. Additionally, naringenin markedly attenuated the histopathological renal tissue injury observed with paracetamol.

Conclusion:

It was concluded that naringenin, through its antioxidant and anti-inflammatory effect, may represent a therapeutic option to protect against paracetamol nephrotoxicity.

Keywords: Naringenin, nephrotoxicity, paracetamol.

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Abstract M9-Group 5

Hemotoxicity and Nephrotoxicity of Sildenafil Overdosing.

Ahmed Z Al-Khars, Mousa O Al-Sadah, Ahmed M Al-Hajji, Abdulrahman M Al-Suailim, Abdulaziz A Al-Yousef.

Introduction:

Sildenafil, commercially known as "Viagra", is a medication used for the treatment of erectile dysfunction. The popularity of this drug is seen to be increasing dramatically. However, adverse effects of sildenafil overdosing do exist, such as epistaxis and hypotension, as evident by some studies. Therefore, this study was conducted to observe the adverse effects of sildenafil overdosing that are: hemotoxicity and nephrotoxicity.

Method:

Fifteen rats were randomly divided into four groups; a control group and three test groups. Different doses of dissolved sildenafil were administered to the three groups. Followed by obtaining sections and blood smears to detect histological and hematological alterations.

Results:

Mild to moderate alterations of nephritic tissue and hematological morphology were observed.

Conclusion:

A possible hemotoxic and nephrotoxic effects of sildenafil overdosing might exist.

Keywords: Sildenafil, Overdosing, Nephrotoxicity, Hemotoxicity.

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Abstract M10-Group 5

Cardio-pulmonary cytotoxicity associated with overdose of sildenafil

Alyaeesh I, Alghanim M, AlSahood A, Alkhalaf A, Alsolaibi Z, Alghamdi R, Alrahman F.

Introduction:

Sildenafil commonly known as 'Viagra' has been used as a medication of people with hypotension, or men with erectile dysfunction. The side effects of this drug appear when it is being taken as overdose. This study was aimed to investigate whether the overdose of sildenafil cause cardio-pulmonary cytotoxicity in rats by seeing the histological alteration.

Materials and method:

Four groups of rats were received intra-peritoneal injections of sildenafil, dissolved in sterile saline 45% (4.35-4.5), except the control group. The injections were given for 5 days in three doses, (0.3 mg/rat for group 1, 0.5 mg/rat for group 2, and 1 mg/rat for group3), to test the histological alteration in the lung and the heart of the injected rats with sildenafil.

Results:

Sildenafil did not show any signs of cardio-pulmonary cytotoxicity, but there was histological alteration on the cardiac and pulmonary tissues, mainly due to sildenafil's vasodilator effect. In the pulmonary tissue, there was clear marked dilation on the pulmonary capillary, congestion bold, and thickness on the inter-alveolar septum. However, on the cardiac tissue there was dilation on the cardiac vessels, but no effect on the cardiac muscles.

Conclusion:

The sildenafil did not cause cardio-pulmonary cytotoxicity, but there was histological alteration on the cardiac and pulmonary tissues mainly due to sildenafil's vasodilator effect.

Keywords: sildenafil overdose, heart, toxicity.

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Abstract M11-Group 6

Cholesterol Level among Diabetic Patients in Al Ahsa Province

Albaqshi HN, Alkhalaf HE, Alsuqair HM, Almarzooq MY, Alrubayyi MY.

Introduction:

Diabetes mellitus is a group of metabolic diseases in which there are high blood sugar levels over a prolonged period. Diabetes mellitus can be divided into two types; Type 1 diabetes mellitus which is caused by lack of insulin secretion (accounts for 10% of all diabetes cases) and type II diabetes mellitus which is caused by insulin resistance in cells (accounting 80-90% of all diabetes cases). The aim of this study is to measure the level of cholesterol in diabetic patients in Al Hasa.

Methods:

The data was obtained from the Polyclinic in King Faisal University and Prince Saud Bin Jalawi Hospital in Al Ahsa. It was analyzed by using a software program known as SPSS.

Results:

There was a statistical difference between the gender and blood pressure and the total cholesterol level among the diabetic patients as well as the high cholesterol level and the patients' ages.

Conclusion:

The total cholesterol levels were significantly associated with the gender and blood pressure among the 67 diabetic patients, while the significant association was detected between only high cholesterol level, and the patients' ages. However, there is no significant statistical difference between high or borderline cholesterol levels separately, and the gender.

Keywords: cholesterol level, diabetes mellitus.

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Abstract M12-Group 6

Serum electrolyte level among diabetic patients in Al-Ahsa, Saudi Arab.

Almuhanna AA, Alholaili SA, Omran AA, Alkhaluf AH, Almulhim MI, Ali MS.

Introduction:

Diabetes mellitus is a chronic condition that is noticed by the inability of the body to control the levels of glucose in the blood stream, maintaining balanced electrolytes levels is necessary for the body to function properly. Identification of any link between the previous points can provide us with a better way of understating them. Therefore we carried out this study to find out whether or not there is a relationship between the levels of serum electrolytes and various age groups, gender, and blood pressure.

Material and method:

All the data was collected from the records in polyclinic in the King Faisal University and Prince Saud Bin Jalawi hospital and was analyzed by computer using the Statistical software for social sciences.

Results:

The Potassium levels were insignificantly associated with gender. Which is most probably because of similarities in their dietary habits and social behavior. The relationship between serum sodium and potassium levels compared to age did not show any significant statistical difference. The levels of serum electrolytes in the present study did not show any significant relationship with blood pressure this could be explained by the low number of samples in the study.

Conclusion:

The study concluded an insignificant association between the levels of serum electrolytes and gender, as well as between different age groups and blood pressure.

Keywords: Diabetes mellitus, serum potassium, serum sodium

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Abstract M13-Group 7

The importance of diabetic patient education and diabetic foot care, in preventing further complication, in Al-Ahsa, Saudi Arabia.

Ibrahim T Alfajri, Ali T AlHashem, Mohamed A Alsowalih, Saad S Almuhanha, Abdulrahman A Alabdulqader, Tarek BENAMEUR

Introduction:

Diabetes mellitus is among one of the highest prevalent diseases in the world. In 2014 it was estimated to be 9% among adults aged 18 years and older. In Saudi Arabia, 3.4 million cases were diagnosed during 2015. Diabetes has lots of complications; the most common chronic complication is diabetic foot. Diabetic foot can be caused by nerve damage or poor circulation: both of these types can lead to serious complications.

Material and methods:

A descriptive cross-sectional study was designed based on validated self-administrated questionnaires. Inclusion criteria: only a diabetes mellitus diagnosis; male and female; and age group of 18 years and more, were selected. Criteria for exclusion: non-diabetic patients, children, and patients who were unable to provide the requested information during data collection. The study was conducted in the polyclinics of King Faisal University in Al-Ahsa, Saudi Arabia. Data were analyzed in a database created using a Microsoft Office Excel 2010, and later transferred to the statistical package for the social sciences version 19.

Results:

Only 11.72% examined their feet when they visit health care providers. The majority of respondent, that is, 38.47% among the diabetic patients in our study thought that it is not necessary to contact their doctor, when they notice any change in their feet. Similarly, 50% of the diabetic patients did not inspect their feet regularly and only about 36.70% inspect their feet regularly, 13.30% were uncertain about foot care.

Conclusion:

We found that nearly half of our respondents were not aware and not educated about these life-threatening complications of diabetic foot. However, primary healthcare centers should improve their system by establishing a comprehensive quality assessment and educate the staff more to provide a good foot-care for their patients.

Keywords: diabetic foot, diabetic, education

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Abstract M14-Group 7

Antibiotics self-medication among medical and nonmedical students of eastern region of Saudi Arabia

Abdullah I Al-Beladi, Hassan S Albohassan, Hassan A Alali, Hassan A Alomran, Abdullah M Alaithan, Tarek BENAMEUR

Introduction:

To measure the prevalence of antibiotics self-medication, and estimate the students attitude and knowledge toward the antibiotics self-prescription.

Material and methods:

A self-administered questionnaire was used to collect data.

Results:

57.9% of students take antibiotics without medical prescription. The percentage of antibiotics self-medication among non-medical students was 67.3%: and out of that 46.7% were male. The study revealed that 11.7% of female medical students were cautious: not to take antibiotics without medical prescription, comparing to 39% of male medical students. Overall, 50% of all medical students take antibiotics without medical prescription. The most common symptoms for which antibiotics were self-prescribed were: cough 42.7%; Sore throat, 40.9%; fever, 39.2%; runny nose, 31.6%; and diarrhea, 17.5%.

Conclusion:

Antibiotics self-medication is noticeably high in both medical and non-medical students. There is a need of urgent intervention to reduce the frequency of antibiotics self-medication among students.

Keywords: Prevalence, self-medication, antibiotics.

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Abstract M15-Group 8

Pregnancy outcomes among women with sickle cell disease in Al-Hasa, Kingdom of Saudi Arab

Al kishi AM, Alkhars AA, Alabdrabulnabi MA, Alhamoud HH, Alshuayb AH, Alskak AAA.

Introduction:

Pregnancy associated complication are not uncommon even in the healthy women. Among the high risk pregnancy is the presence of anemia including sickle cell disease. Relationship between sickle cell disease in pregnancy and the following complications: congenital abnormality, intrauterine growth restriction, preterm labor, neonatal sepsis, intrauterine fetal death, miscarriage, and opioid exposure, is well documented. This research aims to evaluate the pregnancy outcome among sickle cell disease pregnant women in Al-Hasa hospital.

Material and method:

Fifty-nine sickle cell disease pregnant women, who attended maternity hospital from the period January 2014 to March 2016, have been included in the study. The effect of the guidelines of management of sickle cell disease pregnant women were studied, and compared to the following factors: fetal outcome, mode of delivery, Apgar score, birth weight, stillbirth, admission in Intensive care unit, history of pre-eclampsia and eclampsia, history of deep venous thrombosis, foetal surveillance, and general anesthesia at the time of delivery.

Results:

The results showed that the Saudi women with sickle cell disease in Alhasa are at great risk of having pregnancy and birth complications.

Conclusion:

This study uncovered that there is an increased risk of pregnancy related complications among sickle cell disease pregnant women.

Keywords: Sickle cell anemia, Saudi, Women

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Abstract M16-Group 8

Breastfeeding Awareness, Attitude and Barriers among Saudi Women in Alhasa, KSA

Abdulelah Alneamah, Mohammed Albensaad, Ahmed Alrasasi, Abdullah Alnaiem,
Mohammed Alkhars

Introduction

Breastfeeding is the normal way of providing young infants with the nutrients they need for healthy growth and development. It is a perfect way of providing the best food for the healthy growth and development of infants. Four centuries breastfeeding was the sole solution for nutrition of the baby. However, with the modernization simulated breastfeeding formula has been created. Database evidence has proved the disadvantages of this technique.

Methodology;

Prospective survey cross sectional study mothers who are living in Al Ahsa area and have one or more children 82 mothers. Data will be collected by using a questionnaire that was designed to survey information regarding the state of breastfeeding among these mothers. The questionnaire contains demographic data, social data, culture data, economical data, health data and traditional beliefs data. Information on the children in the family were also include the factors expected to stop or decrease breast feeding.

Result:

Most women who are nonbreastfeeders were in the age range of 26 to 36. (90%) of the non breastfeeding mothers live in the cities as compared to the 60% Of the breastfeeding mothers.

Sixty percent (60%) of breast nonfeeding mothers do not spend much time at their homes as compared to 51.1% among the breastfeeding mothers. Nearly half of the not breastfeeding mothers believe that the act of breastfeeding does affect the body structure and lookand that that the natural breastfeeding can be replaced by synthetic formula milk.

Conclusion:

Because breastfeeding is very important for infants, practical steps such as intensive education, support at postnatal period and longer maternity leave are required to encourage the rate of exclusive breastfeeding among the mothers in Al Ahsa area.

Keywords: breastfeeding, Saudi women, Awareness

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Abstract M17-Group 9

Autism: A challenge to Saudi families

Aljubran TM, Alghadeer HA, Almomen HH, Alqassimi AM, Alnazzal MY,
Alsulaiman ZT, Khan AS, Sabri I.

Introduction:

Autism is a mental condition, which is present from early childhood; it is often observed and diagnosed within the first 3 years of the child's life. The characteristics of this condition are impaired social interaction, and verbal and non-verbal communication; and restricted, repetitive or stereotyped behavior. According to some previous studies conducted in Saudi Arabia and Egypt, there are more than 350,000 children with autism in Saudi Arabia, and more than 800,000 children with autism in Egypt. The prevalence of autism in males is greater than females with a ratio of 4:5. The main aim of this research is to examine autism and how it is impacting families.

Material and Method:

This study was conducted between 2016 and 2017 in the eastern region of the Kingdom of Saudi Arab. The target population included all families that have one or more autistic child. The data for this study was collected from the autism centers in the eastern region of the Kingdom. Content analysis was used to transform qualitative data to quantitative data by SPSS.

Results:

37.7 % of the children are causing an embarrassment to their families, while 63.9 % of the families are suffering from the way that the society is dealing with their child. 31.1 % of the families said that there is no autism center near to their houses. Furthermore, 72.1% of the families are living in an area where there is no private school for their Children.

Conclusion:

An autistic children are suffering from many challenges, money, sources, embarrassment and some dangers. We need to be more careful about autism. Families are suffering a lot, but unfortunately they are not getting any help.

Keywords: Autism, challenges, family, Saudi.

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Abstract M18-Group 9

Sudden Infant death syndrome in Al-Ahsa Area: community Awareness

Alsahaf H, Almohammedsale O, Alabbad S, Aljamea H, Almubarak M, Khan AS, Sabri I.

Introduction:

Sudden infant death syndrome is defined as the unexplained death, usually during sleep, of a seemingly healthy baby, less than a year old. The syndrome is also one of the main global causes for death in post-neonatal period. Approximately, 3500 infants die every year due to it in the United States of America. However, in Saudi Arabia the incidence of this syndrome is 17.5% as compared to 82.5% who were expected to die after birth. The aim of this study is to know the awareness of Saudi community towards it, and to observe the risk factors that may lead to this syndrome.

Methods:

A cross-sectional study was conducted among residents of Al-Ahsa, Saudi Arabia, for four months. All the identified families living in the region were included, which were identified through birth and death registry, and contact with community.

Results:

All families with a history of the syndrome participated in the study out of which 77.8 % were male and 22.2 % were females. More than 80% of the families were not involved in any session or read anything on how to deal with an infant after delivery, and during the first year. 25% parents complained about fever before it, while others didn't mention any symptom. Regarding mothers' level of education, 25% of the mothers who did not attend any school or have attended high school, had more than one infant who died suddenly. Surprisingly, more than 25% of the mothers having university degree didn't have enough knowledge to deal with an infant.

Conclusion:

There is need to create awareness in Saudi community regarding this syndrome, as well as, information on dealing an infant must also be provided. Still, the underlying pathological causes behind the syndrome are not clear yet; we need to conduct more researches to find out.

Keywords: Sudden infant death syndrome, Saudi, Awareness.

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Abstract M19-Group 11

Ethanollic extract of red cabbage brassica oleracea Ameliorates hyperglycemia and hyperlipidemia in streptozotocin diabetic rats

Ali Alsaeed , Alameer M, Alhawell M, Alabdulwahab A, Almomen M, Alanzy B,
Almohysin E, Almulhim O, Alebrahim M, Alali H, Mossad Saif.

Introduction:

Diabetes mellitus has become the most common metabolic disease worldwide. The edible leaves of Red cabbage (*Brassica oleracea* L.) are taken raw in salad or in the cooked form. Aim: Therefore, It was of interesting to observe the hypoglycemic and hypolipidemic effects of ethanolic (50 %) extract of the red cabbage leaves in streptozotocin (STZ)-induced diabetic rats.

Material and method:

Diabetes was induced in male Wistar rats by injecting rats with a single dose (60 mg/Kg body weight) of streptozotocin. After 40 days daily oral supplementation (250 mg/Kg body weight) of extract of red cabbage leaves, the hypoglycemic and hypolipidemic action of this extract were investigated by measuring blood glucose level, glycated hemoglobin (HbA1c), total cholesterol (TC), and triglycerides (TG)

Results:

Diabetic rats showed a significant elevation in serum glucose, HbA1c, TC, and TG. The oral supplementation of extract of red cabbage leaves significantly ameliorated serum glucose ($p < 001$), HbA1c ($p < 001$), TC ($p < 01$), and TG ($p < 01$). By comparison, a standard antihyperglycemic drug, glibenclamide, when administered at a dose of 10 mg/kg body weight, reduced blood glucose, HbA1c, TC, and TGs levels.

Conclusion:

It is concluded that ethanolic extract of red cabbage reduced the blood levels of glucose, HbA1c, and lipids and it was more effective than glibenclamide in reducing blood glucose.

Keywords: Hypoglycemic, hypolipidemic, red cabbage, triglycerides

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Abstract M20-Group 10

Satisfaction of Patients Attending KFU Health Care Center In Al-Hasa

Hamed Al Abad , Muntather Al Hejii, Ahmed Al Duwayrij, Hassan Al Abbad, Jehad Al Ghanim, Abdulrhman Al Shamry, Abdulraoof Al Shuaibi and Osama Al Qahtani.

Introduction:

Patient satisfaction is a measurement of the patient contentment about the services they get from the healthcare providers. The objective of this study was to evaluate patients' satisfaction with King Faisal University Primary Health Care Center's (PHCC) services at Al Ahsa region, KSA. The domains of satisfaction included ease of appointment, doctor attitude, staff, facilities, drugs, and overall satisfaction.

Methods:

It was cross-sectional study in which data was collected using modified PSQ 18 (Patients Satisfaction Questionnaire) questionnaire to find out patient satisfaction. The data was collected by filling in the questionnaire by the researchers or response of the eligible patients in the social media. Data was entered in the Microsoft Excel and SPSS software was used for statistical analysis.

Results:

The score of satisfaction of all 6 domains in this study was 55.4 out of 90 (61.55%). There was a significant difference between the score of satisfaction between male and female, while there was no significant difference in score of satisfaction among people of different ages, first time visitors of the health center and returning patients.

Conclusion:

In this study we found that satisfaction of patients was related to the gender but not to the age or to the new and old patients.

Keywords: Patient satisfaction, Primary health center

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Abstract F1-Group 4

Awareness on Child Maltreatment among mothers who visit PHC in Al Hassa

Maryam Mohammed Al-Sultan, Maryam Ali BouSaleh, Maryam Redhaa Bin Obaid, Ola Hassan Al-Ghadeer, Walaa Ahmed Al-Abdullah, Jumanah Habib Alibrahim, Duaa Mustafa Al-Mubarak, Fathia Omer Mohamed*

Introduction:

The Child maltreatment is the abuse and neglect that occurs to children under 18 years of age. Awareness on child maltreatment is an important issue being recently considered, because child maltreatment is a public health problem. Aim: The aim of this study is to assess the awareness on Child maltreatment.

Methods:

The study followed a descriptive analytic study design. The sample selected randomly among mothers who visit PHC clinics and the sample size is calculated Accordingly, following all Ethical, legal and social considerations. The data collecting method is a questionnaire that had been checked for validity and reliability by experts and a pilot study. Data is analyzed through (SPSS) programme.

Results:

The main findings of the study are difference of awareness on Child maltreatment among mothers according to their marital status, according to their educational level and according to their resident.

Conclusion:

The most important recommendation of this study is to help develop strategies for increasing the awareness about the impact of child maltreatment and establishing programmes for the protection of children as well as facilitating scientific researches.

Keywords: Child maltreatment, PHC, Saudi Arabia.

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Abstract F2-Group 6

The effect of eating rate on satiety, and BMI in relation with academic performance

Amnah Alomran, Khadijah Al-Ali, Kawthar Aljamaan, Fatimah Albattat, Zahra Alismail, Fatema Althkerallah, Wejdan Almarzooq, Fatimah Alabdulmohsin, Sajeda Almishal, Sonia Allam.

Background:

Obesity is one of the serious challenges for public health in the world. It has a big impact on the disturbances of the human body and function. Faulty eating behaviors are considered to be among the main contributors to obesity.

Objectives:

This study has two objectives; to determine whether there is a relationship between eating rate and feeling satiety among healthy female students and whether there is a significant relationship between the academic performance and body mass index.

Methods:

One hundred and three healthy female students from high schools and KFU in Alahsaa, KSA participated in the study. Weight and height were measured to calculate the body mass index. Academic performance was taken from school and university records. A meal of 377 calories was given to all participants and rate of eating was recorded.

Results:

There was a significant relation between eating rate and satiety (Pearson Chi-square test= 103.275, df= 4, P-value= 0.0001). The relation between BMI and academic performance proved to be insignificant (Pearson Chi-square test= 20.794, df= 15, P-value= 0.144).

Conclusion:

Most of Saudi students are within the average weight and there was no significant relation between their BMI and academic performance. However, there was a significant relationship between eating rate and feeling satiety.

Keywords: eating rate, satiety, BMI, academic performance.

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Abstract F3-Group 8

The Effect of Microwave Radiation on The Growth of Staphylococcus Aureus

Kawther Abduljabbar Boumarah, Zahrah Ahmed Al Abdullah, Sarah Sami Al Mubarak, Sama Ahmed Alkhawaja, Naglaa Sidig

Introduction:

The benefit and convenience of microwave ovens cannot be denied. They produce obvious effects on the microbial growth. Sterilization of food from microorganisms that cause food poisoning, such as staphylococcus aureus (S aureus), has very significant preventive and cost effective benefit.

Aim:

Investigation of the effect of microwave radiation (MR) on the growth of staphylococcus aureus (S aureus).

Methods:

An experimental study was conducted in four cafeteria's microwaves in KFU. Materials were collected by taking four swabs from four microwaves of four different cafeterias in two different times; beginning and end of a working day, followed by culturing them on Blood agar (BA), and mannitol salt agar (MSA). That was further evaluated by conduction of a similar test inside the lab using S aureus samples. Exposure time varied between zero (control) to 7 min.

Results:

Compared to untreated control culture, cell viability was significantly reduced as the exposure time increased, with almost complete inactivation at 7 min. Data analysis by SPSS version 19.0 concluded that there is a highly significant negative relationship between exposure time and quantity of bacteria.

Conclusion:

It has been determined that a significant decrease in S. aureus was observed as exposure time to MW radiation increased. The results showed no growth of bacteria on both Blood agars and Mannitol salt agar, which can be explained as the constant use of microwave oven by college students has caused destruction of bacteria and consequent sterilization. Third experiment showed that prolonged exposure to radiation cause reduction of S. aureus. Thus, all conducted experiments were supportive of the original hypothesis.

Keywords: Radiation, staphylococcus, aureus

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Abstract F4-Group 9

Potential Risk of Zoonotic Transmission of Respiratory Pathogens from Laboratory and Wild Rodents to Humans in Al-Ahsa'a.

Maram Mahmoud Busuhail, Noura Fahad Al-Eid, Salma Saad Al-Khalifa, Fawatem Hussain Al-Saqer, Nora Ahmad Al-Muhaniy, Lorina Badger- Emeka.

Abstract:

Introduction: The relationship between humans and the animals living in our environment cannot be overlooked and according to (CDA, 2011), of the 1407 known diseases that affect humans, 60% of them are zoonotic. Examples are rodents which are present in our environment.

Aim:

To look into the possibility of transmission of zoonotic respiratory tract infections from animals such as rodents.

Material and Methods:

Laboratory bred albino white rat and a rat from a farm in Al-Ahsa was used for the study. They were anesthetized with ether before sample collection. Swap samples were collected from the nasal region, trachea and lungs and inoculated into nutrient broth and incubated at 37°C overnight. Blood, Chocolate and MacConkey agars were used for bacteria isolations. Microbial identification, MIC values and antimicrobial sensitivity was obtained using the Vitek 2 compact automated system.

Results:

The results obtained showed the aerobic environment has the highest percentage of isolated organisms in different media and the highest percentage of isolated organisms was from Trachea obtained from MacConkey agar. *Pseudomonas Oryzihabitans* as one of the isolates. According to the Antibigram results, the organism is seen to be sensitive to all the tested antibiotics except one. This, therefore, indicates that any infection with *P. Oryzihabitans* would respond to proper treatment. On the contrary, *P. oryzihabitans* isolated from the wild rat tends to be multi-resistant. However, the organism remains a potential threat to humans and has been reported to cause infections in immunocompromised individuals.

Conclusion: *Pseudomonas oryzihabitans* and other *Pseudomonas* species isolated from both rats indicate the presence of respiratory tract pathogens that are potential dangers to humans. The multi drug resistance to antimicrobials points to the dangers of rats in the wild being carriers of MDR strains of pathogenic bacteria. However, there is need for further and detailed investigation.

Keywords: Zoonotic, rodents, disease

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Abstract F5-Group 9

Zoonotic diseases: Wild rats in Al-Ahsa as carriers of Gastrointestinal Tract infections of Salmonella

Yasmeen Almulhim, Fatimah Waleed, Al-Zahra'a Ali, Wala Hassan, Lorina Badger-Emeka.

Introduction:

Salmonellosis is a worldwide disease (WHO, 2005) with estimated reported cases of about 1.3 billion of which 3 million deaths have been recorded worldwide (Bhunia 2008). Salmonellosis is one of such diseases, caused by the bacteria *Salmonella*. According to reports by Boyen et al., (2008) and Abdullahi (2010), of the 2000 *Salmonella* serovars, Enteritidis is one of the top serovars, reported in Saudi Arabia. Literature is silent on the source of Salmonellosis in Al-Ahsa region of Saudi Arabia.

Aim:

This investigation seeks to look into the possibility of zoonotic transmission of Salmonellosis by rodent carriers in Al-Ahsa region of Saudi Arabia.

Material and Methods:

An albino white rat obtained from the College of Medicine animal house and a wild rat from a farm in Al-Ahsa were used for the study. For microbial isolation, *Salmonella*/Shigella agar, blood and MacConkey agar were used. Basic bacteriological techniques were employed for culturing. Organism identification and anti-biogram analysis was by Vitek 2 compact automated system.

Results:

The isolated organism from the GIT of both rats included *Escherichia coli*, *Staphylococcus aureus* and other coagulase negative *Staphylococcus*. *Salmonella* species were encountered only in the wild rat. The antibiotic susceptibility results shows multidrug resistance among all the isolated organisms with those of the wild rat being more prominent as shown in the table. *Salmonella* species was resistant to 2 of the test drugs and intermediate to 5. The *Staphylococcal* isolate from the wild rat was resistant to 5 tested drugs and intermediate to vancomycin. A similar trend is seen with that of the laboratory rat, though sensitive to vancomycin.

Conclusion:

The possibility of a potential human transmission of a zoonotic infection through these wild rats is confirmed in the present study. However, there is a need for more study.

Keywords: Zoonotic, diseases, *Salmonella*, wild, rats, Al-Ahsa, carriers, infections.

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Abstract F6-Group 10

Prevalence of Bacteria in Chicken Fast Food in Al-Ahsaa City Restaurants

Doaa Mous, Noor Mohammad Alosaif, Fatima Mohammd Alshakhs, Jinan Anwar Algafli, Zahra Ahmed Alhammad, Sakina Hassan Alhadab, Mariya Maher Busaleh, Aljazy Mwshary Aleyadhi, Zainab Mohammed Alamer, Hadeel Saleh Alsager

Introduction:

Fast food consumption increased to high levels worldwide in the past few decades, and Saudi Arabia ranked to be number 15 worldwide in fast food consumption. Fast Food also has been found to be associated with different kinds of diseases especially food borne illness.

Aim:

The aims of the research are determination of the prevalence and type of bacteria in chicken meals in fast food restaurants in Al-Ahassa City, Saudi Arabia and increasing the awareness in Al-Ahassa community.

Material and Methods:

30 Samples were collected from 12 different restaurants from villages and different regions of Alahsaa city. The chicken fast food samples were used in the research and were taken from restaurant between March to April 2016 in sterile plastic bags. After that, 10 grams of each sandwich sample was separately homogenized in 100 ml of sterile normal saline for 5 minutes. Samples were cultivated on different media. Then the plates were incubated aerobically at 37°C for 24 h. after that, in order to identify the isolates, biochemical tests were applied (Catalase test, Coagulase test and Oxidase test) and the colonies were counted.

Results:

The research showed no growth in 37% of the samples. In the other hand, the total percent of bacterial count for all agar media is 63%. E-coli was the most prevalent food –borne pathogen isolate (20 %), Pseudomonas (16%) from the whole types of bacteria, Klebsiella (14%), Staphylococcus aureus (8%), Salmonella (3%) and finally Streptococcus (2 %) found to form the lowest prevalence of the detected.

Conclusion:

Emphasizing the need to implement protective measures and the application of good hygiene are too important to prevent the contamination of food. The community should support the need for the health care establishments. The awareness should be given for people about the distribution and the presence of bacteria in fast food.

Keywords: Fast Food, Bacteria, Prevalence

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Abstract F7-Group 11

Antimicrobial effect of Commiphora Myrrha extract

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Introduction:

Recently a resistance against antimicrobial drugs is found with many adverse effects. Therefore, there is a need to develop alternative antimicrobial agents from medicinal plants, which have less side effects on the host. One of these plants is Myrrh. Myrrh is an oleo-gum-resin, freely discharged from natural fissures or from incisions made to collect this product.

Aim:

This study was designed to determine the antimicrobial activity of myrrh, as it is discovered to be a natural antibiotic which is easily obtained and have little side effects.

Material and Methods:

Five microbial isolates were used. Two gram-positive bacteria which are (Staphylococcus epidermidis, Methicillin-resistant Staphylococcus Aureus), and two gram-negative bacteria which are (klebsiella, Pseudomonas aeruginosa) and one Fungi which is (Candida). The plates were incubated at temperature 37°C for 24 hours. The antimicrobial effect was assessed by measuring the diameter of inhibition zone (cm). Finally, the statistical analysis was done to calculate the mean of inhibition zone \pm S.D, by using SPSS program.

Results:

The three different concentrations of commiphora myrrha extract have shown some degree of antimicrobial activity. It was observed that the greatest inhibition area for all microbial strains were recorded with 500 mg/ml concentration and it was followed by 300 mg/ml, 100 mg/ml respectively except Pseudomonas aeruginosa , the greatest inhibition zone area recorded with 300 mg/ml concentration.

Conclusion:

Aqueous extracts of Commiphora myrrha have proved variable degree of antimicrobial activity against Pseudomonas aeruginosa, Methicillin-resistant Staphylococcus Aurous, staphylococcus epidermides, klebsiella, and Candida.

Keywords: staphylococcus, klebsiella, Pseudomonasa, Methicillin-resistant, candida

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Abstract F8-Group 3

The Relationship between Internet addiction & Psychological Well-Being: A Study on Medical Students

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Introduction:

The Internet is widely used by the world, which makes life comfortable however, at the same time, a number of negative outcomes of Internet exposure have been recorded like loneliness, lack of social interaction and family contribution, exhaustion and fatigue.

Aim:

The study was conducted to examine the relationship between internet addiction and psychological well-being among medical students.

Method & Material

For this purpose, two types of questionnaires were identified i.e. Internet addiction scale (IA) developed by Kimberly Young (1995) and psychological well-being scale (PWB) developed by Ryff's (1998). Data was collected with the help of these two questionnaires.

Result:

A total number of 74 students were participated in this study; however, 8 students were excluded because of incomplete information. After the analysis, the result has shown that 16 participants were found as an internet addicted out of 66 students. Therefore, the result shows that 24.2% of students were internet addicted, and 75.8% of students were non-addicted. On the other hand, significant difference was found between internet addicted and non-addicted students on psychological well-being at .05 level ($P < .05$). On contrary, no correlation was found between internet addiction and psychological well-being.

Conclusion:

Finding shows that internet-addicted student were significantly differ as compare to non-addicted student on psychological well-being. Result shows that non-addicted student have comparatively better psychological well-being than addicted student. However, no negative correlation was found between addicted student and psychological well-being.

Keywords Internet Addiction, Psychological Well-being, Medical students.

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Abstract F9- Group 5

Effect of stress among medical students in KFU

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Background:

Medical education is perceived as being stressful, as it is characterized by many psychological changes in students. Stress actually is anything that poses a challenge or a threat to our well-being, especially workload, feeling overwhelmed, and fear of failing and lack of time which are mostly affecting medical students.

Objectives:

To find out the overall effects of stress among medical students with regards to the different age, gender and academic performance.

Materials and Methods:

Sample of 300 medical students (150 male, 143 females), students' within the age of brackets of 18 to 23. Data were obtained with the help questionnaires from preparatory year to fourth year students, King Faisal University, Saudi Arab.

Results:

he female students showed higher percentage as compared to males respondents in term of health problem. As regards to academic performance, 1th years students showed highest level of stress among the four different academic levels i.e. from Preparatory to 4th year students.

Conclusion:

From the finding we came to the conclusion that Stress causes negative impact to healthy life style of medical students which further causes to low Academic performance. However, there is a significant relationship between stress, gender and education performance.

Keywords: Stress, Medical students, Academic performance, Gender.

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Abstract F10- Group 7

Correlation between BMI, Waist Circumference & Blood Pressure among females of college of medicine, KFU (2016)

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Background:

Saudi Arabia is one of the fastest growing countries of the world. However, growth and prosperity have brought significant changes in the lifestyle of the population. Most notably, eating habits are less healthy and the level of physical activity has declined. Consequently, obesity and hypertension are increasing in the kingdom at an alarming rate.

Objectives:

To estimate the prevalence of obesity and its correlation with body mass index (BMI), waist circumference (WC) and the association of these parameters with blood pressures.

Methods:

Cross-sectional study was conducted in College of Medicine in King Faisal University. It included a group of 164 female. 123 Saudi medical students and 41 employees from different nationalities participated in this study. The study used direct data of height, weight, body mass index, waist circumference and blood pressure. Other data was gathered through a questionnaire, and SPSS-19 was used for analyzing data.

Results:

Among the participants obesity represents 12.2% and underweight 17.7%. There was a correlation between BMI and systolic blood pressure (P -value=0.000). And a significant correlation between waist circumference and systolic blood pressure (p -value=0.002).

Conclusion:

Body mass index and waist circumference analyzed were significantly associated with systolic blood pressure; there wasn't any effect on diastolic blood pressure. Measuring waist circumference and body mass index helps screen for possible health risks of obesity and hypertension. The present study shows that body mass index has more significant effect on systolic Aliya Elamin blood pressure than the waist circumference

Keywords: Obesity, hypertension, body mass index, waist circumference.

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