

PREFACE

Advance Educational Institute & Research Centre (AEIRC) was established in 2010 as a sovereign academic organization with the task to provide a path where scientists and researchers from all over the world could meet and exchange their thoughts on their research, for the future developments. We feel privileged to launch our 2nd International Conference on Endorsing Health Science Research, and it's a great honor for us to welcome you to become an integral part of it. The Conference will cover all aspects of Research, particularly Bio medical health sciences, Environmental health sciences, Bioengineering and Psycho-social health.

This abstract book contains 69 Abstracts that are included in the Conference, presented by their respective authors in the form of Oral and Poster presentations.

Both of the Sessions will be headed by the experts in the field, the sessions will strengthen interactions among young researchers. Moreover, generate new ideas and set directions for the implementations of the same. It has always been a motto of TEAM AEIRC to provide first hand association for the promotion of scientific research, thus nurturing a better understanding of scientific education, social aspects & technology. The mission of TEAM AEIRC is to build a platform where researchers from all over the world meet to discuss the developments, advancements and achievements of their discipline and present their work. We appreciate the contributions and interests of all the Speakers, Panelists, Chief Guests, Guests, Ambassadors, Students and Participants. For the upcoming years TEAM AEIRC will surely continue the journey of propagating Research and all its related aspects through Conferences, Workshops, Awareness Programs and Seminars, also provide high valued training sessions for the betterment of society. We wish you a prolific and pleasurable Conference.

GENERAL INFORMATION

Conference Venue:

International Centre for Chemical and Biological Sciences, University of Karachi, Karachi, Pakistan & AEIRC.

Dates:

14th – 17th March, 2014

Official language:

The official language is English.

Conference Secretariat:

The conference Secretariat will be operating at the ICCBS Hall for registration and information, as following:

Registration for participation includes:

Entrance to the Conference Hall

Program details and certificates (will be provided on the same day)

Refreshments

Tea and lunch breaks:

16th March, 2014- ICCBS Hall

Hi-Tea 11:30am / Lunch 02:30 pm

Scientific Session:

Please read the Program section to get detailed information on the Poster area is located adjacent to the Hall. Please be punctual as the sessions will commence on time.

Certificate Of Attendance:

A certificate of attendance will be given to all the participants, at the Conference Secretariat on March 16, 2014.

Cell Phone and Pagers:

Please turn off your cell phones and pagers during all the official sessions.

Children:

In order to preserve the educational atmosphere of the conference, children are not permitted.

Electricity:

Please note the electricity in Pakistan is 220V.

Insurance:

All participants are strongly advised to carry the proper travel and health insurance, as the AEIRC cannot accept liability for any accidents or injuries that may occur at the conference.

Smoking:

Conference premises are declared as strictly non-smoking zone.

Flash Photography:

No flash photography is allowed during scheduled scientific session.

CONFERENCE INCHARGE

Mr. Shamooun Noushad

Managing Director

Advance Educational Institute & Research Centre

Ms. Sadaf Ahmed

Chief Executive Officer

Advance Educational Institute & Research Centre

ORGANIZING TEAM

Syed Zain Azher

Saima Khan

Kanwal Tariq

Zeeshan Ahmed khan

PANELIST

Sumbul Shamim (Dept. Of Pharmacy, DUHS)

Erum Zaheer (Dept. Of Chemistry, Uok)

Asma Makhani (Tufts University, USA)

M. Zafar Iqbal Abbasi (BIDE)

Zia mohyud din (Sir Syed University)

PROGRAM MANAGER

Maria Asad & Faiza Ahmed

AMBASSADORS (PAKISTAN SOCIETY OF PSYCHOPHYSIOLOGY)

Afeera Nadeem
Amaila Fazal
Ammara Ashraf
Areeba Mahmood
Atiya Ansari
Faryal Ishaq
Fatima Zafar
Hira Majeed

Humaira Ansari
Huzaifa Sarfaraz
Iqra Sultana
Iqra Zulfiqar
Kiran Ashraf
Kisa Altaf
Madiha Fatima
Mahnoor Nadeem

Maria Altaf
Mehak Ali
Naila Mushtaq
Tayyaba Kanwal
Ushba Sohail
Warda Tariq
Zeenat

SPECIAL THANKS TO APPLIED MICROBIOLOGY ASSOCIATION

MESSAGE

On the behalf of organizing committee I welcome you warmly at ICEHSR, 2014 organized by AEIRC with the theme of Judgment to action.

This is always an electrifying time for AEIRC; in bringing a significant happening with greater emphasis on equipping our researchers with the precise knowledge and skills. It is clearly at the forefront of AEIRC in recent years as team not only endorse health research and learning but also give major priority on this education to addressing social and development sector skills shortages and the long term cost-effective growth and competitiveness. After recognizing the importance of collaboration between industry, education institutions and policy makers to create real sustainable change, we hope to be successful in promoting opportunities for such collaboration and providing platform with existing initiatives as ICEHSR, to enhance knowledge, understanding and skills in Science, Technology, biology, engineering and education. I hope presence of all valuable researchers and expertise at our Conference pledge to be informative, innovative, thought provoking and will not only provide participants with up-to-date knowledge on recent changes in the direction of health science research but also some application research ideas for future prospects. This event is organized in an integrative and dialogical form which permits sharing of understandings and information. This conference will be part of different scientific disciplines and diverse fields of health research. We will be looking forward to feedback which will be published on our website. I wish you all the best and affirm you once more that we are eager to discover and gain the ideas on not only reducing the burden of diseases but also in knowing how to comprehend integrated improvement, sensible to human and social development, nature and economic sustainability.

In the meantime I am leaving you with the words of Quaid-e-Azam Muhammad Ali Jinnah:

“Development is being sought in every walk of life and you have to take on this process of development. Are you preparing to take on tomorrow’s responsibilities? Are you building your capacity? Are you trained enough? If no, then go and prepare yourself because this is the time to prepare yourself for future responsibilities”

Hope to have a good interactive scientific meeting with promising outcomes.

Best Regards,

Ms. Sadaf Ahmed
Chief Executive Officer
Advance Educational Institute
& Research Centre.

MULTI-PURPOSE HALL			
9:00 AM	TILAWAT		
9:05 AM	INTRODUCTION TO CONFERENCE		
9:10 AM	ADDRESS OF CHIEF GUEST		
TIME	KEYNOTE PRESENTATIONS		AFFILIATION
9:15 AM	SHERSHAH SYED	PROBLEMS IN HEALTH RESEARCH	PMA
9:35 AM	ZAFAR IQBAL	ADVANCES AND EMERGING OPPORTUNITIES IN DIABETES RESEARCH	BAQAI MEDICAL UNIVERSITY, KARACHI.
9:55 AM	SUMBUL SHAMIM	PHARMACEUTICAL SERVICES AND HEALTH OUTCOMES RESEARCH	DOW UNIVERSITY OF HEALTH SCIENCES
10:15 AM	ZEBA IMRAN	PUBLIC HEALTH RESEARCH; CHALLENGES AND OPPORTUNITIES	FUUAST
10:35 AM	ERUM ZAHIR	RESEARCH IN TOXICOLOGY AND CHEMICAL HEALTH HAZARDS	UNIVERSITY OF KARACHI
10:55 AM	ZIA MOHYUD DIN	NEURAL ELECTRODES AND ITS APPLICATION IN BIOMEDICAL ENGINEERING	SIR SYED UNIVERSITY
11:15 AM	SAJJAD AHMED	PAKISTAN DEMOGRAPHIC AND HEALTH SURVEY	PNFWH
11:35 AM	AMNA TARIQ	MENTAL HEALTH A REAL MATTER TO WORRY.	KING'S COLLEGE LONDON
11:55 AM	HI- TEA / POSTER SESSION		
12:15 PM	SADAF AHMED	PAIN; A HEALTH BURDEN ... A RESEARCH AMBIGUITY	AEIRC
12:35 PM	MEHWISH HUSSAIN	THE ROLE OF STATISTICIAN IN HEALTH RESEARCH	DOW UNIVERSITY OF HEALTH SCIENCES
TIME	KEYNOTE PRESENTATIONS (LEJ - LECTURE HALL)		
12:15 PM	SYED A AZIZ	EPIGENETIC PROCESSES IN HEALTH, DISEASE AND RESEARCH;	UNIVERSITY OF OTTAWA, CANADA
12:35 PM	SHAMOON NOUSHAD	WHERE SHOULD I SUBMIT MY RESEARCH PAPER?	AEIRC
ORAL PRESENTATIONS (MULTIPURPOSE - HALL)			
12:55 PM	MUHAMMAD ALI SYED	PERTUSSIS RESURGENCE: SCIENCE AND FICTION!	
1:05 PM	SAMREEN SOOMRO	DISCOVERY OF ANTI-INFLAMMATORY COMPOUNDS ISOLATED FROM PLANTS: TREATMENT FOR CHRONIC INFLAMMATION	
1:15 PM	SHAJEELA AZHAR	POST VACCINAL OBSERVATION IN LYMPHOIDAL ORGANS (BURSA, SPLEEN, THYMUS) OF BROILER CHICKS INOCULATED WITH INTERMEDIATE PLUS OR HOT INFECTIOUS BURSAL DISEASE VACCINES (STRAINS 228E AND BUR-706)	
1:25 PM	SOBIA NISA	ENVIRONMENTAL HEALTH ASSESSMENT AROUND PHOSPHATE ROCK MINING AREA OF ABBOTTABAD (LAKARBAN)	
1:35 PM	ALIYA MAQSOOD	EVALUATION OF CLINICAL COURSE AND RISK FACTORS FOR PCOS AMONG MARRIED AND UNMARRIED WOMEN	
1:45 PM	ZAHABIYA ABBASI	IMPACT OF SLEEP ON YOUNG CHILDREN CLASSROOM BEHAVIOUR IN KINDERGARTEN CLASSES	
1:55 PM	HAROON SALEEM	HEALTHCARE QUALITY: A STRATEGIC MANAGEMENT MODEL	
2:05 PM	FAIZAN MIRZA	MENTAL, BEHAVIORAL AND PHYSICAL EFFECTS OF POWER ENHANCING DRUGS IN CHRONIC USERS	
2:15 PM	UNZELA AYUB	PREVENTIVE EFFECTS OF LYCOPENE ON DYSLIPIDEMIA, RENAL INSUFFICIENCY & RENIN ANGIOTENSIN SYSTEM IN RATS ON HIGH FAT DIET	
2:25 PM	HUMA KHAID	INTENSITY BASED PREVALENCE OF LUMBOSACRAL DISORDER ON MULTISEQUENTIAL AND MULTIPLANAR MRI	
2:35 PM	FARIA KHAN	LIFE SATISFACTION LEVELS AMONG PATIENTS IN A SURGICAL WARD IN GOVT. SECTOR TERTIARY CARE HOSPITALS IN KARACHI	
2:45 PM	ATIF MAHMOOD	SELF ESTEEM IN ADULT BURN PATIENTS IN URBAN KARACHI, PAKISTAN.	
2:55 PM	SAQIB EJAZ	APPLICATION OF DIFFUSED REFLECTIVE METHOD FOR E-SMART BLIND STICK	
ORAL PRESENTATIONS(LEJ - LECTURE HALL)			
12:35 PM	SALMAN MUHAMMAD	COST EFFECTIVE TEST-TUBE ROTATOR	
12:45 PM	MUHAMMAD PARAS	MYELOYDYSPLASTIC SYNDROME FOLLOWING ESSENTIAL THROMBOCYTOPENIA IN HYPERTENSION – A CASE REPORT	
12:55 PM	AQIB JAVED	AWARENESS LEVEL OF FIRST AID IN GENERAL POPULATION, KARACHI-PAKISTAN: A SURVEY REPORT	
1:05 PM	ASIF MEHMOOD ABBASI	EFFECTS OF TAURINE BASED ENERGY DRINK ON REACTION TIME, AUDIO, VISUAL AND TACTILE RESPONSES IN COMPARISON OF MALES AND FEMALES HEALTHY SUBJECTS	
1:15 PM	HAMZA AKHTAR	PREVALENCE OF ANXIETY AND DEPRESSION AMONG THE PATIENTS IN SURGICAL WARDS ATGOVT. SECTOR TERTIARY CARE HOSPITALS IN KARACHI	
1:25 PM	SAFDAR ALI	SELF-ESTEEM LEVELS AMONG PATIENTS IN A SURGICAL WARD IN GOVT. SECTOR TERTIARY CARE HOSPITALS IN KARACHI	
1:35 PM	KISA FATIMA	CEREBRAL PALS IN RELATION TO MATERNAL HEALTH	

2nd International conference on Endorsing Health Science Research, 14th – 17th March, 2014

1:45 PM	ANILA SHAMS	REFLEX TRAINER: A PROGRAMMING BASED COST EFFECTIVE TECHNIQUE FOR IMPROVING REFLEXES IN SPORTS
1:55 PM	TAYYABA HAMID	PHYSIOLOGICAL INFLUENCE OF TAURINE BASED ENERGY DRINK ON CARDIAC PARAMETERS.
2:05 PM	SALIMAH LASI	BIO LIGHT MUSCLE STIMULATOR
2:15 PM	RABBIA AHMED	DESIGN OF DUAL MOVEMENT BLOOD BAG SHAKER
2:25 PM	NAZNEEN ZEHRA	COMPARISON OF CAUSES AND RISK FACTORS FOR INFERTILITY IN YOUNG AND MIDDLE AGED WOMEN
2:35 PM	TALHA MALIK	COMPARISON OF NORMAL BRAIN AND ALZHEIMER'S CAUSED BRAIN, USING CFD ANALYSIS
2:45 PM	MUHAMMAD MAAZ	MODELING AND SIMULATION OF ARTERY USING CLOT BUSTING TECHNOLOGY
2:55 PM	MARIA ALTAF	CARDIOVASCULAR RISK ASSOCIATED WITH OBESITY AND DECREASED PHYSICAL ACTIVITY
3:05 PM	TALHA MALIK	SIGNIFICANCE OF IR RECEIVER AND TRANSMITTER IN EYE MOUSE FOR THE REHABILITATION OF DISABLED PEOPLE
3:15 PM	SIDRA AFZAL	CORRELATION BETWEEN INFERTILITY AND SEMEN PARAMETERS IN PAKISTANI MALE POPULATION: A CROSS-SECTIONAL STUDY.

POSTER PRESENTATIONS (MULTIPURPOSE - HALL)

P 1	FATHIMA HAFSA	THE ASSESSMENT OF HEALTH AND SOCIAL PROBLEMS IN GARBAGE PICKING CHILDREN-CHILDHOOD SALVAGED OR SABOTAGED
P 2	SHARMEEN AMIN	COMPARISON BETWEEN LEARNING ENVIRONMENT IN GOVERNMENT AND PRIVATE HOSPITALS IN KARACHI IN RELATION OF GENDER
P 3	SYEDA SIDRA	POTENTIAL MEDICAL ERROR IN OUR LOCALE; OPINION FROM ALLIED ENTITIES
P 4	FARAZ BAIG	EVALUATION OF INFERTILE KARACHI WOMEN WITH MAJOR UTERINE COMPLICATION.
P 5	YAMNA ZEHRA	INCIDENCE OF CANCER IN DIABETES TYPE II PATIENTS; OPINION FROM HEALTHCARE PROVIDERS
P 6	BILQIS HABIBULLAH	PATTERN OF COMMON EYE DISEASES IN CHILDREN OF AGE 0-16 YEARS IN TERTIARY EYE HOSPITAL, KARACHI
P 7	SANA PARACHA	AWARENESS, CONCEPT AND RATE OF POLIO IN NON-VACCINATED POPULATION
P 8	MOHSIN RAZA	MEASURING IMPACTS OF GLOBALIZATION ON HEALTH.
P 9	HUZAIFA SARFARAZ	"RATIO OF GENDER DEPENDENCY" A COMPARATIVE STUDY BETWEEN KARACHI AND HYDERABAD'S POPULACE
P 10	RIDA HASAN	STRESSFUL LIFE STYLE LEADS TO POOR PERIODONTAL CONDITION; A COMPARATIVE STUDY
P 11	ATIF MAHMOOD	KNOWLEDGE, ATTITUDE AND PRACTICE OF HEALTHCARE PROVIDERS REGARDING THE BLAST INJURIES MANAGEMENT AT TERTIARY CARE HOSPITALS IN KARACHI
P 12	SAHER JAFRI	EVALUATION OF RELATIONSHIP OF OBESITY WITH PREVALENCE OF MIGRAINE
P 13	NAMRAH SIDDIQUI	PERIMENOPAUSAL WOMEN & MIGRAINE; STUDY ON SYMPTOMS & TRIGGERS
P 14	SANAJAMAL	PREVALENCE OF ANOREXIA NERVOSA IN UNDERGRADUATE FEMALES
P 15	MAHA BINT E HASAN	FREQUENCY AND MOST COMMON SITE OF UROLITHIASIS DIAGNOSED ON PLAIN CT KIDNEY, URETER AND BLADDER (KUB) IN SUSPECTED PATIENTS.
P 16	QURAT-ULAIN	EVALUATION OF THE EFFECTS OF ENERGY DRINKS ON BLOOD GLUCOSE LEVEL AND CLOTTING TIME IN MALE AND FEMALE INDIVIDUALS
P 17	SYED ZAIN	ASSESSMENT OF BMI AS AN INDICATOR OF SMOKING OUTCOMES
P 18	BHARTI DEVI	DYSMENORRHEA IN RELATION WITH HYGIENE; A STUDY ON SYMPTOMS AND PREVALENCE
P 19	SAIMA KHAN	CAUSES OF PNEUMOTHORAX IN MALE VERSUS FEMALE
P 20	KHURRUM KHURSHIDI	QUANTITATIVE STRUCTURE ACTIVITY RELATIONSHIP AND RISK ANALYSIS OF SOME PESTICIDES IN THE GOAT MILK
P 21	AISHAH	LESS CONCERN OF PEOPLE TOWARDS ORAL HYGIENE
P 22	TAHIRA	CLOVE ESSENTIAL FOR ANXIETY AND MENTAL DISTURBANCE
P 23	AISHAH	DENTAL FLUOROSIS IN GENERAL POPULATION OF KARACHI
P 24	SAIMA KHAN	CAUSES OF PANCREATITIS, REVIEW IN LOCAL POPULATION

3:05 PM CLOSING CEREMONY

3:15 PM LUNCH

DATE	TIME	WORKSHOP TITLE	FACILITATORS	VENUE
14-MAR-14	10:00 AM- 12:00 PM	DIABETES EDUCATION	ZAFAR IQBAL	AEIRC
14-MAR-14	3:00 PM-5:00 PM	METHODS IN CLINICAL RESEARCH	SHAMOON NOUSHAD	AEIRC
15-MAR-14	10:00 AM- 12:00 PM	END NOTE REFRENCING	MEHWISH HUSSAIN	AEIRC
15-MAR-14	3:00 PM-5:00 PM	AVOIDING PLAGIARISM	SYED ZAIN AZHER & SAIMA KHAN	AEIRC
17-MAR-14	3:00 PM-5:00 PM	IMPORTANCE OF PSYCHOPHYSIOLOGY RESEARCH	SHAMOON NOUSHAD	AEIRC

ADVANCES AND EMERGING OPPORTUNITIES IN DIABETES RESEARCH

M. Zafar Iqbal Abbasi

Baqai Medical University, Karachi.

Diabetes Mellitus is a chronic metabolic disorder which gives rise to significant morbidity and mortality. The prevalence of diabetes is increasing globally. According to International Diabetes Federation (IDF) estimates the current prevalence of diabetes is 381 million worldwide, which is anticipated to rise to 591 million by the year 2035. Research plays an important role to counter the rising prevalence of any disease. In case of diabetes, much has been learned regarding the epidemiology, pathogenesis and treatment of diabetes through research studies. In recent times researchers have identified several areas that present unique opportunities for research. Some of the areas include primary prevention of diabetes; identification of the genetic components of type 1 and type 2 diabetes to better understand the disease, its prevention, complications and treatment. Identification of gene related to obesity is a way forward for prevention of type 2 diabetes. Considerable challenges and hurdles still exist to undertake researches.

WHERE SHOULD I SUBMIT MY PAPER?

Shamoon Noushad & Sadaf Ahmed

Advance Educational Institute & Research Center

It has been seen that for inexperienced authors there are particular sore points in process of publication leading to rejections, adding months to publication and slowing career progress. Though points to be considered before submitting your paper to research journal are Open access journals, large Readership numbers and citations options. Moreover specificity of journals is also an important factor. It is recommended not to compare Impact Factor or other metrics across different disciplines, such as Biophysics vs. Mathematics, Biomedical Engineering vs. Civil Engineering etc because different disciplines have different citation patterns. Publisher is most important to identify fake and sustainable journals with keeping in mind mostly publishers are not academic institutes as the biggest journal like Nature & Cell are also not from academic institutes. Editors & reviewers also plays most important role with your paper as they should be qualified enough and unbiased so that your paper could not be rejected like George Mendal (father of genetics) whose paper was never accepted.

PAIN; A HEALTH BURDEN ... A RESEARCH AMBIGUITY!

Sadaf Ahmed & Shamoon Noushad

Advance Educational Institute & Research Center

To alleviate the burden of uncontrolled pain is an essential public, health and economic challenge. Chronic pain is often difficult to diagnose and managed, hitting millions of people and families as a chronic illness that not only raise healthcare expenses but also produce a huge burden of pain-related disability. Though acute pain is a critical process but it can be resolved. With unrelenting pain and injury it becomes a chronic condition and illness that develop into long-term human suffering and to prevent lost productivity within our society. Instead of receiving effective relief, patients with persistent pain often find themselves in an endless cycle, seeing multiple health care providers, including specialists in different areas other than pain, who are not prepared to respond effectively. More needs to be known about the impacts of chronic pain regarding physiological, pathophysiological, psychological and social consequences. Globally there is a lack of enough data needed to have clear concepts of unknown and partially know mechanisms and methods to manage these enormous pain-related costs represent both a great challenge and an opportunity in terms of improving the quality and cost-effectiveness of care. Though many International agencies increases funding for pain research to a level that is adequate with the size of a public health problem that affects millions of people, but still at national level there is scarcity of such research emphasis on promising therapies and basic & clinical research, comparative effectiveness trials, behavioral therapies and healthcare research. More research should focus on ways to prevent acute pain from developing into a chronic illness and to prevent chronic pain from becoming a lifelong condition. Exploration of Basic mechanisms to understands complexity of pain and development of strategies to development not a freedom from pain but to expand the vision to work for an improved quality of life and reduce the pain burden.

PUBLIC HEALTH RESEARCH; CHALLENGES AND OPPORTUNITIES

Zeba Imran

FUUA

Public health has strong ethical foundations. The future strategy to improve public health conditions will determine the health of future populations and it remains consistent with the principles that have long underpinned public health. Policy makers enable public health to make the promotion and protection of healthy futures by developing its research practices. For public health in the twenty-first century, it is the future health risks posed by today's rapid social and environmental changes that urgently require the attention of researchers and policymakers. The state has responsibility to provide the conditions under which people can live healthy lives. In this presentation, I would be able to answer the question, what are the challenges, opportunities and future in public health? My search began with the conceptual foundations of public health. I found that it should be a mission to protect and promote the conditions for a healthy future which is grounded in the principles of moral equality and environmental stewardship. The principles require the research and policy communities to serve, with and through governments, as trustees of the conditions for health for present and future generations. Public health research and policy are being urged to extend the concept of the good public health and to improve the environmental condition. The most common example of how future conditions for health are set by the societies is anthropogenic climate change. Emissions of CO₂, the major greenhouse gas, are continuing to increase in atmospheric concentrations. Here I consider three of these fields epidemiological, intervention, and economic research and for each select an influential approach. The epidemiological example is risk-factor epidemiology, a subfield of the discipline that developed in response to the etiological challenges presented by the epidemics of chronic disease. Through the elucidation of the behavioral factors for instance cigarette smoking, sedentary lifestyles, obesity, high blood pressure contributing to chronic disease, risk factor epidemiology rapidly became the new paradigm in public health research. Its achievement has been to identify the causes of mortality and proximity to the individual whose health is damaged by them. The paradigm also helps quantify this health damage. The WHO's report on risks to global health was able to conclude that the leading global risks for mortality in the world are high blood pressure, tobacco use, high blood glucose, physical inactivity, and overweight. The preceding analysis suggests that public health is distinguished by its future orientation. It is therefore very important to set a gold standard in public health research to control emerging threats to health. One of the important steps in this regard is to develop economic evaluation, the method that defines economic approaches to public health. It encompasses a range of techniques, including cost-benefit analysis and cost-effectiveness analysis. In broad terms, these kinds of analyses provide a way of comparing inputs and outputs (money spent and health gained) over time for different policy options. To protect and promote the conditions for a healthy future are main challenges in public health research. The principles require the researchers and policy communities to serve through governments for present and future improvement in public health.

RESEARCH IN TOXICOLOGY AND CHEMICAL HEALTH HAZARDS

Erum Zahir

Department of Chemistry University of Karachi

A fundamental understanding of toxicological principles has been considered an important component in risk assessments the world's leading provider of up-to-date toxicology and chemical hazard information—is an essential informational component for any academic program or research initiative related to these areas of focus. It plays a central role in the identification, characterization, and management of risks, the methods of interpretation and application of toxicologic findings have a significant influence on the process of how risks are assessed. Of particular concern are the assumptions about risks that are made by default in the face of scientific uncertainty. The Toxicology Research is responsible for the identification and investigation of potential health hazards associated with chemical contaminants, including those of environmental origin, agricultural chemicals, natural food toxicants and constituents, and food additives. Research is carried out on the carcinogenic, mutagenic, reproductive, neurotoxic and other potentially harmful effects of these chemicals, including alterations to the immune system. Society demands increasingly close scrutiny of the potential health risks associated with exposure to chemicals present in our everyday life, leading to an increasing need for more predictive and accurate risk-assessment approaches.

EXPLORING RESEARCH PROSPECTS IN PHARMACEUTICALS TO SERVE HEALTH RESEARCH

Prof. Sumbul Shamim

Dean, Faculty of Pharmaceutical Science/Principal, Dow College of Pharmacy/Dow University of Health Sciences, DUHS

In the field of pharmaceutical science, researchers are constantly seeking for new molecules and construct that exhibit specific properties. The scientific discoveries of the past generation are failing to be translated efficiently into tangible human benefit. The context of clinical research is increasingly encumbered by high costs, slow results, lack of funding, regulatory burdens, fragmented infrastructure, incompatible databases, and a shortage of qualified investigators and willing participants. These factors have contributed to 2 major obstacles, or translational blocks: impeding the translation of basic science discoveries into clinical studies and of clinical studies into medical practice and health decision making in systems of care. Considering data from across the entire health care system, it has become clear that these 2 translational blocks can be removed only by the collaborative efforts of multiple system stakeholders. The goal of this article is to articulate the 4 central challenges facing clinical research at present—public participation, information systems, workforce training, and funding; to make recommendations about how they might be addressed by particular stakeholders. In recent years, the co-operation between industrial firms and universities needs attention but the interaction pattern in different technological fields is not uniform. In science-based fields, university departments have a distinct focus on basic research and the major interest of industry is the observation of science. In less science-based fields, the solution of technical problems is a major concern of industry. In all fields, the exchange of knowledge in techno-scientific communities is a crucial element of interaction. Strong intra-disciplinary ties between universities and industry in pharmaceuticals obviously imply an insufficient openness to, and integration of, new technologies.

ROLE OF STATISTICIANS IN HEALTH SCIENCES RESEARCH

Mehwish Hussain

Senior Lecturer of Biostatistics (DUHS) and PhD Scholar (UoK)

The use of statistics ranges from planning, collection, analyzing data to making related decisions and even forecasting the events. Statisticians are the scientists who collaborate other's researches while assisting them processing these steps. They calculate the appropriate sample size for study and inform suitable method of data collection for selecting participants in the study. They design valid and reliable data instrument and schedule of study performance. Once the data collected, statisticians are the individuals who know how to compile data for getting output of research questions under study. The description of characteristics of sampled population is accomplished by presenting data in terms of graphs & tables and computing summary measures which can adequately represent the data set. Along with description of sample characteristics, statisticians analyze data using appropriate advanced tools for drawing conclusion and hence making decision from study. These techniques can be used to explore pattern and underlying relationship between variables in data sets. Statisticians know how to generalize the results from small representative sample to larger populations while using appropriate tests and models. Skills in analyzing data and making decisions while using appropriate statistics are vital across research area. Statisticians are the sole source who can articulate the validity of the study results with probabilistic confidence.

MENTAL HEALTH A REAL MATTER TO WORRY

Amna Tariq

Kings College London

It is focus on importance of mental health care. It highlights for people who are stress out and face psychological problems there are many resources exist to help people with mental health problems. Mental Health Treatment Reduces Medical Costs .Excessive anxiety and stress can contribute to physical problems such as heart disease, ulcers, and colitis.It also emphasise on how Mental Health is Good for Businesses Mental health is associated with higher productivity, better performance, more consistent work attendance, and fewer workplace accidents. Role of mental health workers i.e. Psychiatrist, clinical psychologist, social workers and nurses are very important to reduce mental health problem. Those who visit spirituals healers are more prone towards trouble. Psychiatric hospitals or general hospitals with psychiatric units treat people with mental illnesses. There are also community mental health programs and services available. People who feels stigma and avoid visiting mental health workers which leads them towards more adverse condition.

NEURAL ELECTRODES AND ITS APPLICATION IN BIOMEDICAL ENGINEERING

Engr. Dr. Zia MohyUd Din

Biomedical Engineering Department, Sir Syed University of Engineering & Technology

Brain is the vital organ of the body which is used to control or regulate the other parts of the Body. Neurons are the building block of the brain. In the brain different types of neurons are present such as sensory neurons to respond to touch light and various other stimuli coming from different organs. Motor neurons are used to send the signal to the muscles for contraction and interconnecting neurons connects the different parts of the brain. The neurons are electrically excitable cells. The action potential generated across the cell membrane could be detected by the help of electrodes. The electrodes are the sensors which convert bioelectrical potential into electrical signal. There are different type of electrodes used are used to detect the neural signals such as surface electrode, flat electrodes and microelectrode array. Microelectrode array can also be used to stimulate the neurons. The Microelectrode array is helpful in the rehabilitation for the patient suffering from neural disorders such as parkinsonism, epilepsy, blindness and deafness. The surface electrodes can be used to detect the EEG from the surface of the skull or ECoG from the surface of the brain. The EEG and ECoG signal are used for the Brain computer interface devices.

WORKSHOP ON ENDNOTE X4

Mehwish Hussain

Senior Lecturer of Biostatistics (DUHS) and PhD Scholar (UoK).

EndNote is software to deal with research references obtained during literature review. It remained the most favored, time-saving solution for organizing references and creating bibliography. Another significant purpose is to make the insertion of citation easy. The workshop creates and enhances skills while working with EndNote v. 14.0. It begins with installation of the software and comprehension of EndNote environment. It proceeds with construction of library in EndNote and browsing online reference via the software. Manual addition and importing references from online database is also included in workshop's content. The most exciting features, switching different reference styles and citing them in MS Word with one-click are also parts of this workshop. Other related features are also discussed as required. The pre-requisites of the participant are that they must have adequate knowledge of literature review, reference styles, research journals, content of an article, online database and handling MS Office.

DIABETES EDUCATION

M. Zafar Iqbal Abbasi

Baqai Medical University, Karachi.

Introduction: This workshop is designed to enhance the significance of diabetes education in the management of diabetes. It encompasses the basic concepts of diabetes disease process, dietary management, exercise, medications and glucose monitoring. The rectification of misbeliefs and realization of the fact that the medication alone cannot control diabetes are very important. The diabetes educator motivates and facilitates people with diabetes for life style modifications and continuous relationship empowers them to self-manage the day-to-day care of diabetes.

METHODS IN CLINICAL RESEARCH; VALUES AND ETHICS

Shamoon Noushad & Sadaf Ahmed

Advance Educational Institute & Research Center

There are many essentials and ethical conditions for conducting a clinical research for treatments or risk assessment of diseases. Many researchers are not aware of obvious reasons for thinking of better ways to conduct research. Usually, investigators hope and even expect that the new results will be for better and are not concern about the subjects enrolled in study and intentionally or unintentionally, not just some of them, and the goals of the research are always secondary to the well-being of the participants. Those requirements are made clear in the Declaration of Helsinki of the World Health Organization (WHO), which is widely regarded as providing the fundamental guiding principles of research involving human subjects. It is clear that in any clinical study, every human subject under standard ethical codes have rights as study participant regarding well being, respect and confidentiality. This is also particularly likely when the research question is extremely important and the answer would probably improve the care of future patients substantially. Legal and ethical practice by investigators is of mere importance as there is very little left to protect patients from an insensitive disregard of their welfare for the sake of research goals. Even informed consent is not protection enough and approval by an institutional review board, though also important, is highly variable in its responsiveness to patients. The Clinical Research Methods are a gateway to a pressing need for advanced training in clinical research design and analysis and to learn the basic principles and scientific methods essential for conducting human research studies. That includes rigorous training in skills that are critical to the design and analysis of research studies involving human subjects and benefits to the society.

PARAPHRASING AND SUMMARIZING: WAYS TO AVOID PLAGIARISM

Saima Khan & Syed Zain Azher

Advance Educational Institute & Research Center

Plagiarism in its simplest form is copying and pasting of others work that might be your own work. Plagiarism is unacceptable in any circumstances even then it is the most common fault among student's papers, brought upon by laziness. The finest way to put off plagiarism is to teach researchers definition of plagiarism, effective note taking skills, proper citing styles, and the consequences of unethical use of words, ideas and others work. The workshop is design for the effectiveness of paraphrasing training to prevent unintended plagiarism. Paraphrasing and summarizing are the two aspects by which plagiarism could be prevented. There is a high need of having students practicing techniques of paraphrasing, other than only teaching them definitions of plagiarism. The methods used could be easily adapted to any course in which the instructor wishes to help students understand plagiarism. Paraphrasing methods includes recognizing, generating, or extracting phrases, sentences, or longer natural language expressions that convey comparatively the same information. Paraphrasing could be done by changing the sentences in your own words keeping in mind the main point of that source, with proper referencing. A major point made is the role of given and new information in formulating a paraphrase that differs in a meaningful way.

PSYCHOPHYSIOLOGY RESEARCH: AN EMERGING PROSPECT OF WELLBEING

Sadaf Ahmed & Shamoon Noushad

Advance Educational Institute & Research Center

Psychophysiology is an empirical study of human body, brain and behaviors, as physiologically the body respond faster or more accurately to external and internal stimuli. These observations and analysis are of immense research importance with respect to mental, psychosocial and physical health. The included techniques provide an unbiased and spontaneous index of human reaction with all gestural, postural, and other indicators of concealed reaction. Both Physiological and psychological measures that can be used for evaluation are independent as well as dependent variables in terms of stimuli, behaviors, social differences and environmental consequences e.g., during arousal, heart rate increases for some people but decreases for others. In many circumstances these evaluations got invalidated as on totality the usefulness of physiological measurement is not enough singly but contributes important information to understanding human behavior. Recent evidence suggests that physiological measurement provides meaningful data but on the basis of individuality in thoughts, perceptions, cognition, memory associated responses, emotions and personality there should be a validated co evaluation and measurements of psycho physiological parameters. It is suggested that interpreting psycho physiological measurement can be supported by Brain Sciences in several core areas of Developmental Psychology. We are interested in the interrelation of hormones, brain, and behavior and how a human brain exhibit high degrees of neuroplasticity with bodily reactions. Psychophysiology investigates both how hormones act in the brain to affect the learning and activation of behavior and how behavioral and other stimuli are processed by the brain to influence endocrine, cardiovascular and motor activity. Researchers of psychophysiology have the opportunity to learn methods and techniques relevant to behavioral neuroendocrinology, neural tract tracing, behavioral testing methods, electrophysiological responses, psychosomatic analysis, in vivo imaging etc.

GIVE ACKNOWLEDGMENT WHERE ACKNOWLEDGMENT IS DUE: AVOIDING PLAGIARISM

Zain Azher & Saima Khan

Advance Educational Institute & Research Center

Copying and pasting is not a complete description for plagiarism. In other words, plagiarism is an act of fraud. It involves both stealing someone else's work and idea without giving credit. Changing the words of an original source is not sufficient to prevent plagiarism, not given a proper acknowledgment and citation also counts as plagiarism. In order to avoid the plagiarism we must learn and recognize the various forms of plagiarism, especially unintentional plagiarism. However there are various online free and paid plagiarism tools available on the internet which helps you to diminish plagiarism and maintain the uniqueness of your work and to prevent breaking the laws of plagiarism and save from penalties. Plagiarism should not only be avoided for fear of disciplinary consequences, but because you aspire to produce work of the highest quality. Once you have grasped the principles of source use and citation, you should find it relatively straightforward to steer clear of plagiarism. Furthermore, it will help you to reap the additional benefits of improvements to both the lucidity and quality of your writing.

ORAL PRESENTATIONS

REFLEX TRAINER: A PROGRAMMING BASED COST EFFECTIVE TECHNIQUE FOR IMPROVING REFLEXES IN SPORTS

Anila Shams, Muhammad Daniyal Khurshid, Shalani Nathaniel, Ammar Ashraf & Muhammad Saqib Ejaz

College of Biomedical Engineering Ziauddin University

Sport is an important part of our daily life. Some people involve themselves in any sport occasion on amateur stage while others professionally. In any sport contest each athlete desires to be the first and to accomplish the goal. They are guidance strength and patience to gain elevated speed of their sport deed. The speed of sport act means the speed of body and its muscles routine in any sport action. But muscle recital or, muscle cell retrenchment is the ultimate act of a very complex physiological course of the brain-muscles communication system. It is a known fact that muscle effort is planed, directed, restricted and performed by the Central Nervous System which includes the brain and spinal cord. It is fascinating that in spite of brain's main concern everybody prepares muscles without any effort to guide the brain and its connections with muscles. For this reason The Reflex trainer has been designed to not only improve but also rate the reflexes of an individual. The hardware of the board is interfaced with the software with consists of a newly developed program which will evaluate the performance of the player. The random generation of reflex lights on the board glows one after another so that the player can achieve the selected target. The target achieved by the player is displayed on the computer connected via interfacing and at the same time evaluation is also displayed according to the score. This innovative and highly cost effective idea is to improve one of the major components of the neural workings i.e. reflex, is not only effective but also enjoyable at the same time. With extremely simplicity yet a very complex idea is achieved with the use of user friendly software and hardware system.

COMPARISON OF CAUSES AND RISK FACTORS FOR INFERTILITY IN YOUNG AND MIDDLE AGED WOMEN

Anum Hashmi, Lubna Naz & Nazneen Zehra

Department of Physiology, University of Karachi.

INTRODUCTION Infertility has become a common medical and social problem in our population. In our society females are principally investigated for fertility tests. There are several types of infertility, each with many potential sources or origins of cause. The diversity in causes and risk factors for infertility enhances as the age of woman increases and risk factor profile is divergent in different age groups. The aim of this study was to find out the comparative differences in etiologies & risk factors for infertility in women with different age groups. MATERIALS & METHODS The study included married women(n=1000) having problem in conception and with no child history since married. Women were divided in to two age groups. Both groups were investigated for the causes and risk factors of infertility through a detailed questionnaire. The history of miscarriages, use of contraceptives, physiological, sexual and psychological stressors were specifically asked. RESULTS Both primary and secondary infertility were reported in the studied subjects. Incidence of dysmenorrhea, oligomenorrhea, diabetes, miscarriages, obesity and stress were comparatively very high in middle aged women than young aged women. Whereas, some other causes and risk factors like pain before periods, premature ovarian follicle, endometriosis, poly cystic ovarian syndrome (PCOS), anemia, pelvic pain, acne were very high in young aged women than middle aged women and the remaining other causes and risk factors showed a little difference in both age groups. CONCLUSION The causes and risk factors of infertility in middle aged women are different from those in younger women as age further increases the complexity of the causes of infertility. Late age marriages should be discouraged and evaluation of infertility should be initiated earlier when the female partner is older than 35 years or if women have family history of risk factors associated with infertility. The study also identified that the life style, diet pattern and physical activity of women in our population should be modified to avoid the risks of infertility.

BIO LIGHT MUSCLE STIMULATOR

Salimah Iasi & Rabya Sethi

Ziauddin University of Bio Medical Engineering

Purpose of study: Biomedical engineering is an upbringing field for improving the essential qualities of life through diagnosis and therapy. To build a friendly and an efficient relation between human and machines, we have targeted to the most important concern of this era by making non-invasive Bio light muscle stimulator, to promote healthy living. It is especially recommended for those who are living with busy lifestyles and does not get a time to carry out prolong skin or muscle therapy. Introduction: The Bio light Muscle Stimulator is improved version of Bio Muscular Stimulator that efficiently works on face and body muscles to relieve them of stress. It provides not only muscles stimulation but its unique light therapy works for a variety of skin concerns. It could be a helping hand for aging and tired skin. It results in a therapy which encourages natural cell renewal and healing of muscle cells. Damage caused due to external factors can be painlessly treated through this device. Methodology: Switch on the device and massage it gently on facial areas or any part of body. It uses LED lights which emit blue and red wavelength energy which help in stimulating muscle cells, nerves and skin healing. Switch on the device and massage it gently on facial areas or any part of body. As the stimulation require some time period. For ease and comfort of users, a jogging timer has been included which emit a sound or beep after one or two or three minutes and so on. If a stimulation of two minutes is required by the user, the timer will be set according to the required time. After two minute delay, it will emit a beep, indicating that the required time has been finished. It has a maximum time delay of nine minutes. Results Prevent wrinkles, produce collagen and kill bacterial infection in skin, Stimulate joint and muscles, Good for metabolism, There are no harms or side effects known when applied under proper guidelines, Provides deep facial and body massage. Benefits No pain or side effects, Safe and effective for all skin types, Non thermal and non-abrasive Compact and portable, Helps visibly diminish the appearance of fine lines, wrinkles, and age spots, Tightens unsightly pores and smoothens the skin, Gives individual natural freshness, Jogger timer Conclusion: Home skin and muscle therapy can be achieved through this non-invasive portable device with any side effects.

IMPACT OF SLEEP ON YOUNG CHILDREN CLASSROOM BEHAVIOUR IN KINDERGARTEN CLASSES

Zahabiya Abbasi, Shelina Bhamani
The Links School
Institute of Business Management

Sleep is considered as one of the most crucial aspect of human health and wellbeing. A sound and healthy sleep result in healthier life style and growth and development. Young children specifically require a certain amount of healthy sleep for their health growth and development. This not only influences their physical health and has wide influence on various aspects of their personality development. The importance of sleep is also imperative for school going children. This study aimed at exploring the impact of sleep on young children on their classroom and school behaviour. Mixed method design was used for the current study and quantitative data was collected using survey questionnaire and to perceptions of teacher pertinent to this phenomenon was explored by collecting in depth interviews. To collect quantitative data, CBS (Putan, 2001) Teacher filled version for 150 children and 3 teachers from early childhood section were interviewed randomly for the qualitative data collection. The data analysis revealed that there is no significant difference in the sleep duration in male and female children and there is no significant impact of sleep on classroom behaviour of young children. This means sleep does not directly impact the behaviour of the young children in the classroom according to the quantitative analysis. Whereas, early childhood teachers do view that sleep impact classroom behaviour of young children.

SELF ESTEEM IN ADULT BURN PATIENTS IN URBAN KARACHI, PAKISTAN.

Atif Mahmood, Asima Faisal & Faria Khan
Shaheed Mohtarma Benazir Bhutto Medical College, Karachi
Institute of Business Management Karachi

Background: Burns are one of the worst conditions that we come across medicine. The injury represents an assault on all aspects of the patient life, from physical to psychological. It is a common condition found equally prevalent in both developing as well as developed countries and affects people from all ages including babies and elderly. Objective: This study attempted to identify the level of self-esteem in adult burn patients in urban Karachi, Sindh, Pakistan. Methodology: A cross sectional study with a structured questionnaire was designed, guided by Rosen Burg, Self-esteem scale and life satisfaction scale. Patients were interviewed, through convenient sampling (n=150) in major burns centers of the city along with the NGO's. Patients younger than 18 and older 40 were excluded from the study. Also patients with known depression, anxiety and bipolar disorders were excluded as it can affect the self-esteem. Urdu Version of Rosenberg's self-esteem scale, a 10-item widely used self-reported scale, was used to measure self-esteem among the burns patients on a 5 point likert scale. A sum of scores for all of the ten items on a continuous scale yielded the self-esteem levels. The higher scores will be reflective of a higher self-esteem. Results: A total of hundred (100) patients were studied out of which 73 were males and 27 were females. Majority of the patients belonged to age group 26 -32 years. The single most causative agent in burn patients was found to be flame (32) followed by electrical (27) and chemical burns (22) which included the burn injuries from Acids too. The majority of burns (79) were accidental. Low self-esteem was found in patients with total burns surface area more than 50%. The self-esteem levels were found to be negatively correlated with the time elapsed since injury. Conclusion: Support is essential to burns patients recovery and also for raising their self-esteem and self-confidence. Providing moral support from family and society will not only increase their social acceptability but will also help them regain their self-confidence and their return towards the normal life.

DESIGN OF DUAL MOVEMENT BLOOD BAG SHAKER

Rabbia Ahmed ,Emad Shaikh , Ibrahim Memon & Farheen Siraj
Ziauddin University College of Biomedical Engineering

Blood bag shaker uses in the laboratories for the purpose to prevent the clotting of blood which has been taken from the patient for the examination purpose. Previously available blood bag shaker had only one movement in up and down direction while we are introducing the dual movement in the blood bag shaker that enables the shaker to move the blood from upside down movement as well as right to left vice versa. These two movements prevent the blood from clotting and also minimize the clotting factor of blood from the edges of the bag. In its design we placed 12 volts variable built-in power supply for the operation of gear motors that provide the dual movement in blood bag shaker, between these two movements a delay timer is used to control the movement, for the motion of the motors in dual positions Axel have used. It is user friendly equipment and easy to operate and also a cost effective product due to the dual movement the blood is prevented from any disease that would occur after the clotting in the blood. It consumes the less energy and works in a more effective manner. It is fully automatic machine the operator only has to apply the desire volts and machine will be working on the dual mode with the delay time.

POST VACCINAL OBSERVATION IN LYMPHOIDAL ORGANS (BURSA, SPLEEN, THYMUS) OF BROILER CHICKS INOCULATED WITH INTERMEDIATE PLUS OR HOT INFECTIOUS BURSAL DISEASE VACCINES (STRAINS 228E AND BUR-706)

Shajeela Azhar, Samira Akhtar & Muhammad Akram Munir.
University of Veterinary & Animal Sciences (UVAS), Lahore.

This project was carried out to study the effect of two intermediate plus vaccines (228-E and BUR-706) and a mild (Gumboral CT) vaccinal strain of IBDV in terms of their ability to induce an antibody response and their effect on different lymphoid organs (bursa, spleen and thymus) in chickens. A total of 250 chicks (divided into 4 groups) were vaccinated with these strains of IBDV on 15th day of their age and antibody levels were monitored using indirect haemagglutination (IHA) test every week up to 5 weeks of their age. On 25 days post vaccination IHA results revealed that the birds vaccinated with 228-E and Bur-706 had significantly higher antibody titers respectively as compared to Gumboral CT. But reduction in body and lymphoid organs weights ratios which were recorded showed that intermediate strains were more damaging than milder one. Histopathological studies also showed severe damage in bursae of broiler inoculated with intermediate plus vaccines than milder. On 25th day of age of birds, five birds from each treatment group were challenged with a virulent IBDV field isolate. After seven day post-challenge high morbidity and mortality was observed in control group than vaccinated groups. This study suggests the use of intermediate strains as vaccine since they induced high antibody titers as compared to that of the milder strain. However, more invasive and pathogenic intermediate strains caused more damage to the lymphoid organs harboring B cells. So the need exist for an effective infectious bursal disease vaccine, low in virulence, which could be applied by a mass vaccination in chickens conferring excellent protection against the disease with minimum immunosuppressive effect.

COST EFFECTIVE TEST-TUBE ROTATOR

Salman Muhammad Ilyas ,Talha Malik & Ali Hussain
Ziauddin University, College of Biomedical Engineering

Test tube shaker is a device that uses chemistry and biology laboratories to stir the liquid. The basic principle of this device is to stir and mixing the solution in the laboratory. It is also used in medical diagnostics or analysis for cells and tissues. In this project our basic task is to make a cost effective tube shaker. The rack device consists of a support on which a shaft is rotatably mounted, the shaft having clips for supporting test tubes. A directional motor is mounted to the support and is connected directly to the shaft. The shaft has an arm, which can be adjusted to engage the motor causing the motor to oscillate the shaft whereby the motor will rotate continuously in one direction. Digital timer switches are used to control the operation of test tube rotate based on a

programmed schedule. It describes a programmable digital timer based on a microcontroller that can be programmed to schedule the on and off operation of a test tube rotator. The rotator is controlled through a relay switch. This timer allows you to set on and off time. The maximum time interval that you can set for on and off operation is 99 hours and 59 minutes.

COMPARISON OF NORMAL BRAIN AND ALZHEIMER'S CAUSED BRAIN, USING CFD ANALYSIS

Talha Malik, Ali Hussain, Muhammad Daniyal

Ziauddin University College of Biomedical Engineering

The title of our project is to compare the normal brain and Alzheimer's caused brain through modeling and simulation using software namely Gambit and Fluent. The purpose of our experiment is to determine the blood flow velocity and pressure of normal or healthy brain and Alzheimer's caused brain. The procedure involves the step of Gambit (vertex, conic, arc, face, mesh, subtracting of faces) and the step of fluent that include solver, define, material and boundary condition options to show the velocity and pressure of blood. Our experiment also conclude that if the velocity of decrease due to tumor then the pressure inside the brain get increased and may cause brain hemorrhage. The purpose of our experiment is to determine the blood flow velocity and pressure of Normal or healthy brain and Alzheimer's caused brain. The result shows that the in normal brains the pressure and velocity of blood is also normal including the contours of pressure and velocity of blood. Where as In Alzheimer's caused brain the brain got shrink due to tumor because it causes the difference in pressure from inside and outside the brain and velocity become less in that area.

SELF-ESTEEM LEVELS AMONG PATIENTS IN A SURGICAL WARD IN GOVT. SECTOR TERTIARY CARE HOSPITALS IN KARACHI

Atif Mahmood, Safdar Ali, Hamza Akhtar, Faria Khan

Shaheed Mohtarma Benazir Bhutto Medical College, Karachi

Background: Self-esteem is actually a feeling of having respect for yourself and your abilities. It shows ones beliefs and emotions such as triumph, despair, pride and shame which affects the physical and mental well-being of patients. There is a strong relationship between self-esteem and general, mental and behavioral changes related to post-operative patients. Objectives: The aim of this study was to find out the self-esteem levels of the patients admitted in surgical wards of government sector tertiary care hospitals in Karachi. Methodology: A cross-sectional study was conducted in the patients of department of Surgery at Civil Hospital Karachi, Lyari General Hospital, Jinnah Postgraduate Medical Center, Karachi, from January 2013 to December 2013. A written informed consent was obtained from each and every patient. A total of 198 subjects were enrolled by nonprobability convenient sampling majority of which were postoperative. The patients of both sexes of the age ranging from >15 years were included in the study. The State Self-Esteem scale (SSES: Heatherton & Polivy, 1991) was used for evaluation of self-esteem. The 20 item scale has an acceptable internal consistency ($\alpha = .92$). Self-esteem evaluated can be subdivided into performance self-esteem, social self-esteem, and appearance self-esteem. All items are answered using a 5-point scale (1= not at all, 2= a little bit, 3= somewhat, 4= very much, 5= extremely). Results: The studied patients comprised of 144 males and 54 females. The mean age of the patients was 31.36 ± 12.31 . The mean score of SSE was found to be 45.62 (7.08) showing an overall low self-esteem of the subjects. The mean scores for performance SSE was 17.02 (3.21), Social SSE was 17.12 (3.5) and appearance SSE was 14.5 (3.49). The duration of the disease was found to be significantly associated with the Appearance SSE (p value= 0.000). Conclusion: Those who have high self-esteem are presumed to be psychologically happy and healthy whereas those with low self-esteem are believed to be psychologically distressed and perhaps even depressed. It was found that duration of disease had a significant impact on the psychological state of the patient which lowered their overall self-esteem.

LIFE SATISFACTION LEVELS AMONG PATIENTS IN A SURGICAL WARD IN GOVT. SECTOR TERTIARY CARE HOSPITALS IN KARACHI

Atif Mahmood, Faria Khan, Safdar Ali & Hamza Akhtar

Shaheed Mohtarma Benazir Bhutto Medical College, Karachi

Background: Life satisfaction is a person's way of seeing how his or her life has been and how they feel about the future of it. So, Life satisfaction refers to a judgmental process, in which individual assesses the quality of their lives on the basis of their own unique set of criteria. Objectives: The aim of the study was to find out the satisfaction with life levels in patients admitted in surgical wards of government sector tertiary care hospitals in Karachi. Methodology: A cross-sectional study was conducted in the patients of department of Surgery at Civil Hospital Karachi, Lyari General Hospital, Jinnah Postgraduate Medical Center, Karachi, from January 2013 to December 2013. A written informed consent was obtained from each and every patient. A total of 198 subjects were enrolled by nonprobability convenient sampling majority of which were postoperative. The patients of both sexes of the age ranging from >15 years were included in the study. Satisfaction with life was measured by Satisfaction with Life Scale (SWLS) which was developed by Diener in 1984 to assess satisfaction with the respondent's life as a whole. It is a 5-item scale that uses a 7-point likert scale that ranges from 7 strongly agree to 1 strongly disagree. Results: The studied patients comprised of 144 males and 54 females. The mean age of the patients was 31.36 ± 12.31 . The mean score of SWLS was found to be 17.21 (6.81) showing an overall slight dissatisfied level of subjects with their life. Majority of the patients 67.7 % were found to be below average or dissatisfied with their life. The mean scores for SWLS was found to be significantly associated with duration of the disease (p value 0.000), gender (p value= 0.000), and age group (p value= 0.000). Conclusion: The overall satisfaction level of the patients in a surgical ward was below average or dissatisfied which is probably because of the psychological impact that hospital, procedure and postoperative trauma has on the patient. It was found that age, gender and duration of disease had significant impact on the life satisfaction of the patients.

PREVALENCE OF ANXIETY AND DEPRESSION AMONG THE PATIENTS IN SURGICAL WARDS AT GOVT. SECTOR TERTIARY CARE HOSPITALS IN KARACHI

Atif Mahmood, Hamza Akhtar, Safdar Ali & Faria Khan

Shaheed Mohtarma Benazir Bhutto Medical College, Karachi

Background: Admission to hospital and the prospect of surgery is accepted as extremely anxiety-provoking, resulting in behavioral and cognitive sequel which can have far reaching effects on recovery. Studies have explored the relationship between psychological factors and post-operative anxiety but have left depression relatively unexplored. Objectives: The aim of this study was to highlight the prevalence of depression and anxiety among patients admitted in surgical wards of government sector tertiary care hospitals in Karachi. Methodology: A cross-sectional study was conducted in the patients of department of Surgery at Civil Hospital Karachi, Lyari General Hospital, Jinnah Postgraduate Medical Center, Karachi, from January 2013 to December 2013. A written informed consent was obtained from each and every patient. A total of 198 subjects were enrolled by nonprobability convenient sampling majority of which were postoperative. The patients of both sexes of the age ranging from >15 years were included in the study. The Urdu version of Hospital Anxiety and Depression Scale (HADS) was used to measure the severity of anxiety and depression. The score obtained from each patient was used to categorize non-cases (0-7), mild anxiety and mild depression (8-11), moderate anxiety and moderate depression (12-16) and severe anxiety and severe depression (17 and above) cases. Results: The studied patients comprised of 144 males and 54 females. The mean age of the patients was 31.36 ± 12.31 . The mean score of HADS anxiety was found to be 8.49 ± 3.47 whereas for depression, the mean score was 8.44 ± 3.39 . Out of 198, 60 patients were identified as non-cases of anxiety and 73 as non-cases of depression whereas 138 and 125 were determined to be cases of anxiety and depression respectively. The duration of the disease was found to be significantly associated with the HADS scores for anxiety and depression (p value= 0.000). Conclusion: It was found that duration of disease had a significant impact on the psychological state of the patient which varied significantly with the disease duration.

MODELING AND SIMULATION OF ARTERY USING CLOT BUSTING TECHNOLOGY

Muhammad Maaz Siddiqui, Hafsa Farooqi, Syed Faraz Jawed & Afsah Ali Khan
Ziauddin College of Biomedical Engineering
N.E.D University of Engineering & Technology

We have done the modeling and simulation of the research in drug delivery technology of Wyss Institute, it's a nano therapy uses nano technology to target drugs selectively to sides of vesicular collision where blood vessels are clogged up by the a blood clot may cause heart attack, stroke, and pulmonary embolism. Concentrate the drug to that side actually can remove the clot and restore the blood flow. A clot-busting drug much like when a wet ball of sand breaks up into individual grains. Computational fluid dynamics (CFD) uses numerical methods and algorithms to solve and analyze problems that involve fluid flow. We used the gambit and fluent software's for the modeling and simulate the clogged vessel, that how the nano particles that are coated with tissue plasminogen activator (tPA) remove the clot in vessel.

APPLICATION OF DIFFUSED REFLECTIVE METHOD FOR E-SMART BLIND STICK

Salma Tariq, Saniya Amin & Muhammad Saqib Ejaz
College Of Biomedical Engineering, Ziauddin University, Karachi, Pakistan
Hamdard University, Karachi, Pakistan

Vision is the prime perception for every human. Blindness is the condition in which people lacks visual sensitivity due to physiological and neurological factors. People with such disabilities always suffer with severe problems to survive in the society and to carry out daily work like walking, travelling, reading, etc. Innumerable rehabilitation equipments have been designed to aid blind people internationally. But, countries like Pakistan are unable to provide blind people with innovative technologies for their aid and rehabilitation. The only existing device for blind people is simple blind sticks that help them to track the path and to walk safely on the road, home and community. The proposed technique with latest electronic technology and sensor into the traditional blind stick or cane has been devised by us. This will enable the blind people to sense the obstacle that will confront them up to the prescribed distance. The stick is designed with simplicity. It can be used by Blind as well as Partially Blind person for the purpose of walking in any place and on any surface, confidently and independently. The key feature of our blind stick is the implantation of photo-electric sensor that uses diffuse-reflective method of sensing up to 5mm to 100mm distance from hurdle. This E-Smart blind stick is of dual purpose for blinds. It works on two different modes, when set at mode 1; it detects the obstacle in front of blind person. Whereas, at mode 2; it can be used for security purpose. It is a portable, cost effective and well organized system for navigation aid for blind which operates by a rechargeable 9V battery. This actually provides an artificial vision about the environmental picture of objects around them. This will direct the blind person to the available path. However, the output will be in the form of high quality buzzer which the blind person will hear comfortably.

CARDIOVASCULAR RISK ASSOCIATED WITH OBESITY AND DECREASED PHYSICAL ACTIVITY

Maria Altaf, Kisa Fatima Altaf.
Fatima jinnah dental college
Dow university of health sciences.

OBJECTIVES To evaluate the causes of increased cardiovascular risk factors in Pakistan and its association with obesity and physical fitness. **BACKGROUND** Pakistan, like other developing countries faces a double burden of disease, as it passes through demographic transition, where infectious diseases will decline and chronic diseases will become more prevalent. The risk of coronary artery disease and stroke is strongly associated with high blood pressure, especially along with other risk factors, including diabetes mellitus, renal disease, high serum cholesterol, etc. Hypertension can occur at any age, but it is more common among adults and often goes unnoticed. The National Health Survey 1990-94 of Pakistan reported 17.9% prevalence of hypertension among adults 15 years and above **INTRODUCTION** Recently it is realized that adults are being more prone to the incidence of high blood pressure and other cardiovascular risk factors. Increased adipose tissue distribution and its association among nutritional factors, homodynamic and hormonal inequality drives to progressive increase in hypertension and cardiovascular disease prevalence. Physical activity and active lifestyle have constructive effects on reducing cardiovascular risk factors in healthy individuals, it raises high-density lipoprotein cholesterol, lowers low-density lipoprotein cholesterol and triglycerides, lowers blood pressure, improves fasting and postprandial glucose insulin homeostasis, induces and maintains weight loss, improves psychological well-being, and likely lowers inflammation, improves endothelial function, and facilitates smoking cessation. Exercise also has remarkable effects on brains molecular systems as was widely assumed in the early 1990s **METHODOLOGY** It was an observational survey based study conducted on 45 individuals, age ranges from 15 years to 30 years, and data was collected from different Universities of Karachi. Individuals who were overweight and obese were mainly included. BMI was calculated and they were placed in three sub groups, group 1 was people who were overweight (23-24.9), group 2 were obese type I (25-29.9) and group 3 was obese type II. Their blood pressure was observed continuously for 3 days to avoid errors in reading. Randomly designed questionnaire was distributed to evaluate their lifestyles. Data was analyzed using excel 2010 and SPSS 17 **RESULTS** Results shows that more than half of subjects who were overweight showed high blood pressure and were less physically active. These were mostly the individuals who surf their most of the time for internet surfing and entertainment (games which do not consume energy), 35% people were there who participates in sports games and 56% people do not regulate their diet in healthy manner. **DISCUSSION** Result of this study suggests that our population is being at a high risk of obesity and due to this obesity these individuals are most prevalent to cardiovascular diseases. A substantial proportion of subjects were overweight and obese, reflecting the general obesity trend in our society and who had higher levels of BP. **CONCLUSION** There is a need to control hypertension and prevent its complications through effective community interventions. The survey results indicate high prevalence and poor control of hypertension in the community

PERTUSSIS RESURGENCE: SCIENCE AND FICTION!

Muhammad Ali Syed
Department of Microbiology, University of Haripur, Pakistan

Pertussis or whooping cough is a highly infectious, vaccine preventable disease. The incidence of the diseases has greatly been reduced since the introduction of whole cell DTP vaccine in many countries of both developing as well developed world. Pertussis resurgence has been observed in highly vaccinated populations of Western countries since 1990s. Poor vaccine quality, waning vaccine induced immunity, pathogen adaptation and enhanced surveillance as well as advancements in diagnostic facilities are some of the reasons considered responsible for the return of pertussis. Furthermore, a shift of pertussis has been witnessed from infants and children to adolescent and adults. Pertussis may have been ignored and went unnoticed due to its atypical manifestations in partially immunized population or people with waning immunity. Author reviewed the reports of pertussis resurgence from different countries and attempts to investigate reasons behind this come back of the disease. He also emphasizes on the fact that pertussis is still an under reported disease and the available data from the developing countries is not a true picture of the story. Underdeveloped countries of Asian and African continents need to improve their surveillance systems so that a targeted global effort towards control of this vaccine preventable disease may be made.

EVALUATION OF CLINICAL COURSE AND RISK FACTORS FOR PCOs AMONG MARRIED AND UNMARRIED WOMEN

Nida Shaheen, Lubna Naz & Aliya Maqsood

Department of Physiology, University of Karachi

Polycystic ovary syndrome (PCOs) is a frequently encountered endocrine disorder, presented by 4-10 percent of women of reproductive age. Because of diversified clinical and metabolic findings it is still controversial that whether it's a single disorder or multiple associated pathologic conditions. It is significantly associated with reproductive morbidity, infertility, miscarriages, hyperandrogenism, cancers and other complications. For this study, 105 female subjects with PCOs were selected from Abbasi Shaheed Hospital and were divided in married and unmarried groups. Patients were asked for personal family history, disease and menstrual cycle and life style through a detailed questionnaire. Blood samples were taken for hematologic and biochemical findings. Data was compared between both the groups for clinical course, risk factors and complications of the disease. In group I (married) 40.9% females were obese and 50 % were overweight and in group II (unmarried) 62.5% females were obese and 18.75% were overweight. Oligomenorrhea, acne, hirsutism and acanthosisnigricans were higher in group II whereas testosterone levels, ovarian cysts, insulin resistance and psychological behavior disturbances were higher in group I. the mean menarche age was 12.83 ± 0.16 years in both the groups. Furthermore 99% group I females were infertile having no child history. This study concludes that PCOs is a widely spread common endocrine disorder that may lead to infertility. However physical exercises and life style modification are proven to be beneficial and preventive to a certain extent.

DISCOVERY OF ANTI-INFLAMMATORY COMPOUNDS ISOLATED FROM PLANTS: TREATMENT FOR CHRONIC INFLAMMATION

SamreenSoomro, M. Ahmed Mesaik, FarzanaShaheen, SobiaHalim, Zaheer-Ul-Haq

Dr. Panjwani Center for Molecular Medicine and Drug Research, University of Karachi,

H. E. J. Research Institute of Chemistry, International Center for Chemical and Biological Sciences, University of Karachi

Inflammation is a part of the complex biological response of vascular tissues to harmful stimuli. However, chronic inflammation such as atherosclerosis, rheumatoid arthritis, and even cancer are the biggest pharmacological hurdles of today. Targeting inflammation is a broad task, since many mediators are involved in onset of particular disease. Among these many mediators the reactive oxygen and nitrogen species generated by macrophages and neutrophils are of great interest because of their major contribution in establishment of chronic inflammation and cancer. The current studies focused on finding inhibitors of reactive oxygen species (ROS) and nitrogen species (RNS) generated by phagocytic NADPH oxidase and inducible nitric oxide synthase (iNOS) respectively. Natural compounds were tested for their in vitro anti-inflammatory activities, and effect on oxidative stress i.e superoxide, hydrogen peroxide and HOCl production during inflammation. Furthermore compound cytotoxicity was analysed on normal cells system and cancerous cell lines. All in all our discovery could lead to establishment of potentially effective, natural origin steroids and side effects free, anti-inflammatory drug, if further tested for in vivo and clinical trials.

INTENSITY BASED PREVALENCE OF LUMBOSACRAL DISORDER ON MULTISEQUENTIAL AND MULTIPLANAR MRI

Farhana Mehmood, Huma Khalid, Raza Sayani, Farah Khurram, Maha Bint-e-Hasan

Aga Khan University Hospital, Karachi

Lumbosacral disorders are the most common cause of Low back pain throughout the world. The sequelae of disc degeneration remain among the leading causes of functional incapacity in both men and women and are a common source of chronic disability in the working years. Intervertebral disc disorders are associated with low back symptoms among young adults, suggesting that the symptoms may have discogenic origin at this age. A cross sectional data of 101 patients having age range between 11 to 90 years were taken based on history. Study was done from January 2012 to June 2013 in Aga khan hospital. Patient with the prior back surgery were excluded. Obtained data is further divided in to disc bulge and disc dehydration(mild), disc protrusion(moderate), spinal stenosis and disc extrusion(severe) according to intensity of disorders. According to gender, males have higher ratio whether according to age lumbar abnormalities were highly found in people with the age range between 31 to 40 years. Disc bulge and dehydration was commonly found at the level of L4/L5 (38%) and at L5/S1 (46%). Common level of disc protrusion was L5/S (42%), lumbar spinal stenosis and disc extrusion level was L4/L5 (47%). Spinal recess was commonly present at L4/L5 (40%). Results indicate that 77% have mild, 12% have moderate and 11% have severe degenerative lumber disorders.

AWARENESS LEVEL OF FIRST AID IN GENERAL POPULATION, KARACHI-PAKISTAN: A SURVEY REPORT

Sikandar Khan Sherwani, Aqib Javed, Ali Usman, Sajjad Alam Zaidi, Haroon Ahmad, Mirza Tassawar Baig, &Aisha Iqbal

Department of Microbiology, Federal Urdu University of Arts, Science and Technology-Karachi-Pakistan

Bahria Medical College-Karachi-Pakistan.

Centre of Biotechnology and Microbiology, University of Peshawar-Peshawar-Pakistan

Faculty of Pharmacy-Federal Urdu University of Arts, Science and Technology-Karachi-Pakistan

Microbiology Association of Pakistan (MAP)-Karachi-Pakistan

First Aid provides initial and local on spot care for certain illness and injury. First Aid is usually provided by non-expert but trained personnel, to a sick or injured person till he/she gets proper medical treatment. It has three important components i.e. to preservelife, to prevent further harm and to promote recovery. First Aid training is employed in case of emergency situations like bleeding, drowning, heart attacks, choking, eye injuries, burns, and some other typical emergencies. This study was conducted to assess the level of awareness among the general population of Karachi, the most populous metropolitan city of Pakistan. The age group for the study was between 20-40 years. It was the first survey of its kind that consisted of 20 important relevant and direct queries between January-February 2012. The participants of this study belonged to various professions including; students, lawyers, bankers, housewives, teachers, doctors and others. Our results revealed that 88.8% were aware of the term First Aid. Majority (42.9%) of them reported that they basically got the information from their parents while some (27.2%) reported that they got this information from some professional people. Survey results also indicated that 55.5% of the respondents experienced cuts, 40.74% injuries, 35% bleeding, 25% burns and 55% fires in their life. Most of the respondents (75.9%) also reported that First Aid provider should be literate and highly professional. However a surprising misconception among 53.7% participants was that only a professional person can do First Aid. Majority (80.70%) of respondents also had a view that First Aid ought to provide help in routine injuries and moreover. During the study respondents (88.5%) showed their interest of getting First Aid training. Regarding First Aid kits 60.3% of respondents answered of having it at home, 16.29% at academic institutions, 9.62% at offices while 39.25 % reported that they had purchased it from the market. In the light of our findings we concluded that the majority of people in Karachi had a high level of awareness regarding First Aid yet, we also found that there were certain misconceptions among general public that ought to be resolved for better, satisfactory and confident implementation of First Aid treatment effectively in all spheres of life.

MENTAL, BEHAVIORAL AND PHYSICAL EFFECTS OF POWER ENHANCING DRUGS IN CHRONIC USERS

Faizan Mirza. & Sadaf Ahmed.

Dept. of Physiology, University of Karachi

Advance Educational Institute & Research Center

Exercising in gym is largely aimed at getting a desirably muscled physique that is subject to peer approval as well as associated with a higher self-esteem. Many people opt for workouts that define the lean body mass, whereas others aim at getting a beefed up body. The latter being a long and tiring process, pushes many people to opt for power enhancing drugs, for boosting their athletic endurance. Among others; steroids, erythropoietin, creatine, protein supplements are available over the counter all over Pakistani Pharmacies. Together with increasing the muscle bulk, they exert highly undesirable effects on hematological as well as lipid parameters. The present study evaluated and compared the side effects reported by the users of such PED on their mind, personality and body. A proforma was filled by each subject. The results showed that depending on the type of PED used, it has altered the personality of the individual significantly. Attributes that their personality and body did not have initially were observed by them upon chronic usage of these ergogenic aids. This lead us to conclude that "amount in Rs" is not the only price these PED users pay for attaining their desired beefed up physique, with which emerged another question, is that cost actually worth it?!!

ENVIRONMENTAL HEALTH ASSESSMENT AROUND PHOSPHATE ROCK MINING AREA OF ABBOTTABAD (LAKARBAN)

Afshan, Muhammad Irshad, Naureen Aurangzeb, Yamin Bibi, Muhammad Zia & Sobia Nisa

Department of Environmental Sciences, University of Haripur, Khyber Pakhtunkhwa

Department of Environmental Sciences, COMSATS Abbotabad

Department of Botany, PMAS Arid Agriculture University Rawalpindi

Department of Biotechnology, Quaid-i-Azam University Islamabad.

Mining activities are mostly considered hazardous due to their environmental impacts and occupational health and safety issues. This study was designed to evaluate the impacts of phosphate rock mining on soil, water and crop system. Investigation of soil and maize crop grown adjoining phosphate rock (PR) mining indicated was done by using atomic absorption spectrophotometer. Results indicated a significant increase in the concentration of heavy metals (HM) in soils and plant samples. The heavy metals concentrations in soil samples varied in the order of $Pb > Cr > Ni > Zn > Cd$. Total, exchangeable and water soluble forms of the HM were determined in phosphate rock. The magnitude of metal species were found higher near mining site whereas metal concentration in soil samples decreased with the increasing distance from the mine irrespective of the kind of element. Phosphate mine enhanced HM concentrations in all parts of the maize plants. Plant parts differed for HM concentrations as root > shoot > grain. The fields nearer to the PR site gave higher HM concentrations in plant parts. The higher level of HM concentrations in soils gave higher concentration in plants too. Water sampled in the vicinity of PR mine exhibited inconsistent trends in heavy metals concentrations. The HM in water could be attributed to the leachate percolated from the nearby soils or PR mines. On the basis of results it was concluded that PR material is producing tangible impacts on environmental health.

EFFECTS OF TAURINE BASED ENERGY DRINK ON REACTION TIME, AUDIO, VISUAL AND TACTILE RESPONSES IN COMPARISON OF MALES AND FEMALES HEALTHY SUBJECTS

Asif Mehmood Abbasi, Sadaf Ahmed, Faizan Mirza, Quratulain Ali & Tayabba Hamid

University of Karachi

Advance Educational Institute & Research Center

Energy drink is usually carbonated beverage mainly used for the enhancement of physical activity. Give extra boost of energy and increase the stamina. Act as a stimulant and providing mental and physical stimulation. Energy drinks main ingredients are caffeine, sugar, ginseng, guarana, taurine etc. We want to evaluate and compare the effect of energy drink have had on reaction time. The reaction time is a time between the beginning of the application of a stimulus and the beginning of an organism's reaction to it. We took reaction time by the three parameters visual, auditory and tactile with the ruler dropped method. On the Comparison of male and female reaction time, we found that male have decrease value of reaction time as compare to female. The results suggest that male have decrease reaction time as compare to female but effect of energy drink is same on both. Excessive amount of energy drinks neither be beneficial for the health, but it is very much harmful for the individual and can cause headaches, nervousness, dizziness, and insomnia on some extent. These results suggest that energy drinks have predisposed the users to various physiological and psychological disorders.

HEALTHCARE QUALITY: A STRATEGIC MANAGEMENT MODEL

Haroon Saleem

National Testing Service, Islamabad

In an article, "Healthcare on report" by John Morrissey in Modern Healthcare, Harvey Fineberg, a former medical specialist and administrator at Harvard University, 57, did not begin his six year term as head of the Washington based Institute of Medicine until one year ago. Topics of IT health standards have also been raised, where the Institute of Medicine is working upon the task of proposing a common consensus on key capabilities of an electronic health record. A systematic approach to identifying training needs resulted in a training and development curriculum that relies upon the KepnerTregoe methods of problem solving and decision-making. Quality problem solving, a key element for continuous improvement, requires data for identifying and describing problems and a systematic process for analyzing the data. There are three distinguishing characteristics of a quality management program when compared with ad hoc project activity. Such a program should be hospital wide, multidisciplinary, and integrated. An effective quality management program must involve all areas of clinical and non-clinical activity throughout the hospital and is still rare to find this situation in hospitals. Many hospitals will claim that they already have in place many of the processes, as part of the micromanagement system. Hospital managers and doctors in particular must understand that well trained and qualified medical staff with the best will in the world cannot ensure quality and safety, without sophisticated support and successful implementation of a well managed system.

INCIDENCE OF CANCER IN DIABETES TYPE II PATIENTS; OPINION FROM HEALTHCARE PROVIDERS

Yamna Zehra, Nayab Zehra & Imran Sheikh

Dow Faculty of Pharmaceutical Sciences, Dow University of Health Sciences, Karachi

There is a global increase in prevalence of Type II Diabetes Mellitus, creating worldwide public health concern and impacting higher morbidity and mortality rates. Along with previously reported serious cardiovascular complications, recent research in United States showed increased risk of prostate, colon, pancreatic and breast cancer in diabetic patients. To evaluate cancer risks in patients with Type II Diabetes Mellitus in Karachi. A qualitative descriptive study was performed through questionnaire that was circulated among 80 physicians and consultants from 25 hospitals. All data was analyzed by statistical software, IBM SPSS Statistics 21.0. 46.66% of doctors think that there is a relationship between diabetes and cancer. Risk factors common in diabetes and cancer are obesity (55%), infection (38.33%), hormonal disturbance (23.33%), hyperinsulinemia (13.33%) and smoking (5%). Types of cancer affecting diabetic patients frequently include breast (53.33%), pancreatic (16.66%), prostate (13.33%), liver (11.66%), endometrial (8.33%) and stomach cancers (1.66%). Diabetic females (53.33%) are more prone towards cancer than male (41.66%). Verdict from healthcare providers indicate towards the association of incidence of Cancer associated with

2nd International conference on Endorsing Health Science Research, 14th – 17th March, 2014

the risk of Type II diabetes mellitus thus making it possible to indirectly lower the risk of cancer, by minimizing the prevalence of Type II diabetes mellitus. Furthermore patients already suffering from Type II Diabetes mellitus should be dealt accordingly to lessen the chances of adversity.

PREVENTIVE EFFECTS OF LYCOPENE ON DYSLIPIDEMIA, RENAL INSUFFICIENCY & RENIN ANGIOTENSIN SYSTEM IN RATS ON HIGH FAT DIET

Unzela Ayub & Tabassum Mehboob

Department of Biochemistry, University of Karachi

High fat consumption causes accumulation of free fatty acids in adipose tissues, cardiac and skeletal muscles and causes obesity. Which will lead to cardiovascular diseases and elevates oxidative stress by generating reactive oxygen species. This oxidative stress affects cell functions. Systemic RAS is over activated in obesity and causes metabolic syndrome. Lycopene is considered to be an antioxidant; therefore the aim of study was to evaluate the antioxidant effect of lycopene in Wistar Albino rats fed on a high fat diet and lycopene effect on kidney and lipid, urea and creatinine plasma levels. 24 Albino Wistar rats of female sex (b.w: 250-300 gm) were divided into 4 groups (n=6). Group I control (untreated), Group II received high fat diet (2 pellets of 12gm) for 8 weeks daily, Group III received lycopene (200ml of lycopene extract equivalent to 4.3mg of pure lycopene added in drinking water) for 8 weeks; twice in a week, Group IV received lycopene extract together with high fat diet for about 4 weeks. Antioxidant effect of lycopene on high fat consumption was measured in terms of renal function; ACE gene expression, urea and creatinine, Lipid profile; total cholesterol, triglyceride, HDL and LDL levels. In hyperlipidemic group treated with lycopene, there was a significant decrease in renal function. The ACE expression, urea and creatinine level decreases significantly. Significant increase in HDL with decrease in total cholesterol and LDL was observed. The results describe the beneficial antioxidant effect of lycopene on lipid profile and renal tissues.

MYELODYSPLASTIC SYNDROME FOLLOWING ESSENTIAL THROMBOCYTOPENIA IN HYPERTENSION – A CASE REPORT

Muhammad Paras Javed

Riphah International University, Islamabad

Myelodysplastic Syndrome (MDS) is a disorder of haemopoietic stem cell. Since, it has not been commonly observed in Pakistan, thus, this case study is to understand the scientific and therapeutic comprehension of MDS. An 81 year old male hypertensive patient was presented in a private hospital of Islamabad, Pakistan, with anemia. On medical investigation the physician prescribed him, multi-vitamins OD for a month; injection G-CSF 300mcg once a week; Molgramostim 300µg on every alternate day for 3 weeks; Thalidomide 100mg OD with Alprazolam 0.5mg at night for 4 weeks and 5'-azacytidine for a month. Clinical and pharmaceutical inaccuracies were observed. Moreover; the high cost and long term therapy are major obstacles to cure this disease. Therefore, affordable method and short-term effective therapy and reduced cost of drugs will help to cure the disease in more efficient way and in less time with more promising results.

SIGNIFICANCE OF IR RECEIVER AND TRANSMITTER IN EYE MOUSE FOR THE REHABILITATION OF DISABLED PEOPLE

Muhammad Talha Malik, Syed Ali Hussain & Muhammad Saqib Ejaz

College of Biomedical Engineering Ziauddin University Karachi, Pakistan

Hamdard University Karachi, Pakistan

Use of the mouse on a computer system is necessary for its effectiveness. But when the disabled person thinks to use the computer, especially the person who is handicapped and willing to use the mouse, he faces problems and unable to use it because of his disability. For the rehabilitation and help of a disabled person there is a need to develop a mouse which can be controlled without hands, Eye Mouse is found to be a very effective technique in this regard. There are many techniques have been developed for eye mouse, But we use the phenomena of wavelength that the same wave length attracts. By working on this principle, we use IR receiver and transmitter which works when the eyeball moves and send signal to the amplifier which generates the pulse to the LED and then LED starts glowing. When Red LED glows, the mouse light attracts to the wavelength of LED and the mouse starts working. For the movement of the mouse we use eight LEDs which glow according to the signal of your receiver and the movement of the eyeball. Whereas, for the clicking purpose, we use the voice switch which switches as ON and OFF with the intensity of voice. It is a kind of approach through which a handicapped person can be able to use a computer by the movement of his eyes. He or she can be able to use the onscreen keyboard by his or her eyes. In the future, by using this phenomena we can do many things to help the disabled people.

CORRELATION BETWEEN INFERTILITY AND SEMEN PARAMETERS IN PAKISTANI MALE POPULATION: A CROSS-SECTIONAL STUDY.

Faraz Baig, Sidra Afzal & Neelam Barkat

Advance Educational Institute & Research Center

Al-Hafeez Medical centre

Objective: This study is the report of the average semen parameters of Pakistani infertile male population. Introduction: 30 to 40 % Male factor contributes to Infertility; semen analysis is the routine test to determine the basic parameters of semen that contributes to fertility rate. This study reports the reference values of semen parameters of Pakistani male population. Method: We studied the semen parameters of 386 male aged between 20-59. The study was conducted at a running fertility centre. The male partners who failed to have a child since 2 years of living with their partner without taking any protection and visited the clinic from different locations of Pakistan were included in the study after taking their consent, semen specimen collection done by masturbation with minimum abstinence of 3 days and analyzed in detail without freezing within 2 hours of collection as per WHO's standardized semen characters i.e. volume of semen, liquefaction time, sperm count, motility and morphology has been evaluated. Result: This study evaluated the average volume of 3.36 ml per ejaculate, an average concentration of 87.57 million/ml following with the average motility of 44.08% and an average abnormal morphology of 68.24%. We also examined semen abnormal conditions in total population in which 14.5% are asthenozoospermic, 10.3% are azoospermic, 6.2% of population is suffering from hyperspermia, 5.1% of patient were hypospermic, 4.6% of population having oligozoospermia, teratozoospermic condition was seen in 2% of these infertile males, while 2.8% of population was observed to have ooligoasthenozoospermic condition, 1.5% of patient were reported with asthenoteratozoospermia, while ooligoateratozoospermia seen in 0.5% of patients, whereas 2% are oligoasthenoteratozoospermic and 1.2% are necrozoospermic. Out of total infertile male population 48.7% having normal semen parameters. Conclusion: The study reported that the major abnormality in Pakistani infertile male is asthenozoospermia, which concludes that Pakistani male population lack normal motility of sperms that is leading them toward infertility.

CEREBRAL PALSY IN RELATION TO MATERNAL HEALTH

Kisa Fatima Altaf, Maria Altaf

Dow University of Health Sciences

Objective: To investigate the relation between prenatal problems and cerebral palsy. Design: The study design was observational prospective study. Setting Dow Institute of physical medicine and rehabilitation, DUHS. Population or Sample 50 mothers having CP child. Methods Data was abstracted with the help of questionnaire and interviewing mothers about the problems faced by them in their gestational period with peri-natal and post-natal problems. Results Prenatal causes (placenta previa, hypertension, diabetes, seizures) accounted for the majority of CP conditions. In multivariate analysis, cord around the neck was

significantly associated with the risk for CP. Conclusions Women with pregnancy induced diabetes (gestational diabetes) have greater chance of having a baby with birth defect. Gestational diabetes puts the fetuses at greater risk of CP. Women with hypertension are also most likely to have a child with CP.

PHYSIOLOGICAL INFLUENCE OF TAURINE BASED ENERGY DRINK ON CARDIAC PARAMETERS.

Tayyaba Hamid, Faizan Mirza, Sadaf Ahmed, Asif Mehmood and Quratulain Ali
Advance Educational Institute & Research Center
University of Karachi

Taurine Energy drinks are widely available and popular among adolescents. Although taurine is the amino acid produce in our body but in limited amount as per need but if we take in our diet in excessive amount so, the adverse effect disturbs the normal body functioning. Excessive Taurine increases the release of Epinephrine as the result vasoconstriction occurs and it increase SBP as well as DBP. We hypothesized that the TBE drinks would lead to increases in heart rhythm irregularities, Systolic and Diastolic pressure and their comparison among both gender (Male and Females) can be significantly influenced of TBE drinks. To record these measurements we used a Digital blood pressure device before and after Taurine Based energy drink intake. The effects of the TBE drink on systolic blood pressure and heart rhythm irregularities (binning) showed a trend towards increased levels after consumption. After performing 95% confidence interval, our data shows statistical significance. This suggests that TB Energy drinks have consistent effects on human physiology and cause early aged cardiac diseases.

POSTER PRESENTATIONS

MEASURING IMPACTS OF GLOBALIZATION ON HEALTH.

Mohsin Raza
University of Karachi

It is clear that globalization is something more than a purely economic phenomenon manifesting itself on a global scale. Among the visible manifestations of globalization are the greater international movement of goods and services, financial capital, information and people. In addition, there are technological developments, more trans-boundary cultural exchanges, facilitated by the freer trade of more differentiated products as well as by tourism and immigration, changes in the political landscape and ecological consequences. In this paper, we link the Globalization Convergence Index with health indicators to analyse if more globalized countries are doing better in terms of infant mortality rate, under-five mortality rate, and adult mortality rate. The results indicate a positive association between a high level of globalization and low mortality rates. In view of the arguments that globalization provides winners and losers, and might be seen as a disequalizing process, we should perhaps be careful in interpreting the observed positive association as simple evidence that globalization is mostly good for our health. It is our hope that a further analysis of health impacts of globalization may help in adjusting and optimising the process of globalization on every level in the direction of a sustainable and healthy development for all.

EVALUATION OF INFERTILE KARACHI WOMEN WITH MAJOR UTERINE COMPLICATION.

Sidra Afzal, Neelam Barkat & Faraz Baig
Advance Educational Institute & Research Center
Al-Hafeez Medical centre

To evaluate the measure complications occurring within primary and secondary infertile women. Infertility is defined as a condition of failure to achieve a clinical pregnancy of a couple of reproductive age group after 12 months of unprotected intercourse. It can be classified as primary and secondary infertility. In Pakistan the incidence of infertility is reported near to quarter of population, in which secondary infertility is more common as compare to primary infertility. We studied 300 women visiting the gynae clinic out of these; 50 infertile women who were unable to conceive even after one or more year of continues trial were included, while other was excluded. Detailed discussion followed by frequent transvaginal and abdominal ultrasound scans were done to screen their uterine abnormalities in order to explore their major complications. Among all the reported patients 62% of females was primary infertile whereas 38% was secondary infertile. In primary infertile patients 21.4 % has no major complication, 2.3% had cervical fibroid, 7.1% had uterus fibroid, 11.9% had polycystic ovaries, 9.5% had thickened endometrial lining, 2.3% had blocked fallopian tubes and in 7.1% condition was not reported. While in secondary infertile patients 14.28% had no major clinical issues, 14.28% had polycystic ovaries, 4.7% had fibroid in uterus, and 2.3% had fluid retention whereas in 2.3% of patients condition could not be reported. Study explored prevalence of primary infertility in more common rather than secondary infertility in Karachi women and the major complication reported commonly among these infertile females is polycystic ovaries.

LESS CONCERN OF PEOPLE TOWARDS ORAL HYGIENE

Aaishah Iftikhar Kaimkhani, Maria Altaf, Yusra, Fatima Iftikhar, Qurat-ul-ain Yousuf
Fatima Jinnah Dental College

To investigate the index of oral hygiene in Pakistani population and to spread the awareness related to the diseased conditions caused by oral hygiene disturbances and to teach children proper brushing technique in order to maintain a good oral hygiene. To assess the present level of oral hygiene practices in general population aged 18 or less, in particular to analyze how self-care practices in terms of oral hygiene habits and cleaning of dentures are affected by socio-economic factors, dental status, actual dental visiting habits, and the experience of oral health care during school years. Evidence suggests that brushing with a tooth paste may slow plaque reformation over 24 h. Dental plaque is a soft whitish deposit that forms on the surface of teeth. It forms when bacteria combine with food and saliva. Calculus, sometimes called tartar, is hardened calcified plaque. It sticks firmly to teeth. Generally, it can only be removed with special instruments by a dentist or dental hygienist. Poor oral hygiene may lead to carries, periodontal diseases, decay, erosion or other oral health problems. It was an observational study in which 300 participants underwent dental examination at base line. Dental checkups were done from March 2013 to September 2013. We visited different schools of Karachi to evaluate oral hygiene index, poor oral hygiene determined by the extent of dental debris and calculus. Teenagers were on main focus for this study and age ranges from seven to eighteen years. Out of 300 students 133 were female and 167 were male, but gender difference doesn't make any possible correlation with oral hygiene. Well-designed questionnaires were administered to evaluate other possible outcomes. Result was analyzed using excel 2010 and SPSS 0.20. Result shows that 39% people brushes twice a day and 11% uses mouthwash, 88.5% do not floss while 11.7% floss, 35.3% students were having bad smell from mouth, 36.3% were habitually cleaning their tongue 75.3% people never make visits to dentist while 24.7% visits when they feel they are in problem. Result evaluated that mean debris index and calculus index was 0.89 and 0.73 and their mean oral hygiene index was 1.61 with standard deviation of ± 0.420 , ± 0.418 and ± 0.747 . These results gave a good percentage of children who are unaware of proper brushing technique or children who are habitual of eating pan, chalia etc which badly affected their oral hygiene. Dental diseases are associated with poor oral health and may be a more general indicator of personal hygiene and possibly health care practices. Increased frequency of tooth brushing was found to produce a statistically significant reduction in oral debris. Intensive population-directed strategies for oral health education should be considered in order to further improve the oral hygiene practices of the entire population. Moreover awareness programs should be organized to aware the crowd about harmful effects of pan, chalia and to educate them to brush properly. As a good oral hygiene is a window to a good body health.

CLOVE ESSENTIAL FOR ANXIETY AND MENTAL DISTURBANCE

Tahira Atiq, Munnum Zafar, Munira Zafar, Maria Altaf
University of Karachi
Fatima Jinnah Dental College
Liaquat College Of Medicine And Dentistry

The aims and objectives of the study that we performed were to see the impact of Clove essential oil on different behaviors of rats; most importantly the anxiety and depression. However, most of the synthetic drugs are unaffordable, but also possess many toxic adverse effects. Therefore, there is a great need for the development of cheap, effective and safe antidepressant agents from plants and other sources. Clove oil (*Eugenia caryophyllata*) and its extracts are well known to be used for the purpose of relieving pain and to promote healing. Moreover it has wide use in fragrance and flavoring industries. However very little studies have been reported about its effect on different mental behaviors. We carried out the current study to monitor the behavioral effects of clove oil in rats, most importantly on anxiety and depression. Such studies emphasize on the role of natural sources and their use as antipsychotic agents. Anxiety is one of the most commonly seen mental ailments in human population aging 18 years and older. The synthetic drugs used to treat anxiety are not only expensive but also produce a number of side effects. Therefore there was a need to bring natural compounds into use to treat this disorder. The rich floral biodiversity of India has given herbal health physicians with a remarkable group of 'natural pharmacy' from which plants are selected to make herbal therapies and medicines for the treatment and control of various human disorders. The essential oil extracted from the dried flower buds of clove is used as a topical application to relieve pain and to promote healing. Moreover it shows great bactericidal activity for a wide variety of organisms like *Escherichia coli*. The antimicrobial activity in clove oil is produced by eugenol. Its buds are used as a herbal medicine to relieve dyspepsia and diarrhea. However its essential oil is used in anesthesia, analgesic and also for sterilizing purposes. This study was carried out on 14 Albino Wistar rats that were equally divided into test and control groups. 0.1 ml/day of clove oil was administered orally to the test animals for three weeks. Whereas the controls were replaced with water in the same quantity. Behavioral testing was done through the plus maze model and light and dark box. The results of our study were positive indicating that clove oil may produce anxiolytic effects in rats. It is therefore suggested that a low dose of clove oil is beneficial for treatment of anxiety and mental disturbance as well.

DENTAL FLUOROSIS IN GENERAL POPULATION OF KARACHI

Aaishah Iftikhar Kaim Khani, Maria Altaf, Fatima Iftikhar, Ayesha Hassan, Sharmeen Gohar Khan
Fatima Jinnah Dental College.

The continuous uses of water carrying high amount of fluoride may prove toxic to human, animal and plants. Excessive fluoride concentrations have been reported in ground water of more than 20 developed and developing countries including Pakistan where rural areas are facing fluoride problem. Environmental awareness programmed on "fluoride and fluorosis" urgent need is to educate the people for health. Fluorosis - a condition characterized by mottled teeth in dental fluorosis and brittle bones in severe skeletal fluorosis. It is now well known that the fluorosis disease caused by consumption of excess fluoride from drinking water is a major health problem in Asian countries. Fluorosis is caused by oral intake of fluoride when drinking water contains more than the permitted concentration of fluoride. It also occurs if excessive amount of fluoride is ingested by infants. This cross sectional observational study was performed on 300 students belonging to primary schools of government sector in Karachi from May 2013 till August 2013, age ranges between 10 to 17 years. We had chosen low socioeconomic area of Karachi to evaluate fluorosis score; oral assessment was done using mouth mirror and probe, which were sterilized after every single patient in order to inhibit infection spread or other transmitted disease. Randomly designed proforma was distributed to them to assure their dietary habits and life styles. Our result was analyzed using SPSS 0.20 and excel 2010 using simple descriptive analysis. Result of our study shows that 42% population was having no fluorosis score, 28.7% was with normal score, 12.3% questionable, 10.3 were very mild, 4% mild and 2.3% were lying in severe dental fluorosis score with mean of 1.12 and standard deviation of ± 1.29 . Result shows that more than one third students were having Dental Fluorosis. Rural children were having significantly more dental fluorosis than urban. Fluoride concentration over permissible limit (1.5mg/l) in drinking water lead to human health hazards such as dental fluorosis and skeletal fluorosis affecting millions of people. An urgent need is to educate the people on the causes of fluorosis, encouraging rain water harvesting and de-fluoridation technique for providing water with optimum fluoride concentration in the study area so that it might not affect or cause fluorosis nor its deficiency will be seen. Also fluoride supplements should be kept away from the reach of children in order to prevent hazards leading to severe cases of fluorosis. Children should also be taught that they should not eat toothpastes as this is also one of the cause leading to fluorosis.

CAUSES OF PNEUMOTHORAX IN MALE VERSUS FEMALE

Saima Khan, Sadaf Ahmed & Shamoona Noushad
Advance Educational Institute & Research Center

Pneumothorax is the collection of air in the pleural cavity resulting in collapse of affected lung and its extent depends on amount of air that is present. This study compares the prevalence of pneumothorax in male versus female and the recurrence rate. We evaluated that male are more prone to pneumothorax as compare to female, as men has attributed to several factors like higher rate of smoking, taller body habitus and differences in mechanical properties of lungs. Their risk of recurrence was analysed with reference to the subsequent variables like age, sex, height and body mass index (BMI) of the patient, the initial size of pneumothorax, the smoking status of the patient, and the primary form of treatment in use. Male height was the second most important factor, and smoking cessation the only other variable which significantly influenced the risk of recurrence. Smoking cessation appeared to reduce the risk of recurrence while in female type of pneumothorax. Ecstasy-induced pneumothorax is common, in which lesions associated with diaphragmatic perforations and thoracic endometriosis mostly occur during menstruation. The other frequent underlying disorders are chronic pulmonary obstructive disease with cystic fibrosis, emphysema, atelectasis, tuberculosis, pneumonia, lung cancer, fracture, pulmonary embolism, pulmonary hernia, pulmonary edema, transient tachypnea, pleural effusion and haziness but the major diseases are transient tachypnea and pulmonary embolism. Depending on the underlying disease, the peak incidence of secondary spontaneous pneumothorax can occur in older age, that is most common in emphysema patient in which air enter in pleural spaces during different mechanisms directly through alveolar rupture by lung interstitium or backward through mediastinal pleura.

ASSESSMENT OF BMI AS AN INDICATOR OF SMOKING OUTCOMES

Syed Zain Azher, Sadaf Ahmed & Shamoona Noushad
Advance Educational Institute & Research Center

Smoking causes weight loss by increasing the metabolic rate, decreasing metabolic efficiency, or decreasing caloric absorption or reduction in appetite. Smoking is the most imperative avoidable cause of early morbidity and mortality in the world. According to World Health Organization (WHO) tobacco use is currently responsible for the death of one in ten adults worldwide. Individuals who smoke cigarettes are twelve times more likely to die from lung cancer, two to four times more likely to develop coronary heart disease, twice as likely to have a stroke, and ten times more likely to die from chronic obstructive lung disease. The present study was carried out to examine the association between smoking and Body Mass Index in a group of underweight, Normal, Overweight and obese smokers. A cross sectional study was conducted in Karachi and the data was collected by using a questionnaire, 210 male subjects were recruited randomly through screening while women were excluded from the study, while the age group was 18-30 year. Body Mass Index (BMI; in kg/m²) was also calculated. The results show 55.71% smokers were normal in weight, 23.80% smokers were underweight however the percentage of overweight smokers was 16.19% and

2nd International conference on Endorsing Health Science Research, 14th – 17th March, 2014

obsessed smokers 4.28% while thirty eight present smokers smoke less than or equal five cigarettes per day as compared with seven present smokers who smoke greater than twenty cigarettes per day. However 64 % were daily smokers and 36% were non daily. Sixty-one percent of the smokers also used tobacco in other forms like Pan, Gutka and Niswar, though a single cigarette contains approximately 1 mg of nicotine (absorbed) which influence on several metabolic events, such as lipid metabolism. Smoking addiction increases plasma levels of glycerol as well as noradrenaline, which is the main stimulating hormone of adipose tissue lipolysis it is the core reasons that the study shows mostly smokers normal and underweight. The study suggests that there is a strong association between smoking and body weight and concludes that the normal and underweight smokers are higher risk of smoking related diseases in Karachi.

"RATIO OF GENDER DEPENDENCY", A COMPARATIVE STUDY BETWEEN KARACHI AND HYDERABAD'S POPULACE

Huzaiifa Sarfraz, Shamoon Noushad, Sadaf Ahmed & Syed Zain Azher
Advance Educational Institute & Research Center

Dependency is the state of being supported by someone and to rely and controlled by someone. Major helping hand for being dependent is gender. Gender is the socially and culturally shaped characteristics for males and females (sexes) of any society; both genders have to perform the roles which are expected from them. Gender dependency is not very rare thing especially in south Asian countries. Gender dependency is the result of the cultural practices in any society. The culture in developing societies is masculine by its nature because gender relations are greatly influenced by poverty, security, impunity, education and patriarchy and in developed societies, men are the one who lead, secure and are responsible for bread earning for their families. It is being observed that people in developed societies are much aware about their gender roles and their due share in life. But situation is contrary in developing societies. Karachi and Hyderabad both are metropolitan cities of Pakistan but Karachi is more developed and mobilized city than Hyderabad. This difference may possibly bring change in the gender dependency ratio. To confirm this fact, data from 500 respondents was collected from the middle class general population of Karachi and Hyderabad aged 25 to 40 through simple random sampling method; the ratio of educated population was little high in Hyderabad. Survey was conducted via questionnaire. Questions about respondent's experience, hesitation, insecurity, independency in decision making were asked. Results showed that in both cities females are more dependent than males. Females of Karachi are more confident and independent in their lives. The level of insecurity was high in females of Karachi and the ratio of females who are independent in decision making process was little high in Hyderabad. Majority of females from Karachi feel helpless without opposite gender. Findings proposed the importance of education, development and mobility on the road to independent life.

THE ASSESSMENT OF HEALTH AND SOCIAL PROBLEMS IN GARBAGE PICKING CHILDREN CHILDHOOD SALVAGED OR SABOTAGED

Mohammad Danish Khan, Sajidullah Mahmood, Agha Mohammad Hammad Khan, Jabbar Ghufuran Syed, Sana Shahid, Sara Seraj, Fathima Hafsa Fareed, Asma Saeed, Maria Akhtar, Noor ulAin M. Aslam, Sidra Rehman, Erum Shahzadi, Ayesha Nasir, Dr. KiranMehtab
Group-D1, Community Medicine, Sindh Medical University

Many cities of developing countries are home to low-income families that are forced to live off the streets. Therefore the job of waste pickers, many of whom are children, has taken on new importance as an employment opportunity for those with limited education and skills, resulting in increasing health and social problems. A Cross-sectional study was conducted in the dumps of Karachi from March 2012 to October 2012. A sample size of 284 was drawn through non-probability purposive sampling. The age group was 4 to 14 years. The study was based upon a pre-tested structured questionnaire. The data was collected and analyzed on the SPSS version 16. with a confidence interval of 95% and the margin of error was 5% and P-value of 0.05. Malaria was 69.71% (0.004), respiratory infections/Tuberculosis was 43.30% (0.048), and skin infections were 57.04% (0.002). Injury due to metallic object (Tetanus) was found to be 81.33% (0.045), sexual abuse was 19.71% (0.648), drug- abuse was 23.94% (0.01) and violence/corporal punishment was 61.61% (0.024). The study concluded that children working in the dumps show an increased prevalence of symptoms of infectious diseases. They are also at a higher risk of drug, sexual and corporal abuse.

COMPARISON BETWEEN LEARNING ENVIRONMENT IN GOVERNMENT AND PRIVATE HOSPITALS IN KARACHI IN RELATION OF GENDER

Sharmeen Amin, Zafeer Ahmed Yazdani, Sundus Khan, Aliya Khan, Bhawana Nanwani, Sehar Afshaan, Saniya Shahid, Ruba Ali Zahid
Sind Medical College, DUHS

It is an essential need of every medical student to be provided with a supportive and instructive environment in their learning hospital. This environment should be similar for the students learning in both, government and private hospitals settings. This environment should be free from any discrimination among the students on the basis of gender. This study aims to compare the proficiency of the clinical environment provided to the students in Government and Private Hospitals in Karachi. Determine the prevalence of discrimination among the students in Government and Private Hospitals on the basis of gender This is a cross sectional survey. Four renowned university hospitals were selected: two private and two government-based. 150 samples were collected from each university by a self-administered questionnaire. The analysis has been performed using SPSS A confidence level of 95% and a p-value of < 0.05 was considered significant. Satisfaction rate in private hospitals is 56% and in Government hospitals 34.7% the comparison had p-value <0.005. The comparison of the environment for male and female students yielded a p-value between 0.05 and 0.1 It was deduced that there is significant difference between the learning environments of these systems. Students need an environment in which there is active interaction and ample chances for them to develop clinical skills. Fortunately, there is no discrimination among medical students in these systems on the basis of gender.

AWARENESS, CONCEPT AND RATE OF POLIO IN NON-VACCINATED POPULATION

Sana Paracha & Quratalain Sattar
Dow College of Pharmacy (DUHS)

Polio was a fearful disease, and by continuing to vaccinate every child in Pakistan and overseas, polio can be eradicated. The goal of eradicating worldwide polio has attracted international and media attention. This survey is done to establish an estimate number of polio cases in non-vaccinated population, why we are being late of eradicating polio from our society. My research methodology requires collecting ideas from 150 people and compelling it into statistical data to obtain knowledge about polio vaccination. I hope to shed light on the following questions through my survey are over all awareness and concept of polio vaccination among our population, what are the reasons behind skipping vaccination and what is the rate of polio in non-vaccinated population. For this i visited poor colonies, hospitals of city and interviewed the illiterate people and extracted their views upon polio vaccination. For literate population i determined the thinking of different people belonging to different fields of society, so that they could share their views and can led me to the meaningful result. Total awareness of polio vaccination among populataion was 86%. Concept of polio vacciation in literate population was 87% in illetrate was 19%. Most appreciable reason of skipping polio vaccination among literate population illetracy&terrorism. Most appreciable reason of skipping polio vaccination among illetrate population is illetracy. Total polio cases in non-vaccinated population is 66%. Hence, survey showed that polio is still eating our population progressively which is destroying our country's health and economy, still our government has to take necessary steps upon eradication plan of polio vaccination.

POTENTIAL MEDICAL ERROR IN OUR LOCALE; OPINION FROM ALLIED ENTITIES

Syeda Sidra Batool, Ramsha Shahab, Auwais Ahmed Khan

Faculty Pharmaceutical Sciences, Dow College of Pharmacy, Dow University of Health Sciences, Karachi

Journal of American medical association authenticate annual deaths of 225,000 people due to professional negligence by act of a health care provider, deviating from accepted standards of practice. These medical errors included those related to diagnosis (33%), surgery (24%), treatment (18%) & medication (4%). Facts and figures point towards a great deal of risk in exacerbating patients in our country too. Objective of this descriptive qualitative study was to assess current scenario related to medical errors and flaws in our health care setup which predispose patients to the threat. For this purpose a survey questionnaires was designed and circulated among 100 healthcare professionals including physicians, surgeons, pharmacists, nurses and technicians. Another questionnaire aimed common educated people irrespective of race, socioeconomic status, background and affiliations. Results & Conclusion were analyzed using SPSS 16. Results indicate that most of the participants (86%) have encountered such errors in their life. In opinion of Healthcare professionals and public both, the majority of errors arise due to malpractices related to surgical procedures. Most of the people (88%) and healthcare professionals (70%) do not report such cases. In majority of cases no compensation was offered to the affected (50%) and Hospital management did not take necessary action (39%). Hospitals and regulation need to take necessary steps in order to ensure reporting and prevent recurrences of such practices.

PATTERN OF COMMON EYE DISEASES IN CHILDREN OF AGE 0-16 YEARS IN TERTIARY EYE HOSPITAL, KARACHI

Bilqis Habibullah Khatri, Kisa Fatima Altaf

Dow University Of Health Sciences

To assess the pattern of common eye diseases in the children of tertiary eye hospital Karachi. A random cross sectional survey was conducted in paediatric out-patient department of LRBT hospital, Karachi during one week and data was recorded through a performa containing details of bio data, personal history, presenting complains, aided and un aided visual acuity, refractive error and signs of eye and adnexa and ocular alignment. Data was analyzed using SPSS 16.0. Inclusion Criteria was Children under the age of 16 years attending the paediatric ophthalmology department of LRBT Hospital Karachi and Patients having ocular pathologies from eyelid to anterior segment were included. Exclusion Criteria was Children above the age of 16 years attending the paediatrics ophthalmology department of LRBT Hospital Karachi and Patients having ocular pathologies of posterior segment were excluded. A total of 250 patients were examined out of which male patient were 52.8 % and females constitutes 47.2 %. Majority of patients 40.8% belonged to the age group 1-6 years. VKC 24.8 % was the most common ocular morbidity found followed by squint 15.2%, refractive error 14.8%, NLD blockage 14.0%, congenital cataract 6.0%, amblyopia 4.4%, infective conjunctivitis 4.4%, blephritis 4.0%, ptosis 2.4%, traumatic cataract 2.0%, chalazion 1.6%, corneal opacity 1.6%, convergence insufficiency 4.0%, keratitis and styne each 0.4%. Vernal catarrh was the most common ocular morbidity encountered in the study with male preponderance. Further studies are required to find out the epidemiology and risk factors associated with it. vernal kerato-conjunctivitis, naso lacrimal duct.

STRESSFUL LIFE STYLE LEADS TO POOR PERIODONTAL CONDITION; A COMPARATIVE STUDY

Syeda Rida Hasan, Syeda Abeerah Tanveer, Sarosh Sadruddin Morani, Maha Khan, Aeeza Malik, Ambrina Qureshi

2nd Year BDS DIKIOHS

1st Year BDS FJDC

MDS Trainee Department of Community Dentistry, DIKIOHS

Associate Professor and Head, Department of Community Dentistry, DIKIOHS

Several studies have shown significant relationship between periodontal diseases occurring among people due to their stressful lifestyle. However, negligible evidence occurs in relation to separated or socially deprived women. : To evaluate the level of periodontal condition among such women in comparison to those who are not found under any kind of social stress. Through a case-control study design women (age=20-40 years) were purposively approached through Sarim Burney welfare trust/ shelter home, Karachi. These women were categorized as cases and control based on interview based, structured and validated questionnaire based on the life events scale and perceived stress scale. The case and control subjects were matched for age and educational status. Subjects with all possible confounders for periodontal disease were excluded. Periodontal examination was conducted by two trained and calibrated examiners employing Community periodontal index (CPI) as basic examination tool. Descriptive statistics and students'-tests were employed for statistical analysis of data using SPSS. The p value of <0.05 was considered as statistically significant at 95% confidence interval. A total of 108 subjects were approached out of which 32, 13 and 8 reported financial, self health and family care stresses respectively (taken as cases) whereas, 55 reported none of the stress from life events scale (considered as controls). The mean CPI score for cases (stress) group was 2.43, while it was 1.75 for the control revealing a significant relationship between the periodontal disease and stress (P<0.001). Findings of this study indicated a significant association between stress variables and periodontitis, however, financial, self health related and family care stresses demonstrated a more prominent predisposition.

KNOWLEDGE, ATTITUDE AND PRACTICE OF HEALTHCARE PROVIDERS REGARDING THE BLAST INJURIES MANAGEMENT AT TERTIARY CARE HOSPITALS IN KARACHI

Atif Mahmood & Abira Aftab

Shaheed Mohtarma Benazir Bhutto Medical College, Karachi

The objective of this study is evaluate the knowledge and awareness of our healthcare providers regarding major types of blast injuries and their attitudes and practices while dealing with blast injury patients. A cross-sectional survey was conducted at three major tertiary care hospital of government sector, i.e., Jinnah Postgraduate Medical Center, Civil Hospital Karachi and Abbasi Shaheed Hospital, Karachi where major blast victims are recruited. The survey was conducted from August 2013 to January 2014. Our target population for the survey included a total of 102 Surgical Postgraduate trainees and house officers (Interns) of the above said hospitals which were recruited using convenient sampling technique. A self-constructed questionnaire was prepared by the researchers and administered to the target population. The data was analyzed using SPSS 16.0. The variables were cross-tabulated to identify possible relationships. Out of total of 102, 50% of the data was collected from civil hospital Karachi, 51% of those were house officers, belonged under the age group of less or equal 25 years, and 75.5% were females with unmarried proportion of 66.7% of total. It was found that a total of 46 respondents had attended the patients from blast injuries in past whereas 56 had never attended a patient with blast injuries. 15.22% cases who did attend patients from bomb blast scored zero on knowledge related questions, 2.18% cases got maximum score of 10, and 47.83 cases scored minimally which was one out of ten. There was positive association between, the above two groups, with awareness of injuries, attainment of training, and interest in participation of such training programs. A positive association among hospitals must needs, specialty and equipment to handle such cases and those who had attended the patients with blast injuries was also observed. On the basis of findings, we can conclude that, although, respondents have shown through their responses that they do have attitude and practicing on managing blast injuries patients and that's mainly because of frequent exposure to such patients in these hospitals but there was no formal training was ever given to any and thus, their knowledge regarding bomb blast injuries was found to be highly insufficient.

EVALUATION OF RELATIONSHIP OF OBESITY WITH PREVALENCE OF MIGRAINE

Saher Jafri, Shamooun Noushad, Sadaf Ahmed, Amna Khan & Namrah Siddiqui
Advance Educational Institute & Research Center
University of Karachi

The purpose of the study the relationship between obesity and migraine; an approach to find a possible mechanism between obesity & migraine. We interviewed 50 individuals to inquire about their migraine, the initiative causes, symptoms further more questions about their migraine. The study was cross sectional and data of 50 diagnosed patients was taken using ICHD-II belong to HIS (international headache society). Obesity is taken as long term or permanent condition of low grade inflammation. The results showed that though there is minor but have a potential effect of obesity on migraine. Increased weight or increased BMI play a causative role to promote excess frequency and intensity of attacks and pain in migraine respectively. We conclude that there is an association between obesity (increased BMI) with migraine. Obesity promotes to increase the severity & intensity of pain of migraine. We can say that obesity play a causative role in progression of migraine from episodic to chronic migraine. As both are inflammatory conditions and they both promote to increase release of bio-inflammatory markers.

PERIMENOPAUSAL WOMEN & MIGRAINE; STUDY ON SYMPTOMS & TRIGGERS

Namrah Siddiqui, Sadaf Ahmed, Shamooun Noushad, Amna Khan
Advance Educational Institute & Research Center
University of Karachi

The purpose of the study was to inspect the possible mechanism through which women are more prone to migraine and is much more severe during, before or after menstruation. The study on the symptoms and causes in women migraineur and triggers that that provoke migraine in their reproductive years is of increase significance. We sorted out those women whose migraine is targeted before onset of menstruation and during menstruation. It was a cross sectional study questionnaire based study adapted from ICHD II criteria. 50 confirmed diagnosed female patients were interviewed. Our Age limit is reproductive year (>12 to <50).Migraine have been found to be more common in these women, we found a stronger influence of migraine in these women because of additional risk factor to which they are exposed i.e. fluctuating ovarian hormones level in their every periodic cycle. Estrogen levels are key factors in causing migraine. As it is reported that reduced estrogen level results migraine without aura whereas elevated estrogen level cause Migraine with Aura, in some cases the recommended cure was suppose to be marriage.

FREQUENCY AND MOST COMMON SITE OF UROLITHIASIS DIAGNOSED ON PLAIN CT KIDNEY, URETER AND BLADDER (KUB) IN SUSPECTED PATIENTS

Najma rais, Maha-Binte –Hasan ,Razasayani ,Farhana Mehmood,Huma Khalid,Farah Khurram
Aga Khan University Hospital, Karachi

The objective of this study is to determine the frequency of urolithiasis based on gender, age group and most common site of Urolithiasis on helical CT kidney, ureter and bladder in suspected population. Urolithiasis is a third most common disease of urinary tract affecting both genders, but it is most dominant among males. The incidence of stone disease affecting 1% to 20% of population and it varies worldwide. The diagnosis of urolithiasis has undergone considerable evaluation in recent years and plain Computed Tomography is one of the preferable technology to diagnose these calculi. 100 reports of multiple unenhanced axial CT (KUB) were examined through PACS, which was performed during period of March 2013 to April-2013, conducted at Radiology Department of Aga Khan University Hospital Karachi. Patient with age group of 11yrs to 80 yrs. with flank pain were included whether patient with prior history of surgery were excluded. Obtained data was further divided in to site and status of renal and ureteric calculi.Result shows that 56% patients have urolithiasis. Unilateral renal calculi were found in (66%). Frequency of calculi were high in lower pole calyx 13%and at ureterovesical junction (19%)..An Immense number of calculi 71.4% are non-obstructing; Percentage of urolithiasis was commonly seen in young male population (66%). This study concluded that the rate of urolithiasis has become very high in young male patients with the history of flank pain. Huge number of stones were renal, non-obstructing, unilaterally found on helical unenhanced axial non contract CT (KUB).

PREVALENCE OF ANOREXIA NERVOSA IN UNDERGRADUATE FEMALES

Sana Jamal, Kisa F.Altaf, Hira Aafreen
Dow University of Health Sciences

To study the number of occurrences of anorexia nervosa in under graduate females in general population aged 16-23 in Karachi city. Anorexia nervosa (AN) is an eating disorder characterized by refusal to maintain a healthy body weight and an obsessive fear of gaining weight. It is often coupled with a distorted self image which may be maintained by various cognitive biases that alter how the affected individual evaluates and thinks about her or his body and eating. Anorexia nervosa is more likely to occur in a person's pubertal years, especially for girls. Teen girls are learning from each other to consume low-fat foods and diet pills resulting in lack of nutrition. The data was collected from different educational institutes. Cross-sectional study design was used. The sample consists of 60 females of Karachi, Pakistan, the age group of 16 -23 years excluding males. Data was abstracted by asking the questions provided in demographic performa. Study duration was of 5 months. Data was analyzed on SPSS version 20.0. Out of 60 females, 35% females skip meals and starve themselves, 21% do obsessive exercise. However 16.7% females were depressed about their weight. The main cause of anorexia nervosa is starvation due to media influence of looking thin and smart which causes side effects such as joints& legs pain, hair loss & dysmenorrhea. With the help of the above result, it is found that starvation factor is higher among all three factors including depression and obsessive exercise. All these factors were compared with age, starvation and obsessive exercise are increasing in females after teenage whereas depression decreases as age increases.

EVALUATION OF THE EFFECTS OF ENERGY DRINKS ON BLOOD GLUCOSE LEVEL AND CLOTTING TIME IN MALE AND FEMALE INDIVIDUALS

Qurratulain, Sadaf Ahmed, Faizan Mirza, Asif Mehmood Abbasi & Tayabba Hamid
Advance Educational Institute & Research Center
University of Karachi

The most common ingredients of favorite energy drinks are taurine. The purpose of this study was to evaluate the effects of taurine intake on healthy individuals. The variation in blood glucose levels and clotting time was observed before and after selected taurine based energy drink uptake. Individuals were taken between the age group of 18- 24 yrs and their blood glucose levels and clotting time were measured. Our results showed that there is an increase in the clotting time and blood glucose levels with differences in male and female subjects. It us suggested that as taurine found in much higher concentrations in energy drinks is instrumental in reducing platelet activity and prolongation of clot formation by modifying the sensitivity of the Ca²⁺ binding site of fibrinogen to Ca²⁺, thus indirectly impairing polymerization. It is concluded that it seems there are many beneficial and adverse effects on people. However more experimenting on the effects is needed to explore the physiological mechanisms.

DYSMENORRHEA IN RELATION WITH HYGIENE; A STUDY ON SYMPTOMS AND PREVALENCE.

Neelam Barkat, Sadaf Ahmed, Bharti Devi & Shamooun Noushad
Advance Educational Institute & Research Center
University of Karachi

The purpose of the study is to evaluate the occurrence of dysmenorrhea and their associated symptoms like pelvic pain, mood swings, and change of body odor following with reported severity in adolescent girls suffering from discomfort and pain during menstrual cycle. Reproductive aged females of 19-46 years completed detailed questionnaires that were approached from different offices, schools, universities and waiting areas of different gynae clinics. Females were investigated about the pain severity, type of blood flow, symptom appear during pain, the most painful areas, occurrence of abdominal pain during periods, problem of leucorrhoea, changes in body odor and the mood swings. 100 females were included in the study out of which 75 females completely fill out the questionnaire and 25 resist to answer some questions. The most reported complain of females having dysmenorrhea is the problem of leucorrhoea observed in 74% of females, 58% of females mention the abdominal, back and thigh pain, while 61% of females state the mood swings and bloating in tummy areas while 44% females report light changes in body odor. The prevalence of dysmenorrhea is very common among these effected females which is highly correlated with emotional mood swings and with the common complain of leucorrhoea that highly indicates the poor hygiene environment.

CAUSES OF PANCREATITIS, REVIEW IN LOCAL POPULATION

Saima khan, Irhum Latif, Raza Sayani
Advance Educational Institute and Research Center
The Aga Khan University Hospital

Objective: To evaluate the common causes of pancreatitis in our population in relation to CT and ultrasound. Material and methods A retrospective study has been carried out in 110 patients, in which 51 were females while 59 were males, who were diagnosed with pancreatitis on the basis of CT examination. US reports were reviewed to look for occurrence of gall stones, CBD stones or any other anatomical variants or abnormality. Results: It was found that 45/110 (40%) of patients who were referred for ultrasound or CT examination for query of pancreatitis were abnormal with the main causes i.e. cholelithiasis, choledocholithiasis, pancreatic duct calculi and cholecystitis. Most common abnormality detected in occurrence of pancreatitis is cholelithiasis at variable levels. Calculi were seen in 12 cases, Details on the basis of cause, age and other co-morbidities are presented. IMPRESSION: It has been seen that cholelithiasis is a common cause in our population with pancreatitis.

QUANTITATIVE STRUCTURE ACTIVITY RELATIONSHIP AND RISK ANALYSIS OF SOME PESTICIDES IN THE GOAT MILK

Muhammad Khurram Khurshidi, Sadaf Ahmed, Shamooun Noushad, Taha Khurram
Advance Educational Institute & Research Pakistan
Norton Training Institute & Research Centre (USA)
Cytogen Centre, Pakistan
Pakistan Central Homeopathic College & Hospital, Pakistan

The detection and quantification of different pesticides in the goat milk samples collected from different localities of Faisalabad, Pakistan was performed by HPLC using solid phase microextraction. The analysis showed that about 50% milk samples were contaminated with pesticides. The mean \pm SEM levels (ppm) of cyhalothrin, endosulfan, chlorpyrifos and cypermethrin were 0.34 ± 0.007 , 0.063 ± 0.002 , 0.034 ± 0.002 and 0.092 ± 0.002 , respectively; whereas, methyl parathion was not detected in any of the analyzed samples. Quantitative structure activity relationship (QSAR) models were suggested to predict the residues of unknown pesticides in the goat milk using their known physicochemical characteristics including molecular weight (MW), melting point (MP), and log octanol to water partition coefficient (K_o/w) in relation to the characteristics such as pH, % fat, specific gravity and refractive index of goat milk. The analysis revealed good correlation coefficient ($R^2 = 0.985$) for goat QSAR model. The coefficients for K_o/w and refractive index for the studied pesticides were higher in goat milk. This suggests that these are better determinants for pesticide residue prediction in the milk of these animals. Based upon the determined pesticide residues and their provisional tolerable daily intakes, risk analysis was also conducted which showed that daily intake levels of pesticide residues including cyhalothrin, chlorpyrifos and cypermethrin in present study are 2.68, 5.19 and 2.71 times higher, respectively in the goat milk. This intake of pesticide contaminated milk might pose health hazards to humans in this locality