

المؤتمر الطلابي الثاني لأبحاث طلاب البكالوريوس

UNDERGRADUATE RESEARCH CONFERENCE
IN PALESTINE



APRIL 23, 2019





We are pleased, at the Deanship of Scientific Research at Al-Quds University, to organize the 2nd Undergraduate Research Conference in Palestine in collaboration with Al-Quds Bard College to promote and recognize excellence in undergraduate student research. The main purpose of this conference is to promote critical thinking and research skills among students and provide them with the opportunity of public speaking and experts' and peers' feedback sharing.

Students, working individually or in groups, usually present their exit projects and present them in oral and poster sessions of the conference. This year, the scientific committee received 92 scientific abstracts from different Palestinian universities in the West Bank and Gaza. After a thorough peer-review process, thirty-seven papers were accepted for oral presentations and 28 for poster presentations in the areas of Engineering, Information Technology, Dentistry, Pharmacy, Medicine, Public Health, Biomedical and applied Sciences, Law, education, literature and Human Rights.

The 2nd Undergraduate Research Conference is the first conference in Palestine and the region that concerns exclusively with students' research projects. This year, we are having the second version of the conference, and we hope to continue organizing this conference at Al-Quds University in collaboration with other Palestinian Universities every year.

Finally, I wish to acknowledge the dedication and the great efforts done by the organizing and the scientific committees to develop a stimulating and interesting conference program.

Elham Kateeb, DDS MPH PhD

Dean of Scientific Research

Al-Quds University



Al-Quds Bard College (AQB), a partnership between Bard College in New York and Al-Quds University in Palestine, now in its 10-year, was thrilled to host the Second Annual Undergraduate Research Conference. The conference was born at AQB three years ago, a cooperation between AQB's writing Fellows and Faculty. This year, with the critical support of the Deanship of Scientific Research at

Al-Quds University, we brought students together in person from around the West Bank and virtually from Gaza, to present completed and ongoing research before professors drawn from across AQU's faculties. Students presented research on topics as varied as genetics to media billboards in the West Bank. The collection of work demonstrated deep engagement of university students in critical thought and analysis.

AQB is proud to be part of a network of colleges across the globe that emphasizes student-driven research that asks difficult and probing questions, analyzes and challenges accepted norms. Here at AQB, we encourage our students from their very first year to be active and engaged researchers, and to put themselves into their work. We were delighted to welcome other student researchers from around Palestine who also hold our ideals in high regard.

Dr. Rebecca Granato

Dean of Academic Outreach, Al-Quds Bard College

As the head of the organizing committee, I am extremely proud of how the Second Undergraduate Research Conference came to being. I would like to extend my appreciation to all members of the organizing committee and to the volunteers. We believe that research is a very important aspect of the process of reaching knowledge; therefore, this conference comes to encourage all students to conduct research through different mechanisms that eventually fall in the benefit of the Palestinian society. This conference is the first of its kind to encourage students in the undergraduate level as well as ambitious high school students to always seek for knowledge and solutions through research.

In its second year, the conference featured a wide participation from all over the Palestinian universities and schools. We were very glad that students from universities in Gaza were able to participate and share their ideas and research with their fellow researchers from other Palestinian cities. Therefore, we always aim to create an environment where all students could ask questions, share their ideas, and take part in research.

Sondos M. Odeh, MSc

Head of Organizing Committee

Al-Quds Bard College

Oral Presentations:

■ Information Technology, Computer, and Physics:

Sami Atawneh, Al Quds University

Design and Development of mini Universal Testing Machine (mini UTM)

It's a development of Mini Universal Testing Machine for Small Scale Materials that have a destructive way that calculate the tensile strength of materials which it is in the small size scale, this development is important test that can be used to measure the tensile strength of small scale materials as Natural Fibers, Synthetic Fibers, Papers, Wires, Polymers, Human Hair & materials in small scale size, it is based on moving a slider table that doing a tensile on the material settled between clips gauge. The load cells read and this reading converted to digital data that controlled by PC, the user-interface provides features for the complete real-time measurement, control, data processing, output results display, report printing and other functions. Device component design involved mechanical, electrical and software design and extensive stress analysis. Testing using materials with known properties was conducted in order to calibrate the system and verify the design.

Ala Alhourani, University of Palestine, Gaza

Tamamy Online

Negotiating on the price of a product or service is a daily activity in Gaza city, however, due to the nature of these transactions domestically it is impossible for a seller to offer similar discounts as haggling is not a common practice, but they can do it for a large number of buyers in one-time deal. This project is an E-commerce system built on node.js technology. The idea originated from the hard economy in Gaza and the belief that technology can help solve this issue. In our web application,

we combined e-commerce with traditional thinking in trade in the Gaza Strip to provide a simple pre-paid card to charge customers' accounts. In addition, we're providing payment by PayPal compatible system so our project can keep pace with the revolution of technology. We used modified waterfall methodology in order to develop this project in addition to creating a responsive design interface that will allow the application to cater to different device interfaces.

Malak Sharif, Al Quds University

Sentiment Analysis - Tweets Related to President Trump

In our project, tweets are collected using the Twitter streaming API from Twitter. The collected tweets are pre-processed using PHP libraries language. The features of the tweets are selected based on Naïve Bayes classifier and used to classify the tweets as positive, negative and natural. Sentiment analyses using Twitter data were performed in the opinions about President Trump. A total of 120,000 tweets was collected for analysis in different languages. English tweets are only used, after removing duplicates, retweets, and the cleaning steps, 21,232 tweets were used in the analyses. Upon sentiment analysis of retrieved Tweets, Tweets were carrying more neutral sentiments about President Trump about 58%, and 25% was positive, and the least was negative 17%. The research has taken President Trump as target 'case study' of this project, but measures can be applied to other goals in flexibility, only by changing the target element. This project would be easy for the user to obtain the summarized report about the opinion of Twitter. It is also used to support them in the decision-making process in their daily life activities.

Khawla Qamhieh, Haneen Turkman, Nehal Abuasabeh, and Isra Njoom, Al Quds University

Effect Of Salt Concentration On Electric Potential Of Macroions

Electric charges and electrostatic interactions are ubiquitous in soft-matter and biological systems. Soft materials are typically composed of macromolecules such as polymers, colloids and proteins which often acquire surface charges when dissolved in a polar solvent like water. Charged macromolecule, called macroions, such as micelles, DNA, dendrimers and other nanoparticles are important in Gene therapy, drug delivery, and other applications in biotechnology. In our study the effect of salt concentration on the electrostatic interaction in asymmetric electrolyte is investigated using Poisson-Boltzmann (PB) model. From our study we conclude that by increasing salt concentration the surface electric potential of the macroion, and the Debye screening length are decreased, and these effects are increased by increasing the valence of the counterions.

Ismael Al Boheissi, University of Palestine

Robotic Arm for Dental Automation

The intervention of robotics in the field of dentistry can offer improved and precise treatment with good quality of work in a less amount of time. It can alter the dental health of the people and will be much safer.

The system will be developed consisting of pre operative and intra operative stage.

1. In preoperative stage software are to choose and create medical history files of the patient, and can monitor the pulse rate and oxygen saturation via finger pulse oximetry, this information will help clinician to monitor the condition of patient during procedures. followed by taken a cone beam CT image to patient and a dental x-ray image to area of chief complain, software can estimate the maximum carpal of dental anesthesia⁵ according patient age, weight and medical history.

2. In intra operative stage displays the 3D virtual dentitions on the screen with initial interpretation of image and diagnosis is making by clinician with sensory feedback and information processing gathered from

preoperative stage and diognodent pen and chemical dye to confirm the diagnosis in susceptible lesion ,

With system which can move in 6-axis of each tooth for its position along X, Y, Z, lingual, rotation, near-far medium directions , system. In order to check the position of the patient and the movement of the surgical instruments by intra-oral camera and reference point which is establish by clinician in the beginning of the procedure which will finally completely remove the decay or preparation the tooth with compliance to minimally invasive concept in all procedure .

Mutaz Dawoud, Mohammad Shaheen, Mohammda Hamash, Adnan Azzam, University of Palestine

Association of protein supplements intake and renal function among athletes in Gaza strip, Palestine

Protein supplements are widely used among youth to increase muscles mass, its well established that using of these supplements may increase the muscle mass, meanwhile, studies indicate that increasing intake of protein has many side effects on renal functions and increase renal solute loads. Few studies focus on the side effects of protein supplementations on renal functions, thus, there is a need to figure out this association. To assess the impacts of protein supplements intake on renal function among athletes aged 18-30 years old in Gaza strip. A case-control study will be conducted on 40 subject how attends sport clubs and taking protein supplements, and 40 subjects how who are on a regular diet with no protein supplements, well- designed questionnaire will used to determine their dietary intake and eating habits, meanwhile, samples of serum will be tested, all samples was tested for Urea, Uric acid, Creatinine, Albumin and Total protein. Anthropometric measurements will be also taken. Obtained data will be analyses by SPSS version 20.

Ruwaa Allawieh, Al-Quds University

Infection Control knowledge, Attitude and Behavior among undergraduate dental students at Al-Quds University

Infection control is one of the most crucial challenges in healthcare settings worldwide and is considered one of the most important causes of morbidity and mortality associated with clinical, diagnostic and therapeutic procedures. At the dental field the dentists deal with an infective environment while treating patients. Hence strict cross infection protocols are usually taught at dental schools to build the correct habits in dealing with patients and instruments and minimize the risk of cross infection. Al-Quds university dental school applies those strict rules in their out patients dental clinics; however, we don't know how much of infection control protocols are practiced among students and how much of what they learned, will be practiced in their future clinics. Thus, this study came to evaluate the cross infection knowledge, attitude and practice among undergraduate dental students at Al-Quds University. A cross sectional study based on a self administered questionnaire consisting of seventeen questions regarding the students' knowledge of cross infection and bloodborne pathogens transmission in dental settings, six questions on attitude and thirteen questions about their practice and behavior. In addition, some demographic questions such as the gender and the academic average were asked. Questions of this survey were modeled after validated published surveys. This questionnaire was administered to 5 th year dental students at the mid of their final semester in the DDS program at Al-Quds university Abu-Dis. We will generalize a descriptive study of knowledge and attitude then we'll do some association using a correlational test to compare the frequencies of knowledge, attitude and practice with a p value 0.05. Data will be analyzed using SPSS software. Ethical approval will be submitted to AQU Research Ethics Committee.

Compliance of dental staff with infection control practices in primary health care centers in Gaza strip

One of the most important issue for dental care staff is to take in consider the safety conditions during practice. This has a direct impact on the health of patients and staff in dental clinics. The aim of the current study is to assess the level of Compliance of dental staff with infection control practices in primary health care centers in Gaza strip. A survey for observing 100 dentists working in the all dental clinics of primary health care in the five governorates of Gaza trip will be conducted by well-trained personnel on using a checklist related to routine safety procedures. According to the reports and the data base of Ministry of Health, the target population of the study will be 100 dentists. The checklist will include items about infection control measures related to dentist practice, availability of equipments, instruments and materials necessary for infection control, and the infrastructure level of clinic environment suitable for infection control, also the socio-demographic information of dentists will be included in the checklist. Data will be statistically processed by SPSS program to describe the level of compliance of dentist by presenting in the form of frequency tables and graphs, in addition t- tests and ANOVA at significant level ($\alpha=0.05$) will be used to compare the difference in the level of compliance of infection control according to gender, age, years of experience and qualification of dentists and according to region, type and the condition of clinics.

The results and recommendations of the current study may help the dental staffs and the decision makers in Ministry of health in Palestine to carry out polices, measures and interventions that help in controlling and prevention of potential transmission of occupational and nosocomial infections among a dental personnel and their patients.

Evaluation and Challenges of Polypharmacy in Palestinian clinical of chronic disease

Polypharmacy is defined as the concurrent use of multiple medications including prescription and over-the-counter drugs, this can result in potential inappropriate drugs use and increase the risk of drug-drug interactions. In Palestine the elderly population is estimated to be 2.9% of the general population and is known to have high prevalence of chronic diseases and thus the high prevalence of polypharmacy. This cross sectional study was conducted to evaluate polypharmacy among geriatrics in East Jerusalem, 100 patients aged 60 or older (59% male and 41% female) were interviewed in the chronic disease clinic in the Jerusalem Health Directorate and all their prescriptions examined. Also their doctors were interviewed. The interviews covered factors that may affect the possibility of polypharmacy including diseases and demographic factors such as age; educational level. Results show that 57% of patients were from (60 -69) age group, 52% were married and 21% illiterate; 44% smokers and 97% were coffee drinkers. Prevalence of polypharmacy were 100% (more than 3 drugs); 22% had excessive polypharmacy (more than 10 drugs); 26% of the patients had their last visit since more than 3 months. Most importantly, 73% of the patients feels difficult in taking their medicines and polypharmacy also makes 81% of them forget taking their medicines on time. Morbidity of different disease of the study population were studied and all their drugs were discussed with their doctors and results show 27% of the patients took their lowest effective dose. Several statistical relationship were examined some prove the relationship between polypharmacy as a real cause of patients suffering and difficulties that prevent them to adhere on their medical schedule on time. This study emphasizes the need for a better control on polypharmacy among elderly and the importance to develop care strategies to resolve problems and difficulties patients suffer.

Nadia Hasan, University of Palestine

Occupational Hazards In Primary Healthcare Dental Clinics In Gaza Strip-Crosssectional Study

Dental professionals are at risk to many occupational hazards. They are predisposed to infections as HIV and hepatitis; dental materials, dermatitis skin exposure to incidents noise, radiation musculoskeletal disorders, psychological problems and; respiratory disorders; and eye insults. Skin exposure to incidents remains an important concern, as exposure to serious infectious agents represents additional risk. Goal and importance of study: The purpose of this study is to assess the level of awareness and attitudes about occupational hazards among dentists in dental clinics in Primary Health Care centers of MOH and to correlate the level of awareness with the level of practicing the safety measures against the occupational hazards, in addition to describe the level of availability of measures to protect the dentists and their clients from occupational hazards. The results of this study may highlight the importance of adopting protective interventions and updated protocols to be applied routinely in the dental clinics of Gaza strip.

Areej Abu Hanieh and Sundos Hasouneh, Birzeit University

The Effect Of L- Ascorbic Acid (Vitamin C) DI-Alpha – Tocopherol Acetate (Vitamin E) And White Grape Seed Oil On Colorful Melanin Concentrations Using Synthetic Melanin

Vitamin.C used as antioxidant to treat UV-induced skin pigmentation disease, While combining it with Vitamin.E increase its antioxidant effect by 4 folds , Grape-seed-oil contains phenols like Catechins which express a powerful antioxidant effect and a whitening effect , combining the three agents together give synergistic effect that magnify the decreasing in colorful melanin concentrations. Objectives, To determine the effect of Vitamin.C, E and grape-seed-oil on melanin concentrations separately then determine the synergistic effect for three ingredients together. Synthetic melanin calibration's curve was constructed using spectrophotometer, then Vitamin.C, Vitamin.E and grape-seed-oil were added to the

melanoma cells , Cell viability was measured after 72 hours using hemocytometer, then a different concentrations of the agents and its combinations were added to the synthetic melanin solutions , to measure melanin concentrations using spectrophotometer. The combination of the three ingredients (Vitamin.C, E, grape-seed-oil) achieved an extremely statistically significant decreasing in melanin concentration, and The combinations that contain grape-seed-oil showed higher effect on melanin concentration reduction than the combinations that contain Vitamin.C & E without grape-seed-oil, while Vitamin.C and Vitamin.E separately did not show any significant reduction on melanin concentrations and grape-seed-oil showed a statistically significant effect on decreasing melanin concentrations. The combinations of the three ingredients together (Vitamin.C, Vitamin.E, Grape-seed-oil) achieved the lowest p value (Extremely statistical significant) and the lowest melanin concentration, while Grape-seed-oil was the only ingredient that achieved statistically significant decreasing in melanin concentrations .

Mohammad Lubbad, University of Palestine

Relationship between Diabetes Type-II and calcium ions concentration in saliva In Gaza strip: Retrospective Cohort Study

Saliva contain amount of calcium concentration which when increase play a role in plaque formation on the teeth and cause the periodontitis disease therefore most of diabetic patient show loss of their teeth. In this study, the aim is to investigate the Relationship between diabetic disease type-2 and calcium concentration in saliva will among diabetic patients in Gaza strip. Retrospective cohort study will be designed to measure the calcium concentration in the saliva for a random sample of uncontrolled diabetic patients (n=150) and controlled diabetic patients (n=150) by reviewing the (HA1C level in blood) in the records of diabetic patients in the diabetic clinic in ten primary health care centers belonged to Ministry of Health of Palestinian Authority in Gaza strip governorates to follow up and classify conditions of the patients as controlled and uncontrolled. In addition HA1C in blood and Ca++ level in 2ml Saliva will be examined during conducting the study for the each sample unit (either controlled

and uncontrolled patients) in the health laboratory of University of Palestine. The saliva for examination will be collected without any stimulation of salivary gland at 9 a.m. and 12 p.m. after rinsing the mouth with water and allowing 2- 5 minutes for accumulation of saliva. Also the patients' periodontal conditions will be evaluated to examine the relationship between diabetes mellitus and periodontitis according to Ca^{++} level in saliva. The collected data by a prepared questionnaire about the socio-demographic, health status, and lifestyle of patients will be entered, cleaned and analyzed by using different significant tests at level of significance $\alpha=0.05$ such as t- test, correlation and regression test by SPSS program.

Bashaer Al Saeed, Hebron University

Smoking cessation counseling in Palestine: community pharmacists' attitudes, role perceptions and practices

Smoking is a major risk factor for many diseases that may causes death, so smoking cessation is a key to reducing the number of smoking-related diseases and deaths at any age. Pharmacists are uniquely positioned to promote tobacco cessation; they are the most easily accessed by the public and are exceptional situated to initiate behavior change among smokers. To assess Palestinian pharmacists' awareness and attitudes regarding smoking cessation and determine the barriers preventing pharmacists performing their role in smoking cessation. A simple, self-administered surveys was distributed to practicing community pharmacists in Palestine (west bank), the survey consisted of 5 sections (demographic, pharmacist's knowledge, pharmacist's attitude, smoking cessation treatment, and pharmacist's role in smoking cessation). Data was analyzed using Statistical Package of Social Sciences (SPSS®) Version23. Preliminary results involving, 90 pharmacists working in community pharmacies showed that pharmacists had a good knowledge regarding smoking and their role in smoking cessation (34%). A 20% of the pharmacists reported that they 'always' or 'most of the time' asked their patients about their smoking status. Once patients' smoking status was identified, a 40% of the pharmacists provide advices regarding smoking cessation and only

25% assess smokers' readiness to quit. Almost 33% of the recruited pharmacists 'always' and 'most of the time' assisted smokers in quitting by advising the use of nicotine replacement therapy (NRT). Only 39, 10, and 9% of the pharmacies expressed the availability of smoking cessation treatments such as NRT, bupropion, and champix, respectively. Only 38% of the pharmacist 'strongly agreed' and 'agreed' that the smokers appreciate their advice about quitting.

Ayman Musleh, University of Palestine

Marginal and Internal Crown Fit Evaluation of CAD/CAM versus Press-Laboratory the lithium disilicate crown.

This study aims to evaluate of marginal gap and internal adaptation of lithium disilicate crowns fabricated by conventional press-dental laboratory and CAD/CAM systems. The size of the marginal and internal gaps of crowns fabricated with the two techniques in the current study, the research should be performed in an effort to improve clinical outcomes. Tooth #14 was prepared per standard specification to receive the lithium disilicate crowns. sixty Type IV gypsum dies tooth #14 were duplicated and divided into three groups (n=30). The lithium disilicate CAD/CAM system (Group 1) was fabricated with the E4D CAD/CAM system according to the manufacturer's instructions. For press-dental laboratory made crowns, impressions were taken on the region area with two-step impression techniques with light and putty consistency VPS. Impressions were sent to two independent dental laboratories (Groups 2 and 3) for fabricating the monolithic press lithium disilicate crown. Tooth #14 was optically scanned and lithium disilicate blocks were used to fabricate crowns using CAD/CAM technique. Polyvinyl siloxane impressions of the prepared teeth were made and monolithic pressed lithium disilicate crowns were fabricated. The marginal gap was measured using optical microscope at 160× magnification (Keyence VHX-5000, Japan) and internal fit of the crowns was assessed by the silicone replica technique. Four sections of each replica were obtained, and each section was evaluated at four points: marginal gap (MG), axial wall (AW), axio-occlusal edge (AO) and Centro-occlusal wall (CO), using an image

analyzing software. Statistical analysis was performed using ANOVA and chi-squared test. Study design: Experimental. Setting of study: University of Palestine and Laser Specialized center For Esthetic Dentistry.

Yasmeen Abu Dheam, Al-Quds University

Study the effect of Dietary supplements and Rhubarb root on Palestinian diabetic patients

Diabetes mellitus is a common cause of morbidity and mortality worldwide. The World Health Organization predicts that diabetes will become the seventh leading cause of death in 2030. Dietary supplements may be used as adjuvant to anti-diabetic medications, they are perceived to prevent or at least delay diabetic complications. In addition, diabetic patients may use some herbal product to help control blood sugar. One medicinal herbal product that diabetic Palestinian patients may use is Rhubarb root. This cross-sectional study will evaluate knowledge and practice of Palestinian diabetic patients' use of dietary supplements and herbal products in general and Rhubarb root in particular. A questionnaire will be used as an instrument of measurement. Approximately 250 questionnaires will be distributed to diabetic patients in Bethlehem, Jerusalem, Hebron, Ez-zariya and Ramallah. In addition, the investigator will interview Al-At-tarin about the herbal product use in diabetic rhubarb plant and will also interview patients that use this plant to obtain better knowledge of patient practice. Results: Preliminary results from 42 questionnaires suggest that 79% of diabetic patients have type 2 diabetes. Out of the 42 diabetic patients, only 13 patients use Dietary supplements (about 30%), and Vitamin B12 is the most nutritional supplements used by these patients. Some patients reported using some plants to treat diabetes, but none of the patients reported using the rhubarb root plant.

Synthesis of Biocompatible Gold nanoparticles using natural phytochemical as anti-neoplastic therapy.

Cancer is the second leading cause of death globally and was estimated to account for 9.6 million death in 2018(According to WHO). To reduce the significant disability, suffering and deaths caused by cancer worldwide, effective and affordable programs in early diagnosis, screening, treatment, and palliative care are needed. Treatment options may include surgery, medicines and/or radiotherapy. In our research, we try to find a new way to treat cancer naturally. Toxic chemicals are utilized in several of the processes for production of nanoparticles, either in the form of reducing agents to reduce various metal salts to their corresponding nanoparticles, or as stabilizing agents to prevent agglomeration of nanoparticles. These toxic chemicals are powerful reducing agents that are currently used to produce gold and other metallic nanoparticles .These reducing agents are highly toxic to living organisms and to the environment. The purpose of the present experimental study is to prepare biocompatible Gold nanoparticles through 3 Months (which contain the phytochemical) with high purity as anti-tumor therapy for destroying of cancer cells. Gold nanoparticles will be synthesized by a “green” procedure in University of Palestine laboratories. Then it will be internalized in cancerous cells to facilitate in detecting and damaging cancerous cells. Cytotoxicity and cellular uptake part of this study will be carried on cancerous cells in Rabbits. Gold nanoparticles will be prepared and applied on cancer tissue of ten rabbits. Then, the tissue culture will be checked out by pathologist. The results of the current may indicate that these non-toxic gold nanoparticles can serve as excellent detectable and damageable agent for cancerous cells, it will be a novel approach toward tumor damaging through Nano-pharmaceuticals.

Knowledge, Attitude and Practice of Antibiotic prescription among Dentists in The West-Bank: A cross sectional study.

Inappropriate use of antibiotics not only drives antibiotic resistance and misuses resources but also increases the risk of potentially fatal reactions and exposes people to unnecessary side effects, Moreover, changes in the dental pharmacotherapeutic field have been so rapid in recent years that necessitate the constant updating of dental practitioners' knowledge about new drugs, drug interactions, and useful therapeutic trends is necessary. Thus, this study came to determine the level of Antibiotics abuse among general dentists in the West bank , and evaluate the knowledge and attitude toward the antibiotic prescription guidelines using a self administered questionnaire. A cross sectional study distributed on all dentists working in Palestine (west bank) . The questionnaire contains five parts, First section explored the demographics such as Age, Gender and place of study. Second section had two parts the first one had nine questions about Knowledge of treatment approach in different dental situations, the second part contains three questions about Treatment Approaches For Different Emergency Dental Problem. Third section shows Antibiotic prescription habits and perceived indication for it with fourteen questions. Fourth section contains seven questions included Education About Antibiotic And Its Resistance and last section shows Dentals practice Antibiotic Prescriptions with twelve questions. The data resulting from this study will inform us about the level of antibiotics abuse in the West Bank Dental sector , moreover it will help us defining the level of knowledge and attitude of the dentists toward antibiotic prescription in their personal clinics and practice, forming an image of the additional needed education on the antibiotic prescription guidelines.

Yasmin Arda, Al-Quds University

The Association between Dopamine Score and Feedback-Based Learning in Healthy Undergraduates

People vary in their cognitive performance. In particular, evidence shows that the neurotransmitter dopamine plays an important role in modulating feedback-based learning. Enhanced dopamine levels are related to better learning from positive feedback. Decreased dopamine levels mediate learning from negative feedback. Naturally-occurring differences in dopamine genes contribute to individual differences in feedback-based learning. In the brain, dopamine exerts its actions via receptors located pre and post synaptically. There are several genes involved in regulating the function of the dopaminergic system. Dopamine transporter (DAT1) and dopamine D2 receptor (DRD2) regulate and modulate dopamine signaling presynaptically, whereas the dopamine receptor (DRD1) and (DRD2) transmit dopaminergic signals postsynaptically. In our study, we created a dopamine score based on the effects of functional polymorphisms in the aforementioned dopamine genes to consider a pathway-based analysis of individual differences in dopamine functionality based on naturally-occurring polymorphisms. We recruited a sample of 423 healthy undergraduate students from Al-Quds University. All participants completed a battery of psychopathology tests. Furthermore, subjects were administered a computer-based probabilistic categorical feedback-based learning task that dissociated learning from positive and negative feedback. We found that the value of the dopamine score is positively correlated with the efficiency of dopamine neurotransmission. Subjects with higher dopamine scores showed better learning accompanied by the shortest response time for both reward and punishment. These results highlight the importance of examining the collective variations in the dopamine circuitry in the brain. Such scores can be significant in understanding the pathophysiology of psychiatric disorders that are related to dopamine such as major depressive disorder and attention-deficit hyperactivity disorder.

Serotonin Transporter Genotype Modulates the Effects of Dopamine Transporter Genotype on Learning from Positive and Negative Feedback

People vary in their learning from positive or negative feedback. Feedback-based learning is modulated by two main neuromodulators, dopamine and serotonin. Dopamine is a key player in positive feedback processing, where it promotes behavioral activation to seek reward. Serotonin has been linked to negative feedback processing and behavioral inhibition. Dopamine and serotonin levels are regulated in the brain by transporters; the dopamine transporter (DAT) and serotonin transporter (SERT), which are encoded by DAT1 gene and SLC6A4 gene, respectively. Evidence implies that serotonin regulates dopamine release, since dopamine function in reward processing, while serotonin is exhibits behavioral inhibitor which suppresses behavior. The cognitive effects of the interaction between dopamine and serotonin remains to be elucidated. In this study, we are pursuing a multidisciplinary approach to study the molecular and cognitive effects of the interaction of naturally- occurring polymorphisms; the 3'-UTR of the DAT1 gene, a variable number tandem repeat (VNTR) which controls the expression of DAT, and the STTP in the SLC6A4 gene which regulates the expression of SERT mRNA. Also, we will construct a neurocomputational model to study the interactions between dopamine and serotonin in feedback-based learning. We recruited a sample of 450 healthy participants from Al-Quds University. All participants completed a probabilistic categorical feedback-based learning task that differentiates learning from positive and negative feedback. Our results suggest that genes that modulate dopamine and serotonin levels affected reward learning but not punishment learning. When we held SLC6A4 constant and varied DAT1 genotypes, there was better learning from both reward and punishment with higher dopamine levels (9-repeat carriers) in the context of higher serotonin levels (short allele carriers). Conversely, there was no difference between DAT1 genotypes in learning from positive and negative feedback in the context of low serotonin levels (long allele homozygotes). When we held DAT1 genotypes constant, there were no difference between SLC6A4 genotypes in the context of high (9-repeat carriers) or low (10-repeat homozygotes)

dopamine levels. These findings argue in favor of a modulatory role of serotonin on dopamine function. Future studies will investigate this gene-gene interaction in Parkinson's disease and Major Depressive Disorder as it relates to cognitive function and response to treatment.

Ala' Hrizat, Al-Quds University

Characterizing Goal-Directed Behavior in Children with Attention-Deficit/Hyperactivity Disorder

Attention-deficit hyperactivity disorder (ADHD) is characterized by symptoms of inattention, impulsivity and hyperactivity. Children with ADHD show impaired motivational behavior. For example, they tend to select small, immediate over large, delayed rewards. They might be unable to predict the consequences of their actions showing a deficit in action-control strategies. Goals and habits are the two behavioral mechanisms that control-actions. Balancing these two behaviors leads to normal action-control. In previous studies, we found that rat models of ADHD demonstrated over-reliance on habits and poor goal-directed actions. This deficit was restored by administering methylphenidate (the most commonly used psychostimulant in ADHD treatment), dopamine D2 receptor agonist or dopamine D1 receptor antagonist. Further, in another pilot study, we found that children with ADHD are less reliant on goal-directed behavior compared to healthy children. In this study, we examined action-control patterns in children with ADHD on- and off-methylphenidate. We hypothesize that on-methylphenidate patients will show different patterns of action-control compared to off-methylphenidate patients. We tested 7 off-medication and 7 On-medication, 6-10 years old children with ADHD, and 13 healthy controls. Participants were 6-10 years old and were group matched for age and sex. We tested patterns of action- control using a computer-based task of the outcome devaluation paradigm that consists of three phases; a training phase, a devaluation phase and a choice test. Children with ADHD were successful at acquiring action-outcome associations as well as showing higher tendency on goal-directed responses. However, throughout the task, on-methylphenidate children showed (1) lower number of errors, (2) higher

reaction times and (3) no difference in action-control responses (goals vs. habits). These results indicate that methylphenidate was beneficial in modulating symptoms of ADHD by reducing the number of errors during learning and increasing children's response times; but it was not effective in improving children's cognitive profile, reflected by similar action-control patterns in both on and off-medication states.

Leen Jayousi, Al-Quds University

The Influence of Serotonin Transporter on Rule of generalization and Acquired Equivalence.

People vary in their cognitive performance; prior studies have shown that cognition is sub-served by different brain regions. For example, studies have demonstrated the significant and dissociable roles of the basal ganglia and medial temporal lobe in learning, memory and generalization. In particular, it has been suggested that the medial temporal lobe facilitates the formation of rules based on prior learning. These rules can be generalized to novel learning situations. Given the significant serotonergic input to the medial temporal structures, studies have focused on the influence of serotonin on generalization. In this study, we investigated the relation between serotonin and generalization by studying a naturally-occurring genetic haplotype of two single nucleotide polymorphisms in the serotonin transporter gene (SERT). The STPP polymorphism in the SERT regulates the expression of the serotonin transporter mRNA. On the other hand, the 5-HTTLPR polymorphism modulates the transcription of the serotonin transporter. A sample of 400 healthy undergraduates from Al-Quds University completed an acquired equivalence computer-based cognitive task for learning and generalization. Results showed that participants with low serotonin (AA-LL haplotype) of the STPP and 5-HTTLPR polymorphisms exhibit worse performance in the generalization phase than participants with high serotonin (CC-SS haplotype). These results can advance our understanding of the pathophysiology of various neuropsychiatric disorder that are related to serotonin like major depressive disorder where patients show structural deficits in the medial temporal lobe.

The Influence of Dopamine Transporter Gene Polymorphisms on Hippocampus Cognitive Function of Generalization.

The human ability to generalize previously learned information and stimuli to novel situations is essential for adaptation. It has been shown that the interactions between the basal ganglia and the medial temporal lobe may play a role in learning and generalization. Different genes are involved in regulating dopaminergic function in the basal ganglia. Synaptic dopamine signals are regulated by the dopamine transporter (DAT). Despite the significance of dopamine in modulating learning, it is still unclear how generalization can be modulated by the dopaminergic pathways. In this study, we will examine how dopamine regulates generalization by studying a naturally-occurring variable tandem repeats polymorphism, the 3'UTR VNTR, in the dopamine transporter gene (DAT1). The 3'UTR VNTR polymorphism regulates the expression of the DAT. A sample of 400 healthy participants from Al-Quds university completed an acquired equivalence computer-based cognitive task for generalization. This task aimed to evaluate the ability to learn stimulus associations and generalize the learned rules to novel stimuli. Our results showed that participants with the 9-repeat genotype, which is known to be associated with less DAT expression and higher levels of dopamine, exhibited better performance in the learning phase than participants who were 10/10 homozygotes (higher DAT and less dopamine). There was no effect of genotypes on performance in the generalization phase. Our study shows that dopamine levels could play an important role in regulating the learning process that relates to basal ganglia functionality. Dissociating the contributions of dopamine function to the basal ganglia vs. medial temporal lobe cognitive function can significantly further our understanding of these two crucial neural systems.

Hadeel Karaki, Iman Maswadeh, Eman Abu Khalaf, Ihsan Awawdeh, Al-Quds University

Antioxidant and antimicrobial activities of onion peels extract and Fortification of white wheat flour to prevent health hazard

The oxidation eliminates health benefits of edible oil and cause many human hazards, which can be reduced by using natural antioxidant phenolic extracts. Yellow onion peel has been reported to contain the phenols of different structure. When olive oil fortify by antioxidants extract from onion peels , can able to decrease oxidation . This study aims to delay oxidation in virgin olive oil .The samples of onion peels and olive oil were collected and stored in a good condition until use .The onion peels were washed, dried and ground samples were introduced into the 80% aqueous ethanol (ethanol: water, 80:20 v/v) with a ratio of 1:30 (sample: solvent) for 30 minutes along with ultrasonic shaking.The extracts were separated from the residues by filtering through filter paper. The combined extracts were concentrated and freed of solvent under vacuum at 45oC, using rotary evaporator the dried crude concentrated extracts were stored in a refrigerator (-4 °C) until used for . The total phenolic content and antioxidant activity of onion peels extract will estimate it . The onion peel extracts will add in three concentrations (300,600&900 ppm), to the virgin olive oil. Treated and untreated (control) oil samples will store in dark at ambient temperature (approx25 and 40C) for 80 days. The samples will analyze before and after the extract add with Acid value, Peroxidevalue, Iodinevalue, Anisidinevalue, K232 and k270. The yellow onion skin extracts have antimicrobial activity in relation to E. coli, Pseudomonas aeruginosa, Staphylococcus epidermidis and Staphylococcus aureus and the method will determine .The extract will show antioxidant and antimicrobial activity and were effective in preventing formation of hazardous compound, and therefore increase shelf life of oils.

Sara Abu Saymeh, Al-Quds University

Bacterial Contamination Of Used Toothbrushes

My senior project which is about the bacterial contamination of used toothbrushes is aiming to evaluate and identify the bacterial contamination on daily used toothbrushes. I distributed 50 toothbrushes for students who are living in dorms, they signed a consent form and I asked them a questionnaire. By the beginning of March I'll collect them, analyze and figure out the types of bacteria & connect my results with the questionnaire they answered it.

Raghad Bahar, Al-Quds University

Curcumin Nitric Oxide Enhances Its Anti-Cancer And Anti-Inflammatory Activities

Cancer is a leading cause of death worldwide and most drugs currently available for the treatment of cancer have limited potential. Natural products or their structural relatives have been the mainstay of cancer chemotherapy for the past few decades and still comprise about 50% of the drugs that are used for cancer chemotherapy. Curcumin is one of the natural drugs that, recently, attracted close attention due to its putative cancer-preventing and even anticancer properties on its own. As well, since its discovery as a crucial signaling molecule, great hopes are generated for new Nitric Oxide (NO) -based treatments for a wide variety of diseases. Here we tested the anti-cancer activities of Nitro-Curcumin, hypothesizing that; by joining the effects of curcumin and NO in one compound, will be more potent than curcumin alone in treating and preventing cancer since they will retain the pharmacological activity of the parent compound curcumin, but also have the biological actions of NO, a strategy that has not been implemented before in cancer treatment and prevention. To compare the anti-cancer activities of curcumin and NO-curcumin, we treated different cancer cell lines using both compounds and tested the effects of both compounds on different cancer cell lines proliferation and death. And because colitis is a colon cancer predisposition factor,

we evaluated the anti-inflammatory effect of NO-curcumin in mice in vivo using dextran sulfate-induced colitis model. Our results showed that NO-curcumin is more effective in reducing cell proliferation and increasing cell death when compared to curcumin. In addition NO-curcumin has a lower IC50 compared to curcumin. Finally, our results showed that NO-curcumin is a more potent anti-inflammatory compound when compared to curcumin. Altogether, our results demonstrate, for the first time, that NO-curcumin is a more potent anti-cancer and anti-inflammatory effects, which makes it a potential future treatment for cancer and inflammation.

Doaa Abbad, Al-Quds University

Strategies in the treatment of Crohn's Disease

Crohn's disease (CD) is a chronic inflammatory condition that affects the GI with uncertain etiology. A retrospective study was conducted in which medical record of 58 Crohn's disease patients at the Yammah hospital and Bethlehem Arab Society for Rehabilitation were reviewed between Nov. 2016 and March 2017. Study results indicate that about 51.7% of patients went to doctors with mild disease, 27.6% of patients went in with moderate disease and 13.8% of patient went to doctors with severe disease. Our findings indicate that the Gastroenterologist included in the study do not use the Crohn's Disease Activity index to evaluate the disease score, instead disease severity is determined according to their experience. As such, results that used patient records are likely influenced by doctor's experience. Abdominal pain is a very common condition in 52% of Crohn's Disease Patients; this pain can be either acute or chronic in nature. Other symptoms may include diarrhea reported in 15.7% of CD patients. As for the location of disease, the most common part of GIT is ileum in 49.1% of CD patients. The second part of GIT affected is ileum and colon. The age category most affected is between 15-30 years old with 58.6% of patient in this age range. The medication of choice in CD patients is the immunomodulatory drug 5-Aminosalicylic acid used in 66.7% of Crohn's Disease patients. Moreover, in some patients with

moderate to severe disease used combination of drugs such as corticosteroids, azathioprine and infliximab to achieve remission. Also, 17.2% of patient used corticosteroid with other medication. That means the treatment according to severity of disease so the step up approach is applied. In conclusion, the study characterized CD patient population in Palestinians Bethlehem area hospitals. The study indicates that Doctors need to be encouraged to use Crohn's Disease. Activity index to obtain disease score. Medication use seems to be consistent with guidance although excessive use of corticosteroids is evident.

Reem Dwaik, Tamara Abu-Mohor, Shatha Abdeen, Salam Warasneh, and Isra' Imad, Al-Quds University

Status of Healthcare for β -Thalassemia Patients In The west Bank

Evaluation of thalassemia patients can be demanding because of the plentiful potential disease sequences and absence of available therapies rather than transfusion and bone marrow transplantation, both of which have related morbidities and charges. This study aims to evaluate the hematological, biochemical and the endocrine profiles of β -thalassemia patients and their correlation with iron overload considering its related complications. This study involved 53 patients of β -thalassemia treated with blood transfusion and iron chelators. Data were collected retrospectively from registries in 2017 and 2018. The hematological and biochemical profiles included: complete blood count, liver and kidney function tests, fasting blood sugar, calcium, serum ferritin and the endocrine profile for each patient. Among of the diagnosed patients included in this study; 51% were males and 49% were females, with an average age of 21 years ranging from 6 – 57 years. The mean for serum ferritin level during 2017 - 2018 was 2055 ng/dl, and for hemoglobin was 8.23 mg/dl. Regarding liver function tests, abnormal results for ALT and AST were encountered in 13.2%, 32.1% respectively. Moreover, serum creatinine as an indicator for renal function was found to be abnormally low in 79.2%. Vitamin D3 deficiency was also observed in 35.8%, and hypothyroidism was seen in 26.4%. With regards to the treatment approaches, 84.9% of the patients are blood transfusion dependent and 69.8 % of them rely on iron chela-

tors. In this matter, Splenectomy was carried out only for 17%. Additionally, BM transplantation was done for 8% even it's the only available curative therapy. Our preliminary findings point to the urgent need for better management of thalassemia patients in the West Bank. These findings might be used to implement new follow-up and treatment policies.

Asalah Salhab, Al-Quds University

Effect of Sociodemographic factors and Antipsychotics on Quality of life in Palestinian patients with Schizophrenia.

Quality of life has a vital role in developing treatments that can help individuals with schizophrenia to lead more fulfilling and satisfying lives. To date, there are limited studies regarding the Quality of life in Patients with schizophrenia in Palestine. To evaluate the impact of sociodemographic factors and antipsychotics on quality of life (QoL) in Palestinian patients with schizophrenia with the use of the SF-36 Questionnaire. Method: Eighty patients with Schizophrenia were interviewed in both HEBRON Community Mental Health Center and Dr. Kamal Mental health hospital in Bethlehem. The data was gathered between the end of December, 2017 and finished at the Beginning of February, 2018. Data was collected by the administration of SF-36 Questionnaire during a personal interview with eighty patients. Patients' medical files were used to obtain medication. Statistical analysis was performed using the statistical package for social sciences (SPSS), and were analyzed by using parametric tests. A number of significant correlations were identified between QoL and the independent factors. There was no impact of gender on QoL. Similarly, the results show no significance difference in the QoL with respect to marital status. Our findings show that being employed was associated with better QoL in the physical function domain (PF) and the role physical domain (RF). Results also show a positive correlation between the two educational levels; Diploma degree and vocational degree, and QoL in the physical function domain (PF) and the role emotional domain (RE). While the results show no correlation between bachelor degree and QoL. Regarding place of living, schizophrenia patients who live in the city have a better QoL in the bodily pain domain (BP)

and in the social functioning domain (SF). In the current study, income higher than 4000₪/month was associated with high quality of life score. The study found that 82.5% of patients with schizophrenia live with a very low income, which is below 3000₪. Finally, our findings reveal that there is a significant correlation between QoL and patients who did not stay in a mental health hospital. Antipsychotic drugs are the cornerstone for the treatment of schizophrenia. These medications have always been of great interest in studying quality of life in schizophrenia. In our study, majority of the patients were receiving single typical antipsychotic medication (45%). Approximately 35.5% were receiving combination antipsychotic medications (typical and atypical) and (20%) were receiving atypical antipsychotic medications. The results show a positive significant difference between QoL and patients receiving atypical medications in the social functioning domain (SF). The relationship between subjective treatment satisfaction and QoL in patients with schizophrenia was studied. Our results show that 82.5% of the patients were satisfied with their medication. Moreover, it was found that there is a positive correlation between satisfaction to medication and QoL in mental health domain (MH). The study indicates that 63.8% of schizophrenic patients are smokers. The results show that there is a positive significant difference between QoL and non-smokers patients in role emotional domain (RE) and social functioning domain (SF). Furthermore, results indicate a positive correlation between QoL and family support in all domains of the Questionnaire. Unexpectedly, only (18%) of our sample have medical conditions other than schizophrenia. In addition, the study found a negative correlation between age and QoL in the physical function domain (PF) which means poorer quality of life with increased age. Finally, a negative correlation between duration of illness and QoL; as duration of illness increases, QoL decreases. This study characterized the QoL of schizophrenic Palestinian patients and determined the factors that may impact it. The study shows that being employed was associated with better QoL. In addition, living in an area where access to specialist care is available increases QoL for schizophrenic patients. While the majority of the patients receive typical antipsychotic medication (45%), approximately 20% receive atypical antipsychotic medications. Relative to a study conducted in 2004 in which only 2% of patients received atypical

medication, the increased use of atypical medication is a positive development. Consistent with literature reports, the results show a positive relationship between QoL and patients receiving atypical medications in the social functioning domain (SF). This may be attributed to the known effect of atypical medications on negative symptoms. A positive correlation between satisfaction to medication and QoL in mental health domain (MH) was identified and a negative correlation with age that means poorer quality of life with increased age. Finally, a negative correlation between duration of illness and QoL, as duration of illness increases, QoL decreases.

Beesan Warasneh, Al-Quds University

Body Mass Index And Lifestyle Habits As Predictors Of Health In Palestinian Adults: Across-Sectional Study

Increasing prevalence of obesity has led to rising numbers of hypertension, dyslipidaemia, cardiovascular disease, diabetes mellitus, and other leading conditions. Poor lifestyle, in the form of poor diet and lack of proper sleep and exercise can be attributed to comorbidity and decrease in overall health. Little is known about eating habits, sleeping habits, and the prevalence of obesity in Palestinian adults. A team of trained medical-students conducted a cross-sectional study of Palestinian adults aged between 18 and 60 years old. Stratified random sample of 2500 adults is selected based on governorates, and an interview-aided questionnaire is used for data collection in addition to measures of weight, height, and waist circumference. 2106 Palestinian adults have been selected with a participation rate of 83%. Preliminary results show that the sample is 43.6% male, 56.4% female with a mean age of 33.2 years (SD=12.8). Mean calculated BMI of the sample was 26.5 (SD=5.6) with a mean height of 1.67m (SD=0.09). Participant distribution according to living area was 39% urban, 53.7% rural, and 7.3% living in refugee camps. The majority of the sample was married (55.3%) or single (42.2%) with the rest being either divorced, widowed. 901 (42.8%) participants had at least 1 child with a mean of 4.56 (SD=2.58) children per participant.

52.3% of the sample had poor sleeping habits, 74.3% had poor eating habits, and 32.5% of the overall sample were smokers. Hypertension, diabetes, and dyslipidaemia were the most common illnesses reported with rates of 7.5%, 5.1%, and 3.4% respectively. Conclusion: It was found that Palestinians exhibit poor eating and sleeping habits and have a large percentage of smokers. Disease prevalence was found to agree with international studies in that hypertension, diabetes, and dyslipidaemia were found to be the most common diseases. In light of this, we believe that the Palestinian population is in dire need of educational programmes to better improve their lifestyle in a such a way that it reflects on their habits and disease prevalence.

Islam Hamarasha, Al-Quds University

The Predictive Value of CBC for Febrile Seizures: Retrospective Study

Febrile seizures (FS) are seizures that occur between 3-72 months age, with a temperature of 38 C or higher, with absence of central nervous system infection, with incidence of 2-5% in neurologically healthy child. Two forms of FS are simple FS and complex FS. The overlap between the peak FS onset and the onset of iron deficiency anemia diagnosis, drives this study to investigate the relationship between Anemia and Febrile convulsion types. A retrograde study of 170 child between the ages of 6-72 months diagnosed with febrile seizures at different West-Bank hospitals during 2018, 2017 and 2016. Data collection for the computerised documentation hospitalisation system for CBC values includes, Haemoglobin, Haematocrit, Mean corpuscular volume, and Red blood cell distribution width. Analysis was performed on 127 patients, using IBM 23 SPSS. Results showed that FS was presented in two age peaks, were at 18 months old and 24 months old, presenting (8.7%) each,. The sample was distributed between 57.8% females and 42.2% males. Within different patterns of FS, generalized tonic clonic seizure presented the most frequent pattern in 88.3%, generalized Tonic 5.3%, generalized Atonic 3.2%, and focal 3.2%. Complexity was distributed as 78.6% simple, and 21.4% complex. There were no significant differences between SFS and CFS patients in relation to Age, Grade of Fever, Gender, Infec-

tion Focus, and Family History of febrile seizures, and no significant relation between the HB level and complexity, ($T(123) = 1.104$, $p = .272$), or other inflammatory CBC markers. We suggest that hemoglobin may be an Age dependent protective factor of SFS. Further data is planned to be collected to provide a larger number of sample, and to add controls cases to compare them with the febrile seizures patients.

■ Literature and Human Rights

Taqwa Al Balawi, Al-Quds University

The Implication of Supremacy of Superpowers over International Law and Human Rights Treaties.

The imbalance in the international balance of power and the unipolar world has affected the Palestinian-Israeli conflict and has affected the application of international law with respect to the issue of settlement. The mechanisms of applying international law are no longer viable in exchange for the dominance of some states. The United States of America, as a super power in the United Nations bodies, affects all the resolutions against Israeli settlements. This is a result of the strong relationship between America and Israel. Therefore, America uses its power to achieve Israel's interests even if this violates the international laws. Although the establishment of the settlements is contrary to the international laws (the Hague Convention, the Geneva Accord, the Rome statutes), there are ongoing expansion of settlements in the West Bank and East Jerusalem. This study focused on how the role of United States of America, as a super power in the United Nations bodies, affects all the resolutions against Israeli settlement, depending on the American Israeli relationship. This relationship affects other United States interests in the Middle East. It sheds light on the nature of this relationship and explains the interference of mutual interest for both countries. Although there are no mechanisms for applying international laws, the peaceful popular resistance and the mobilization of public opinion and interna-

tional public opinion is the best way to demand the rights of the Palestinians. This forms a great support for the Palestinian cause, through pressure on states and UN bodies to take serious measures and create a more suitable environment for peace. Therefore, the continuation of work in international forums and bringing more decisions in favor of the Palestinian cause, even if not implemented, will constitute a pressure on countries and America to take action on Palestinian issues and establish an independent state on the 1967 borders, and work to end the settlement.

Jwana Nassar and Wisam Alawy, Bethlehem University

Performance Poetry and the Representation of Women and Palestine

Performance poetry has always been a way to perform and convey an emotionally charged message to a broad audience. This study aimed to examine performed poems written in English by Palestinian poets some of whom live outside Palestine that examined the Palestinian cause as a major issue that should not be ignored. Our research showed that there are studies on the analysis of poems written and performed in other languages such as Indonesian poetry (Cole, 2010), English/ Spanish code-switched poetry (Napiorski, 2011), and Classical Arabic poetry (Al-Zubaidy, 2014). However, there's no research on Palestinian poetry written in English, and particularly research conducted in Palestine. Therefore, we decided to focus our attention on the works of Palestinians that are written and performed in English that aim to deliver an important message about the representation of women in Palestinian culture, cause, and the resistance. Our analysis focused on one poem, "Love Letters from Palestine" (Dajani, 2014) though we also examined four other poems to provide support for our claims: "The Palestine I know" (Ziadah, 2016), "Shades of anger" (Ziadah, 2011), "Gaza" (Hammad, 2014), and "Nakba" (Kanazi, 2013). All these poems focused on women in Palestine, often representing Palestine as a woman, along with the Palestinian culture and resistance. In these poems, we noted five recurring themes linking the situation of Palestinian women and the Occupation: arranged marriage, anger about the past, culture, anger about the present, and hope

for the future. “Love Letters from Palestine” considered an additional, especially interesting theme, “scorned love,” as it drew a parallel between a woman whose husband had never loved her and the complex links between Israel and Palestinians.

Wiam Awadallah, Bethlehem University

The Monstrosity of the Destruction of the Females in Mary Shelly's Frankenstein

This research examines the real monstrosity in Mary Shelley's Frankenstein. My argument is that the true monstrosity in the novel is the destruction of the females that results, as Julia Kristeva says in her theory of abjection, from fear and disgust of women's bodies. I will use major pieces of textual evidence from the novel and analyze them through Kristeva's idea of abjection to show how monstrosity is constructed in the novel. First, I show that monstrosity is evident, as Kristeva says, in the fragility of law. This can be seen in how Victor Frankenstein is exonerated of his crimes that led to the destruction of Justine and the female monster, because of the unfair and biased judicial institutions. In contrast, Justine is accused and punished for a crime that she didn't commit. Second, monstrosity is also evident in Victor's denial of the significance of the maternal. This can be seen in his creation of the female monster without the need of a woman, his comparison between his creation and females' labor, and in the symbolic destruction of the female monster's placenta. The latter in turn indicates that he wants to prove that the mother's absence isn't a big deal.

Madleen Abu Irayeh, Bethlehem University

Abjection in Shelley's Frankenstein

This paper analyzes Mary Shelley's Frankenstein through Julia Kristeva's theory of abjection. The main argument is that Victor Frankenstein and his creature experience and reflect abjection, which Kristeva defines as the breakdown of meanings when humans encounter fear or phobias. These fears and phobias are a response to what is avoided or not acceptable in the symbolic order (language, law, rules). Moreover, Victor's first encounter with abject can be seen in his early childhood where he is separated from his mother. I will show that these fears can be seen in Victor's phobia of the corpses of Clerval, Elizabeth and his mother as well as the creature's self-loathing. First, the corpse elicits abjection through evoking the mortality of human beings. Upon beholding the corpses of his family, Victor suffers delirium, visual hallucinations, nightmares and fever which all represent the corpse as the "utmost of abjection" (Kristeva 4). Second, the creature experiences abjection which can be seen in his thorough awareness of his deformity and defilement. The creature tries in vain to be accepted in the symbolic order. However, he realizes that he is the abject or the source of fear from which humans flee and avoid.

Layan Najarian and Luciana Ameer, Bethlehem University

The New Voice of Resistance in Palestinian Hip-Hop: DAM and the Representation of Arab Women

This study aimed to find the effect of the specific language varieties used by the Palestinian hip-hop group DAM on the ways that feminist themes of honor killing, the objectifying of women, and the categorizing and marginalizing of Arab women are represented in songs. The research techniques involved inspecting and finding the feminist themes presented in five songs performed by DAM as well as analyzing the effect of language use on those themes. Among the five is one unreleased song that we heard in concert and obtained permission to include in our study. In

addition, the researchers applied Tyson's (2006) discussion of feminism to examine the themes of the songs. The researchers found that DAM uses multiple languages and language varieties including the Modern Standard Arabic (MSA), Colloquial Arabic (CA), and Hebrew as well as words borrowed from the English and Hebrew languages. DAM exploits these languages to communicate cultural issues and social critique in subtle ways to a wide audience, simultaneously local and international. For example, their use of particular MSA words heightens the seriousness of their topics while their use of CA forms marked as very local and very informal reminds Palestinian listeners that the problems being discussed are part of our national culture, parts that Palestinians can change. Our goal in choosing this topic was to examine the representation of Arab women through the lens of Palestinian hip hop written and performed mainly by feminist Arab men although, importantly, female performers are involved as well.

Nadeen Abu Sirrieh, Samiha Okkeh and Youmna Abu Hilal, Bethlehem University

Sexual, Religious and Cultural Taboos Subtitled in American TV Shows and Movies

This study was conducted to examine subtitling into Arabic in American movies and TV shows that deal with sexual, religious and cultural taboos. This paper analyzed three episodes from the American TV show Friends, and two episodes from animation series The Simpsons, and three American movies, Troy, Sierra Burgess is a Loser, and The Wolf of Wall Street to examine these issues. The analysis process was about watching these episodes and movies, collecting the English words that have discrepancy with the Arabic subtitles, transcribing them with a short description of the relevant scenes in which they occurred, and finally considering the relationship between the original English words and the Arabic subtitles by focusing on the choice of words used in the subtitle. The study demonstrated that subtitlers generally present qualified subtitles, but when it comes to sexual, religious and vulgar contents, they tend to either euphe-

mize or omit this content from the subtitling line. Through examining these contents, the study also showed that the subtitlers, by honoring the cultural ideologies that are found in most of the Arab societies in their subtitles, presented a discrepancy between the ideologies of the Arab culture and the ideologies of the American culture. The first was presented as a standard and idealized one, while the other was presented in any ways depraved.

Malak Dwiat, Irene Ballout, Katrin Handal, Bethlehem University

The Language of Advertising in Billboards Across Palestine

Businesses around the world communicate and raise awareness for their products through different modes of advertising like billboards. While there is research on the language of advertising in the Arab world (Al-Olayan & Karande 2000; El-daly 2011; Kalliny & Gentry 2007), there is no research on the language of advertising or more specifically advertising using billboards in Palestine. This paper analyzed the language of advertising in billboards throughout various Palestinian regions. The aim of this study was to answer the following questions: What languages or language varieties are used on billboards in various areas of Palestine? How do these billboards seek to persuade consumers in Palestine to buy products or services? Thirty-two distinct billboards across Palestine were analyzed according to Bhatia's (1992) and Piller's (2003) frameworks (as cited in Baumgardner & Brown's, 2012) for analyzing English in magazine advertising using tools from sociolinguistics, linguistics, and multimodal discourse analysis. The results showed that Arabic was used mostly on the billboards for both international/multinational companies and local companies). International/multinational companies used Modern Standard Arabic (MSA), while local companies used Palestinian Arabic). Applying Schrank's manipulation of language techniques (as cited by Prelicpeanu, 2013) on the data revealed that Palestinian advertisers tended to use the same techniques as other advertisers around the world to persuade consumers to buy products or services. Furthermore, certain dimensions of the Palestinian culture were depicted on the billboards. The study revealed that Palestine is not as receptive

to foreignism as expected and that the billboards were not inclusive of the entire Palestinian culture. This study emphasizes the need to conduct a future research on a larger number of billboards in different places in Palestine and to study language use in other forms of advertising in Palestine as well.

Posters:

■ Law and Applied Sciences

Raghad Herbawi, Bana abu Dbaa, and NoorAlhuda Rajabi, Polytechnique University

Isolation and microbiological activity of whey protein; Field of application: the formulation of topically-applicable cosmetic compositions

Whey proteins is a liquid produced by the processes of the manufacture of milk products, including the cheese industry, a source of health and vitality throughout the ages but it has several disadvantages, including it causes pollution of the environment and pollution of groundwater, and we will deal with these problems that pose a threat to the environment. 1,2 Our project aims to reuse the watery by-product of cheese production process, the microbiological active Whey protein in stabilizing O/W emulsion cosmetic composition. Whey powder was separated using ordinary cheese production process, While whey concentrate was isolated using thermal treatment process 3 . Each of them were dehydrated at 60° C for two days. The microbiological activities of the Whey protein was studied using agar dilution method on E-coli and Staphylococcus aureus. For this solutions of whey protein with concentrations (10⁻² , 10⁻³ ,10⁻⁴ and 10⁻⁵ g extract/ml) in aqueous DMSO were prepared and analyzed for their bacterial growth inhibiting activity. The tested samples in the given concentration range exhibited 90-100% bacterial inhibition. The physiochemical and rheological properties, and accelerated stability tests of three cream formulas containing different concentrations of Whey powder as emulsifier (33%, 50 % and 100% w/w) were assessed and compared with commercial cream product containing no Whey powder. All physical and rheological properties of the prepared formulations were found to be the same as the commercial cream product. Stability studies showed a stable homogenous appearance and effective cream during one months of storage at room temperature, 37° C and 50° C.

معوقات المرأة في المناصب العليا

خلاصة عن أهمية المرأة في المجتمع*

لا يمكننا حصر الأدوار المهمة والإيجابية والفعالة للمرأة في المجتمع، من خلال مقال قصير فالمرأة تنجب وتربي وتعلم وترعى أطفالها وزوجها وببتها، وتعمل لمساعدة الزوج ومشاركته بتحمل المسؤوليات وتخفيف العبء عنه، فنهاها الطبية التي تدوي بحنان وإنسانية أوجاع وجراح الناس، وهي المعلمة، والمهندسة، والممرضة، والشرطية والمحامية، وغيرها من الأدوار السامية التي تجاهد من خلالها لخدمة وطنها وأهلها إلى جانب الرجل، ليقدماً معاً أجمل معاني الحب والوفاء والتكاتف والإنسانية لتحقيق التقدم وخدمة المجتمع بكل إخلاص وأمانة .

اهداف البحث *

١- تعتبر هذه الدراسة من الدراسات القليلة التي تناقش معوقات تقدم المرأة في تولي المناصب العليا والعوامل الثقافية والشخصية التي تمنع تقدمها رغم وجود الكفاءات المؤهلة للوصول الى أعلى السلم الوظيفي .

٢- تُعبر هذه الدراسة عن توجه جديد في الدراسات المتعلقة بالمرأة ؛ وهو الانتقال من دراسة القضايا التي تتناول المرأة منعزلة عن المحيط الاجتماعي إلى القضايا التي تدعم مشاركتها في بناء المجتمع وصناعة القرار فيه.

٣- تساهم هذه الدراسة في اختبار نظرية التحيز تجاه القيادات النسائية والنتائج عن عدم انسجام الدور، والتي لم تستخدم في الدراسات التي اطلعت عليها.

المقارنة *

ما المعوقات الثقافية التي تمنع المرأة من الوصول الى مناصب القيادية في القطاع العام .

ما المعوقات الشخصية التي تمنع المرأة من الوصول الى المناصب القيادية القطاع العام

الفساد و الوظيفة العامة

شهدت دولة فلسطين في الآونة، سلسلة من التجاوزات الإدارية التي ترتقي إلى مصافي الفساد ، ويعد الفساد ظاهرة اقتصادية واجتماعية وسياسية توجد في جميع دول العالم، وإن اختلفت خطورتها من دولة لأخرى، حيث تمثل هذه الظاهرة إحدى القضايا الكبرى التي تحتل اهتمام المواطنين في جميع دول العالم، وأحد أبرز وأخطر المشكلات التي اتفق عليها الخبراء والمختصين على مكافحتها وعلاجها، وذلك لما لها من قدرة على انتهاك لقيم والمعايير الأخلاقية من جهة ، ولما تسببه من مخاطر على استقرار المجتمعات وأمنها من جهة أخرى، وهذا ما يهدد مؤسسات الديمقراطية والعدالة ويعرض برامج التنمية المستدامة وسيادة القانون للخطر .

ويعرف الفساد الإداري في الوظيفة العامة بأنه:

“ سوء استغلال السلطة العامة لتحقيق مكاسب خاصة، ويحتوي الفساد الإداري على قدر من الانحراف المتعمد في تنفيذ العمل الإداري المناط بالشخص، غير أن ثمة إنحرافاً إدارياً يتجاوز فيه الموظف القانون وسلطاته الممنوحة دون قصد سيء بسبب الإهمال واللامبالاة، وهذا الانحراف لا يرقى إلى مستوى الفساد الإداري لكنه إنحراف يعاقب عليه القانون وقد يؤدي في النهاية إذا لم يعالج إلى فساد إداري

إشكالية الدراسة: إشكالية هذه الدراسة تبرز من خلال طرح التساؤل الرئيسي التالي : كيف تؤثر ظاهرة الفساد الإداري على حقوق الإنسان والتنمية البشرية في فلسطين والدول العربية ؟

أهمية الدراسة : تنبثق أهمية الدراسة من أهمية موضوعها وهو الفساد بصفة عامة والفساد الإداري بصفة خاصة، ولما له من آثار سلبية في فلسطين على التنمية البشرية وحقوق الإنسان، حيث أن أفضل الدول في احترام حقوق الإنسان هي أيضا أفضل الدول في الحاکمية الرشيدة

ومكافحة الفساد، وبالتالي فالبحت في هذا الموضوع يعتبر دراسة لجوهر معضلة التخلّف والحلقة المفرغة التي تدور فيها المشاريع التنموية في فلسطين رغم ضخامة الإنفاق العام عليها، وذلك من أجل الوقوف على الأسباب ومن ثم البحث في الحلول التي تساهم في التقليل من الظاهرة رغم خطورتها.

أهداف الدراسة :

تتمثل أهداف الدراسة في ما يلي:

- تسليط الضوء على الفساد والفساد الإداري وأهم أسبابه ومظاهره كإطار نظري.
- التعرف على أهم القضايا الحساسة للفساد الإداري في الوظيفة العامة.
- التعرف على التشريعات الفلسطينية في مكافحة الفساد .
- إظهار أهم أجهزة مكافحة الفساد .

محاور الدراسة :

تم تقسيم هذه الدراسة الى المحاور التالية

المحور الأول : الإطار النظري للفساد في الوظيفة العامة

المحور الثالث : التدابير العلاجية والتشريعات القائمة لمكافحة الفساد في فلسطين.

المحور الثالث : حقوق الإنسان والتنمية البشرية في فلسطين مع وجود الفساد.

النتائج والتوصيات :

- لا يقتصر الفساد على الرشوة والكسب غير المشروع عبر سوء استخدام السلطة بل هو شر اجتماعي وأنه يؤثر بشكل فعال في

المجتمع ويرسخ الفقر ويحجب الشفافية.

- انتشار الفساد الإداري في الوظيفة العامة له علاقة مباشرة بفساد أجهزة الدولة ومسؤوليتها والأثر المباشر ليس على الوظيفة العامة فحسب، وإنما على حقوق الإنسان كونها غير قابلة للتجزئة .
- رغم مجهودات فلسطين وإجراءاتها التشريعية والإصلاحية المصاحبة لمكافحة الفساد إلا أنها تحتاج الرقابة الآزمة من يشغل الوظيفة العامة.

حماية الآثار والتراث الفلسطيني

أهمية الدراسة

- الحفاظ على الهوية الفلسطينية للشعب الفلسطيني الذي سيبقى متجذراً على أرضه.
- تعزيز الروابط ما بين ماضي الفلسطينيين، و حاضره، ومستقبلهم.
- لما لهذا الموضوع من أهمية في زيادة التماسك الاجتماعي والمساعدة على تعزيز السلام ما بين الجميع.

أهداف الدراسة

- زيادة الوعي عند افراد المجتمع بأهمية تراثنا وطرق الحفاظ عليه وتطويره.
 - تسليط الضوء على أهمية المواقع الأثرية والسياحية لانها تُعتبر جزءاً من الإرث الحضاري لشعب مُعَيَّن من الشعوب.
 - تعريف قانون حماية التراث الثقافي الفلسطيني و الكشف عن صور الانتهاكات الواقعة على الاثار الفلسطينية .
- *سيتبع الباحث في هذه الدراسة اسلوب المنهج الوصفي التحليلي .
- وبناء على ذلك سوف اتناول هذه الدراسة من خلال محاورين أساسيين :
- الأول: التراث الفلسطيني بين مخاطر ضياعه والمحافظة عليه
- الثاني: الحماية الجزائية للتراث الفلسطيني.

أثر إستراتيجية المشروع على المستوى التحصيلي لدى طلبة الصف الثاني الأساسي في مدرسة السواحة الشرقية الأساسية في مديرية ضواحي القدس

هدفت الدراسة إلى التعرف على أثر استخدام طريقة المشروع في التعليم للصف الثاني الأساسي في مادة التنشئة الوطنية في مدرسة السواحة الأساسية المختلطة في مديرية ضواحي القدس للعام الدراسي (2016-2017). كما هدفت إلى التعرف على الفروق في استخدام طريقة المشروع على المستوى التحصيلي للطلبة بين الذكور والإناث. وقد تكون مجتمع الدراسة من المجموعة التجريبية ويبلغ عددهم 30 طالب وطالبة، والمجموعة الضابطة ويبلغ عددهم 33 طالب وطالبة. وقامت الباحثة بالتنسيق مع مديرة المدرسة ومعلمة الصف لإجراءات الدراسة حيث بدأت بتحليل محتوى وحدة «حيوانات في بلادنا» في المادة وقدمت القراءات العلمية حول الموضوع باستخدام الصور والأفلام القصيرة ثم خططت مجموعة من الأنشطة التي سيقوم بها الطلبة ونسقت إجراءات الزيارة الميدانية مع مديرة المدرسة والاستاذ المشرف ووزارة التربية والتعليم. وفي نهاية المشروع تم إنجاز مجموعة من الأعمال الفنية وتم عرضها في معرض صغير في الصف منتج من قبل الطلبة حيث عبروا عن تعلمهم ورأيهم حول ما انتجوه وحول طريقة التعليم. واستخدمت الباحثة المنهج التجريبي. والاختبار التحصيلي هو أداة القياس وتم التأكد من صدق الأداة باستخدام صدق المحكمين، وكذلك التأكد من ثبات الأداة باستخدام معادلة كرونباخ ألفا حيث بلغت القيمة الكلية للثبات (0,65) وهي درجة مرتفعة، وقد تمت المعالجة الإحصائية للبيانات باستخراج المتوسطات الحسابية والانحرافات المعيارية، اختبار «ت»، اختبار وذلك باستخدام الرزم الإحصائية (SPSS). وقد توصلت إلى النتائج الآتية

* وجود فروق ذات دلالة إحصائية عند المستوى ($0.05 \geq \alpha$) بين مستوى التحصيل لدى المجموعة التجريبية والضابطة حيث كانت الدلالة الإحصائية $0.05 >$ وهي دالة إحصائية، وبذلك رفضت الفرضية الصفرية. فقد كانت الفروق لصالح طريقة المشروع، والتي كان متوسط تحصيل الطلبة فيها أعلى شيء بمتوسط حسابي (55.34)، مقابل (35.66) للمجموعة التي تم تدريسها بالطريقة التقليدية. * عدم وجود فروق ذات دلالة إحصائية التجريبية

بين مستوى التحصيل لدى المجموعة التجريبية والضابطة حسب متغير الجنس، حيث كانت الدلالة الإحصائية $p < 0.05$ ، وهي غير دالة إحصائياً، وبذلك قبلت الفرضية الصفرية. وأوصت الباحثة بالعمل من قبل وزارة التربية والتعليم بتعميق مفهوم التعلم القائم على المشاريع لدى معلمي المرحلة الأساسية الدنيا من خلال إجراء دورات تدريبية علمية هادفة للمعلمين حول توظيف تلك الطريقة في التعليم. وتوفير الأدوات والتقنيات اللازمة في المدارس التي تسهل طريقة التعلم القائم على المشاريع. وإجراء دراسات مماثلة وتجريبية خصوصاً للمرحلة الأساسية الدنيا.

In Vitro Assessment of Antioxidant, Anticancer and Antimicrobial Activity of Wheat Sprouts Extracts

Cancer is a major public health problem. The incidence and searches show that tens of millions of people around the world suffer from cancer, and almost all ultimately die from it. Cancer is often thought of as an untreatable and painful disease. Everyone has a possibility of suffering from cancer. Although the developing of cancer increases with age, people may develop carcinogens from lifestyle due to genetic mutations or cell damage, nevertheless, environmental effects may act as factors that lead to development of cancer. Treatment of cancer is still being studied. The only choice for treating cancer patients now a days are the anticancer drugs and chemotherapy. The side effects may damage the whole body since it affects not only cancer cells but also normal healthy cells. As a result, this leads to immunosuppression of the body. However, the inhibition of the immune system allows for bacteria to infect the body requiring Antibiotics which are the first defense line for bacterial infection. At the same time, the cancer patient will suffer more with the side effects of the antibiotics along with the anticancer drugs and chemotherapy. Accordingly, researches are trying to find alternative treatments that are less toxic than chemicals, like natural plants. Consequently, researches began using the plants extracts which have always been a rich source for many compounds that are useful for producing drugs. In this study, specific plant sprouts will be used which is the wheat sprouts. For the reason that they have many nutrients that improve metabolism, keep blood sugar levels at normal stage, in addition to eliminating toxins by neutralizing them. After planting the wheat seeds, the sprouts will be dried in shade and extract the anticancer and antimicrobial. Specific techniques will be used in order to examine the biological activity of these antioxidants including the anticancer and the antimicrobial. Agar diffusion method will be used for evaluating the width of the inhibition zone. Later the minimal inhibitory concentration of antimicrobial extracts will be determined. In addition, the anticancer extracts would be experimentally used on different cancer cell lines, and by counting the floating cells, the number of dead cells would be compared with the live cells. Afterwards, according to the results, wheat sprouts would be evaluated and tested if they can be used as antimicrobial and anticancer or not, by using different concentrations.



Fareeha Ashour, Al-Quds University

Assessment Of Quality Of Life For Thalassemia Patients In Palestine

Thalassemia is the most common hemoglobin disorder in the world; it is a critical issue in the Arab world and Palestine. This pilot study was conducted to evaluate the effect of the disease and its comorbidities on Palestinian patients quality of life, their adherence to iron chelators and satisfaction to health services provided to them. A cross-sectional study enrolled 25 patient of thalassemia major and intermedia, from different cities in Palestine. These patients were evaluated for their quality of life using short form-36 questionnaire that consists of two domains (physical component summary-PMC, mental component summary- MCS). The overall scores for each item and for each domain were obtained in which range from 0 to 100. 0-20 reflect poor, 20-40 reflect bad, 40-60 reflect good, 60-80 reflect very good, 80-100 reflect excellent. In general, the highest score appear for the social functioning (80.5 ± 4.49) and the lowest one was for role physical (52 ± 9.79). The scores of thalassemia major (PCS 70.80 ± 11.84 , MCS 66.47 ± 12.91) were higher than thalassemia intermedia (PCS 61.01 ± 11.83 , MCS 63.74 ± 8.26). For patients who transfused <12 Units/Year (U/Y) (PCS 63.19 ± 12.80 , MCS 63.78 ± 11.69) comparing to patients transfused 12-24 U/Y (PCS 77.32 ± 10.62 , MCS 73.43 ± 9.57). Adherent patients (PCS 69.28 ± 15.19 , MCS 71.20 ± 11.58) acquired higher scores than non- adherent patients (PCS 60.32 ± 12.52 , MCS 59.23 ± 9.93). Only 56% of patients were adherent to their iron chelators while 44% were non-adhere. Mean value of patient satisfaction was higher in the north (72.5 ± 14.19) compared to the south (32.14 ± 30.11) of Palestine. There is huge need to exert more efforts to improve the QoL for thalassemia patients, since thalassemia has an influence on QoL and limit the physical functioning, mental health, vitality, general health and other physical and emotional abilities. Strategies need to be implemented to increase the adherence to iron chelators and patient satisfaction. A follow-up study is needed that includes higher number of patients from different cities in Palestine.

Prevalence of chronic diseases in Palestinian geriatrics and common pharmacological interventions- a cross-sectional study

Geriatrics are more susceptible to have multiple medical disorders due to different physiology and, hence, are more subjected to polypharmacy. This study investigates the prevalence of chronic diseases and medical conditions, used medications, and associated socio-demographic factors among the Palestinian geriatrics population. This was a cross-sectional study conducted during June 2013 and January 2014. The study population was Palestinian geriatrics ≥ 60 years old living in the West Bank and East Jerusalem. Interview-aided questionnaires were completed for participants by the surveying team. The questionnaires comprised of personal and socio-economical data, health condition, current medication, and medication knowledge and adherence. A total of 1192 Palestinian geriatrics participated in this study. The average participant age was 70.3 (SD=8.58) and ranged from 60-110 years. The sample comprised 659 (55.30%) females and 533 (44.70%) males. The majority of participants were retired or unemployed (83.60%), (81.90%) were non-smokers, and (61.80%) were married. Forty unique chronic diseases and conditions were reported. The mean number of diseases reported per participant was 2.33 (SD=1.68) and ranged from 0-11 conditions. These were divided into ten groups according to body systems. Cardiovascular, endocrine, and musculoskeletal conditions were the most reported. One hundred and seventy-five unique drugs were reported. The mean number of drugs per participant was 4.54 (SD= 2.83) and ranged from 1-17 drugs. The total number of drugs was strongly correlated with the total number of conditions $r(1192)= 0.628$, $p > 0.001$. Commonly prescribed therapeutic agents were aspirin (575 incidents), angiotensin- converting enzyme inhibitors (403), diuretics (409), metformin (323), paracetamol (270), and protein pump inhibitors (275). To the best of our knowledge, this is the first prevalence study of chronic diseases among Palestinian geriatrics which comprised a large number of participants from all districts in the West Bank and East Jerusalem. These results provide information and recommendations that should be considered by Palestinian physicians, pharmacists, health professional, and health policy makers.

Knowledge, attitude and Practices of Palestinian University Students Regarding Vitamin D

Vitamin D is one of the fat-soluble vitamins. Sun is the main source for this vitamin. It has a great importance in increasing intestinal absorption of calcium, magnesium, phosphate, and zinc. Vitamin D is vital for growth of bone and other multiple biological effects. Therefore its deficiency or imbalance will lead to major problems. This study had evaluated the level of knowledge, attitude, and practice regarding vitamin D (D-KAP) in a sample of Palestinian University students. A cross sectional study was performed. Data collection form distributed in a six Palestinian Universities with a total of 400 students had filled the data collection forms, during the period of January to March 2019. The Analysis was performed using (IBM SPSS) version 23 for Windows. Correlation tests were used to determine the association between the socio-demographic data and the D-KAP study. Completed forms which are received from 400 Palestinian university students had found that; 57.8% of the students had poor knowledge about vitamin D, while 42.2% of them had a good general knowledge, 53.8% were found to be unaware about vitamin D while 46.3% have good awareness. 57.5% had bad practice, while. 42.5% of the participants were found to have good practice. Our results indicated that the majority of the Palestinian university students had poor knowledge, bad attitude and negative practices toward vitamin D. Therefore, an important step should be addressed toward raising awareness and ensuring the right education and knowledge regarding vitamin D in the Palestinian community.

Public Views On The Role Of Pharmacists In Smoking Cessation

Smoking cessation is the key to reducing death cases resulted from extravagated smoking health complications. Self-smoking cessation, regardless of the smoking cessation method used, is proving to be difficult. Often, smokers seeking a consultation from a health care provider to successfully quit smoking. Pharmacists can play a pivotal role in providing counseling services to smokers enabling them to successfully quit. Accordingly this study was carried out to assess the public view of the role of a pharmacist in smoking cessation in Palestine. The survey was constructed using Google drive, printed and distributed to public between Dec 2018 – Feb-2019 using social media (electronic) or as a paper (manually). The survey consisted of 26 questions divided into three section namely demographics, public counseling preference, and perceptions. Data were analyzed using a statistical package of social sciences (SPSS) in version 17. A total of 136 completed questionnaires were collected. Preliminary findings demonstrated that 14.7% of the respondents were ‘selected’ a pharmacists as a choice for support in smoking cessation. However, only 16.2% of them ‘selected’ pharmacists for general counseling and 35.3% ‘selected’ pharmacists only if they seek pharmacological intervention. Public perception showed that 50% of respondents were ‘agreed’ that pharmacists are an integral part of the health care system like a physicians, they trusted the pharmacist for the information about smoking cessation and felt that pharmacists were a qualified health professional to provide smoking cessation. Public showed little interest in seeking smoking cessation counseling by pharmacists, this may be due to the fact that most Palestinian pharmacists have no pharmacological treatments that can help smokers quitting. Increasing the effectiveness of the role of pharmacists in smoking cessation requires extra efforts from health policy makers and pharmacists.

The average of skill in fixed prosthesis among dental student in university of Palestine, 2018-2019

Prostheses are used to rehabilitate mastication , improve esthetic and aid speech,Teeth require preparation to receive restorations, and these preparations must be based on fundamental principles from which basic criteria can be developed to help predict the success of prosthodontic treatment. Among the fundamental principles of tooth preparation is the retention and resistance forms. Both can be achieved by providing a geometrical shape for the prepared tooth with minimum occlusal convergence angles (Hinnara S,2017). The convergence angle (CA) of a tooth preparation is the combined angle made by opposing axial walls when measured against the vertical long axis of the tooth 1 Textbooks in fixed Prosthodontics often recommend a convergence angle of approximately 5° ($4-6^{\circ}$) as the ideal and a range of $4-14^{\circ}$ as acceptable (Journal of Dental Education,2013). Dental students of University of Palestine in previous years had difficulties in preparing teeth to achieve the generally recommended CA of less than 12° . This Experimental study aims to determine applicability of convergence angle among dental students in university of Palestine in 4th and 5 th level, and measures the reliability of evaluated by having two investigators draw the reference lines and measure the resulting convergence angles and by comparing the evaluation of supervisor with AutoCAD evaluation. One hundred full crown casts that will be selected randomly from preparations made by fourth and fifth year undergraduate students. Two images will be obtained from each of the 200 dies using canon 5D iii camera , one with the die placed B-L, and one M-D, then scaling the pictures to original scale. By means of Auto CAD 14 , lines will be drawn parallel to either the traced axial walls in the gingival one third of the buccal and lingual surfaces, or all proximal surfaces. These lines will be then extended until they met to form an angle above the image Convergence angles that will be measured using the software tools.

Assessment of exclusive breast feeding among lactating women visiting Al-Remal Primary health care clinic in Gaza Government, Palestine.

Breastfeeding has many health benefits for both the mother and infant. Breast milk contains all the nutrients an infant needs in the first six months of life. Breastfeeding protects against diarrhea and common childhood illnesses such as pneumonia, and may also have longer-term health benefits for the mother and child, such as reducing the risk of overweight and obesity in childhood and adolescence. Exclusive breastfeeding means that the infant receives only breast milk. No other liquids or solids are given – not even water – with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals or medicines. PMS study 2013 results show that exclusive breastfeeding in GS 55%, WB.52.9%, and in state of Palestine was 53.9%. The World Health Organization estimates that around 220,000 children could be saved every year with exclusive breastfeeding. The World Health Organization (WHO) recommended that Infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. The Global Strategy for Infant and Young Child Feeding describes the essential interventions to promote, protect and support breastfeeding. The importance of Exclusive Breastfeeding for infants to survive, grow and develop properly they require the right proportion of nutrients. Breast milk is rich in nutrients and anti-bodies and contains the right quantities of fat, sugar, water and protein. These nutrients are major pre-requisites to the health and survival of the baby. When a child is exclusively breast fed, their immune system is strengthened, enabling it to life-threatening illnesses like pneumonia and diarrhea amongst other infections. In fact, reports indicate that babies who are not breast fed for the first six months of life are 15 times more likely to die from Pneumonia compared to newborns that are breast fed exclusively for six months after birth.

Antibacterial Activity Of Plants Extract On Bacteria Species.

Spices have been used for many centuries by various cultures to enhance flavor and aroma of our foods as our ancestors have recognized the usage of spices in food preservation and in treatment of clinical ailments and there are several reports on development of antibiotic resistance in diverse bacterial pathogens (Gold, S.G. and Moellering, R.C., 1996). Gram negative bacterium such as *Escherichia coli* is present in human intestine and causes lower urinary tract infection, coleocystitis or septicemia (Benhassaini et al., 2003; Benjilali et al., 1986). Different antibiotics exercise their inhibitory activity on different pathogenic organisms (Chanda and Rakholiya, 2011). Multiple drug resistance in human pathogenic microorganisms has been developed due to indiscriminate use of commercial antimicrobial drugs commonly used in the treatment of infectious diseases. The development of antibiotic resistance is multifactorial, including the specific nature of the relationship of bacteria to antibiotics, the usage of antibacterial agent, host characteristics and environmental factors. This study has forced scientists to search for new antimicrobial substances from various sources as novel antimicrobial chemotherapeutic agents, but the cost production of synthetic drugs is high and they produce adverse effects compared to plant derived drugs (Abiramasundari et al., 2011).

The Relationship Between Contraceptive Hormones With Use Of Serum Lipid Profile & Electrolyte In Gaza Strip Women

Hormonal contraception means birth control method that acts on the endocrine system. Some studies in pre-menopausal women using OTCs have shown minimal lipid profile changes and another studies have shown alterations in the level of serum electrolyte when use injectable contraceptives. The current cross-sectional study aims to determine the relationship between contraceptive hormones use with serum lipid profile and serum electrolyte. The study will be conducted in Antenatal care unit of Primary health care centers of Ministry of Health in Gaza strip, where two hundred women at childbearing age who will visit the antenatal care during the period of study will be recruited by systematic random sampling process from these clinics of five Governorates of Gaza Strip. Prepared questionnaire will be used to collect the data of the study by interviewing the women by trained personnel on filling the questionnaire which will consist five domains (Socio-demographic information, Health condition, Gyno-obstetric condition, history of Contraceptive use and Laboratory investigation results about serum lipid profile and electrolytes). Blood sample will be taken from the women under supervision of the physician in the center and will be sent to the health laboratory of University of Palestine for examination. Follow Up records of women could be reviewed for confirmation some conditions related to health of women. All obtained data from questionnaire, blood lipid profile values, HDL/LDL ratio, LDL/HDL ratio and total cholesterol/HDL ratio will be entered and analyzed in (SPSS), the following tests will be applied: Frequency and distribution, Student T-test and Chi square test. The results of the current study may help in providing an indicators for potential risks of dyslipidemia or vascular disorders associated with contraceptive use among women in Gaza strip.

Distribution Of Cosmetic Dental Procedures Among University Students: Observational Cross Sectional Study In Gaza Strip

Cosmetic dentistry is a branch of dentistry which deals with any dental work that improves the appearance (though not necessarily the function) of a person's teeth, gums and/or bite. There are many techniques and options to treat teeth that are discolored, chipped, misshapen or missing. Common procedures include bleaching, bonding, crowns, veneers, reshaping, and contouring. These improvements are not always just cosmetic. Many of these treatments can improve oral problems, such as the bite. Due to a heightened awareness in cosmetic dentistry in the society and the rapidly increasing numbers in the dentistry graduates, it is rational to understand the best possible way to satisfy the society demand and fairly distribute the dental effort. The aim of this study will be to identify the distribution of cosmetic dental procedures among university students and their satisfaction with the cosmetic result in Gaza Strip. The study will be carried among adult students aged between 18-25 years old in Gaza strip universities (Al-Azhar university, Islamic University, Al-Aqsa University and University of Palestine). 320 students will be recruited randomly by stratified method according to students distribution in colleges. The survey will be conducted to gather information about the cosmetic dentistry prevalence and the tendency of university students to undergo cosmetic procedure by a self-administered questionnaire which will be distributed among university students. Upon results, we will be able to weigh the demands of our society to the need for more cosmetic dental clinics, and to distribute them geographically on the basis of the major concerns of each area. By having a background of the dental awareness of our society and what they are expecting from a dental treatment we will be able to deeply reinforce knowledge and application to fulfill patients desires.

Reduced Lipid Profile In Mothers Use Contraceptive By Herbal Extract In Gaza Strip

A contraceptive is a means and chemical substances used as a means to prevent pregnancy, which have many effects, including high body fats , In many cases, heart and blood diseases are not used, a contraceptive helps stimulate the patient's condition in these cases. A plant with high sweetening capacity due to its content of glycosides will be used to reduce body fats. The aim is to decrease lipid profile levels and lowering the risk factor in women use contraceptive drugs by herbal extracts .

Method:

Experimental study :The experimental in two way. the one way is concerned with plant for extraction , purification , and analysis the compound from herbal by Chromatographic Techniques.

Clinical trials: Test on the liver and kidney functions in the rabbits not pregnant, Test the rabbits breast feeding and affect the extract on the baby, Test lipid profile for rabbits 4 different times.

The Effect Of Ephedra Foeminea Extract As Antimicrobial And Anti-fungal

Drugs derived from natural sources play a significant role in the prevention and treatment of human diseases. In many developing countries, traditional medicine is one of the primary healthcare systems (Abdallah, 2011). And due to emergence of drug-resistant bacteria; It is essential to investigate newer drugs with lesser resistance especially the one that derived from natural resources like the plants. Ephedra is likely one of the oldest medicinal plants still currently in use. Antimicrobial and antifungal activity of some ephedra species has been noticed in recent years (ZHANG Ben-Mei et al,2018). The aim of the present study will be to study the effect of E. foeminea extracts as antimicrobial and antifungal. The current study is an experimental study, as in vitro Four bacteria, Staphylococcus aureus, Pseudomonas aeruginosa, MRSA, and Escherichia coli and two fungi, Klebsiella pneumoniae and Candida albicans will be used as test microorganisms. Maceration extraction technique (William P. Jones,2012) for the dried stem of E. foeminea will be used by methanol /water 90/10 for 2 days (Ali Parsaeimehr et al,2010). Three concentrations of extract will be used on 30 plate for each type of microorganism, at the University of Palestine laboratories. The antimicrobial activity will be tested by using plate methods, with a variable diameter of growth inhibition zones in most types of bacteria and the MIC values will be evaluated using the broth serial dilution method according to standard methods (CLSI,2012).

Cancer And Vitamin B17

Laetrile, amygdalin or vitamin b17 is a popular alternative for cancer a drug contains purified amygdalin, a compound found naturally in the seeds or kernels of many fruits. When it is ingested the body breaks down laetrile into three compounds: hydrogen cyanide, benzaldehyde and (1) , Hydrogen cyanide appears to be the primary anticancer ingredient in laetrile, There are four possible theories on how laetrile may fight cancer, Two theories state that cancer cells are rich in enzymes that convert laetrile into (2) ,(3) Since cyanide kills cells, this means that cancer cells may break down laetrile and kill the cancer, the third theory suggests that cancer is caused by a deficiency in vitamin B17 (amygdalin), The last theory proposes that hydrogen cyanide, which is made by breaking down laetrile, will make cancer cells more acidic and cause them to die, some studies were made to determine the effect of Laetrile on cancer, there were two animal studies, scientists treated a variety of cancers with laetrile alone or combined with an enzyme that helps activate it. In both studies, animals did not show any improvement after being treated with laetrile in addition, two studies were done on (4)(5) in one study,178 people with cancer were treated with laetrile(6) Scientists found that it had no significant effect on cancer. In fact, some people experienced cyanide poisoning, in the other study, six people with cancer were treated with laetrile. Scientists found that laetrile did not help treat cancer, as each individual's cancer continued to spread Lastly, a few test-tube studies have shown that laetrile may reduce the occurrence of tumors by suppressing genes that help them spread. However, there's no evidence that this same effect will occur in living human bodies.

Prevalence and Severity of Gingivitis in High School Students in Gaza Strip

In order to create a healthy society, we have to take care of the cornerstone of the health community, which mainly formed by the high school students. And one of the most prevalent of oral diseases that gets its roots early in childhood are periodontal diseases. As a consequence of these diseases, if they are not treated on time, the destructive processes are progress in both hard and soft tissues together with losing teeth. Gingivitis is one of these diseases. It involves the inflammation of only the gingiva and is reversible when appropriate treatment measures are used. The aim of this study is to assess the prevalence and severity of gingivitis in high school students in Gaza Strip in Palestine. Study Design: Cross-sectional, descriptive and analytical study. Population and sample: The population is the high school students in Gaza Strip governorates. Three hundred and fifty of high school students aged between 14 to 18 years will be recruited in this study. For periodontal examination, William's graduated periodontal will be used , Plaque Index (PI) by (Silness and Loe. 1964) to assess dental plaque, and Gingival Index (GI) by (Silness and Loe.1963) to assess gingival inflammation. Also a questionnaire will be used to collect the socio-demographic and health conditions of students. The data of study will be entered and analyzed by SPSS program and presented as frequency tables, different types of charts, and the relationship between gingivitis and other independent socio-demographic factors will be examined by significance statistical tests such as (t- tests, ANOVA, and Chi-square test).

Noora Saeed, Asma Awar, and Amneh Halabieh, Al-Quds University

Community Pharmacists Level Of Knowledge, Attitude And Patient Counseling Among COPD Patients And The Use Of Inhaler Devices .

chronic obstructive pulmonary disease (COPD) is one of the chronic inflammatory disease that are leading cause of morbidity and mortality worldwide and economic burden . The prevalence of COPD is mostly relevant to smoking and thus, smoking cessation is the most important option in the prevention and treatment of the disease. Community pharmacists are the ones in charge to deliver the best services in inhalation technique and medication adherence & counseling , which plays a main role in the management of COPD , since they are essential pre-requisites for achieving full therapeutic effect in patients. The purpose of this study was to research the level of knowledge of community pharmacists , attitude and patient counseling among COPD and the use of inhaler devices and to evaluate awareness of pharmacists about it. In February 2019 , a questionnaire for assessment of knowledge of COPD Palestinian pharmacists , (n=300).

Doa Al Najjar, Palestine University/Gaza

Assessment Of Factors Associated With Obesity Among Gaza Secondary Schools Female Students, Palestine

Globally, obesity has increased among children, adolescents and adults; at least 2.8 million people die each year worldwide as a result of being overweight or obese, with mortality rates being proportional to the degree of obesity. Younger age groups are affected, as demonstrated in nearly one-third of the American college students who are overweight or obese. According to the WHO, some 30–80% of adults and about 20% of children and adolescents in Europe are overweight. The situation in Asia is better, with lower prevalence's of obesity in Thailand and China. With obesity becoming an overwhelming global public health issue, there are a multitude of obesity-associated diseases, including heart disease, diabetes, hypertension and certain cancers. Although obesity is less

prominently associated with morbidity in adolescence, it is nevertheless a strong precursor of obesity and related morbidity in adulthood. Adolescence has been identified as a critical period in the development of overweight/obesity patterns, with the transition to college being another potentially important period of risk for weight increase among young adults. Individual behaviors and environmental factors can contribute to excess caloric intake and inadequate amounts of physical activity. The current high rates of obesity have been attributed to, in part, increased snacking and eating away from home, larger portion sizes, greater exposure to food advertising, limited access to physical activity opportunities, and labor-saving technological advances (Duffey & Popkin, 2011; Piernas & Popkin, 2011; Powell et al., 2011; Sallis & Glanz, 2009). Childhood and adolescent overweight and obesity have increased substantially in the past 2 decades, raising concerns about the physical and psychosocial consequences of childhood obesity. In Palestine, the prevalence of obesity has been increasing for decades for both males and females in all age groups, it's about 18% in adult males and 26% in adult females .

Rawan Nassar, Palestine University /Gaza

Assessment of exclusive breast feeding among lactating women visiting Al-Remal Primary health care clinic in Gaza Government, Palestine

Breastfeeding has many health benefits for both the mother and infant. Breast milk contains all the nutrients an infant needs in the first six months of life. Breastfeeding protects against diarrhea and common childhood illnesses such as pneumonia, and may also have longer-term health benefits for the mother and child, such as reducing the risk of overweight and obesity in childhood and adolescence. Exclusive breastfeeding means that the infant receives only breast milk. No other liquids or solids are given – not even water – with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals or medicines. PMS study 2013 results show that exclusive breastfeeding in GS 55%, WB.52.9%, and in state of Palestine was 53.9%. The World Health Organization estimates

that around 220,000 children could be saved every year with exclusive breastfeeding. The World Health Organization (WHO) recommended that Infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. The Global Strategy for Infant and Young Child Feeding describes the essential interventions to promote, protect and support breastfeeding. The importance of Exclusive Breastfeeding for infants to survive, grow and develop properly they require the right proportion of nutrients. Breast milk is rich in nutrients and anti-bodies and contains the right quantities of fat, sugar, water and protein. These nutrients are major pre-requisites to the health and survival of the baby. When a child is exclusively breast fed, their immune system is strengthened, enabling it to life-threatening illnesses like pneumonia and diarrhea amongst other infections. In fact, reports indicate that babies who are not breast fed for the first six months of life are 15 times more likely to die from Pneumonia compared to newborns that are breast fed exclusively for six months after birth.

Amal Khalifa and Kafa Ghaben, Palestine University/Gaza

Association between Iron deficiency among school age students aged 6-12 y and their learning abilities in Rafah and Biet Lahya cities, Palestine.

Zinc deficiency are believed to be widespread especially in low income countries like Palestine. Approximately, 80 % of school age children have zinc deficiency, respectively. It noticed that micronutrients deficiencies further exacerbate health and learning through most insidiously growth faltering, impaired intellectual development that can significantly reduce learning abilities. The exact burden of zinc deficiency among primary school children and their impacts on learning abilities is not known. Thus, there is ultimate need to figure out the association between zinc deficiency and impaired intellectual development and reduction learning abilities. This study therefore aims to determine the prevalence of zinc deficiency among primary school children in a urban setting in North and South of Gaza Strip and find association with learning abilities as well as identifying other possible contributing factors. A case-control study

will be conducted, 120 subjects of school-age students will be recruited, divided into a case group where subjects characterized by low zinc serum levels, meanwhile, control group characterized by normal zinc serum levels. Data on anthropometrics measurements, biochemical analysis on zinc serum levels, and measuring the learning abilities via school exams scores. All obtained data will be analyzed via SPSS version 22.

Rana Wadi, Palestine University/Gaza

Dietary intake, eating behaviors and food insecurity among obese Palestinians children & adolescents enrolled in Gaza Schools

The double burden of malnutrition can be clearly shown among food insecure children, they not only show micronutrients deficiency, but also, they showed increased obesity rates. There are many factors which influence obesity incidence among these age group including dietary intakes, eating habits and household food insecurity. Many factors contributes to childhood and adolescent obesity, finding the correlation between dietary habits, and eating behaviors and linking them with household food insecurity may contributes in figuring a clearer understanding of obesity onset among this age group. Exploring the intermediate causes and associated factors which contributes in increasing incidences of obesity, and which may help lowering the burden of malnutrition among children and adolescents. This is a cross-sectional study, 130 obese children and adolescents who enrolled in Gaza schools will be recruited to measure their dietary habits, eating behaviors and household food insecurity, a well-semi-structured questionnaire will be used, data obtained will be analyzed using SPSS version 20, consent forms will be obtained from fathers and mothers.

Lutfi Atrash, Samah Ayyad, Rula Odeh, Ahmad Tuqan, Al Quds University

CleanEcare

CleanEcare is the title of our presentation it's a new idea that uses the electricity to clean and sterilized the medical clothes, to create a better medical atmosphere and to reduce dangerous illnesses. To make this Idea accurate and safety for use we need to start working on research, we started from Sep 2018 working in Microbiologist and Engineering department and make experiment in both sides. Our research based on the microbiologist part especially the effect of electricity on Bacteria and how it affects to kill the microorganisms. We have made many experiment on bacteria that on the cloth before and after electricity, we have a lot of result some of them Logical but most illogical so we start doing more and more to have better result.

Hammam Al Hersh, Hadeel Saraheen, Polytechnique University

Smart Irrigation System Based On Solar Cells

An effective irrigation system will be designed to contribute to the low cost of energy using solar energy from irrigation systems in arable and desert lands in an environmentally friendly manner. The project involves the construction of an independent network system that is fully solar-powered. The DC pump is operated through the energy produced by the solar cells to pump water from the water source (Well or groundwater) to a high reservoir, for use in the process of irrigating the plants by the valve on the outlet of the tank, Where the valve is connected using Arduino and humidity and heat sensors to control the flow of water from the reservoir to the field. Batteries are used to store day-to-day energy for use in controller and sensor feeds or in small DC loads.

Ahmed Abu Sabha, University of Palestine/Gaza

Performance of Hot Mix Asphalt Concrete Produced with Waste Glass Powder Filler

Previous studies have revealed the beneficial effects of adding Waste Glass Powder Filler (WGPF) to Bitumen Emulsion Mixtures (BEMs). These effects were confirmed for some dense graded mixtures based on recipes currently used for hot asphalt concrete mix and being considered for usage in BEMs. On the other hand, Hot Rolled Asphalt (HRA) which is a gap graded mixture is extensively used for surfacing major roads because it provides a dense, impervious layer, resulting in a weather resistance durable surface able to endure the demands of modern traffic loads and providing good resistance to fatigue cracking. This laboratory study attends to study the performance of asphalt concrete mix, where some of fractional conventional mineral filler is substituted with different percentages of crashed glass materials of 25%, 50%, 75% and 100 %. The specimens were compacted by 75 blows on each side and left to cool at room temperature for 24 hours. Marshall stability and flow tests were performed on each specimen, where the cylindrical specimens were placed in water path at 60 °C for 30 to 40 minutes then compressed on the lateral surface at constant rate of 2 inch/min. (50.8mm/min.) until the maximum load (failure) is reached. The study concluded that satisfactory performance of upper asphalt pavement layers can be achieved by adding waste glass powder with 50% of the conventional mineral filler.

Heba Wafi, University of Palestine/Gaza

Traditional Architectural Techniques And Their Application In Contemporary Architecture.

This study seeks to take advantage of traditional architectural techniques and their application in contemporary architecture. Since ancient times (see, for example, Hoben and Guillard, 1994), man interacted with the surrounding environment by looking for mechanisms to meet his needs, working on building techniques (Fayez, 2009), which was based primar-

ily on the use of local raw materials as construction materials . This is due to the fact that these materials provide him thermal comfort at low cost in both climates, hot and cold (Abboud, 2014). This study shows the environmental treatments, as an example of traditional architecture techniques, to develop them as well as employ them in contemporary architectural design, in line with the latter's requirements as an architectural style. This study shows the importance of traditional construction techniques using local building materials, such as sand, as well as the positive or negative impact of these materials on contemporary architectural design.

Moneer Al Khoudary, Yasser Ftieha, Talat Al Hasaynea and Abdulla Matar, University of Palestine/Gaza

Porous Concrete Caps for Infiltration Boreholes

The municipalities of the Gaza Strip, which have implemented the project for the absorption of underground water with rain water, which aims to exploit as much water as possible on the Gaza Strip to feed ground water, which suffer significantly from the increase in pollution, carried out some of the drilling projects on the ground And the face of the problem of early blockage of its internal components, which need to be maintained periodically to be blocked by the sediments carried with running water by the structure of the system, which is the two containers flowing water to the first container and then to the second container located above the Of the separation wall between the two containers. This practical idea is intended to increase the sedimentation process by introducing the liquid in several stages, but this method failed due to irregular and turbulent flow to the inside, thus moving the sediment beneath the first container. In this project we aim to solve the problem of obstruction and increase the amount of injection in the groundwater, and the work of a more efficient and effective system and reduce the high cost and periodic maintenance. This is done by a new design which is only one container. The water is directly connected to it. We placed a porous mortar on the top of the absorbent hole in the cylindrical shape, which is similar to the head

cap, which has an external diameter and an internal diameter that produces a certain thickness capable of filtering the water passing through it. The lateral water pressure and the reverse washing process have a special design method. Therefore, we designed a project that simulates the idea implemented in the project in fact through simple tools and equipment expressed the desired goal, and we used a concrete with a particular design allows access to water through which the concrete called water, and we added rainwater deposits water reservoirs used in the operation of the system. Since the concrete allowed the entry of a small proportion of the very soft sediments exist and did not allow the passage of sediments of large size and the system was suitable to solve this problem and we got very good results where the proportion of sediments in the water before entering the filtering process is much greater after entering the process of filtering and exit.

Tamer Al Yazory, University of Palestine/Gaza

Field Training Management System

The project provides services to help the students and university for the administration, documentation, tracking, and reporting of instructor-led-training programs. FTMS is focused on back-office processes and are considered a tool for corporate training administrators as such, a training management system acts as a central enterprise resource planning software specific to the training industry. They can be complemented by other learning technologies such as a learning management system. Is a software application for the administration, documentation, tracking, and reporting of instructor-led-training programs. FTMS is focus on back-office processes and are considered a tool for corporate training administrators such as a training management system acts as a central enterprise resource planning, software specific to the training industry. They can be complemented by other learning technologies such as a learning management system. During the period of university education, and in some cases in school, students in certain disciplines, such as engineering, medicine, etc., need field training. Part of the period of education in the field is considered a requirement for graduation and a certificate of study. In addition, the government in the state to train students

before graduation. This training is of paramount importance; otherwise, it would not be a prerequisite for graduation from university. Many students in the Gaza Strip always look to find companies to training when graduation. They always want the lowest possible time to find the companies to training. On the other side ,they use traditional approaches to announce training companies ,also use the hardcopy to evaluate the student. Several trainees and companies recently began to use social media to search of training site. Accordingly ,it would be better for both students and university to work through an organized and well-known channel to meet each other; this channel should be easy to reach and inexpensive.

■ American School of Palestine

Yasmin Attili, Omar Jaber, and Tala Musa, American School of Palestine

Determining the Impact of the ASP Health Club's Non-Smoking Initiative Awareness Campaign on Elementary Students' Exposure to Second-Hand Smoking

The purpose of this study was to determine whether the ASP Heart Health Club awareness campaigns had an effect on children's exposure to second-hand smoke or not. The sample we have chosen was a random sample, with a number of approximately two hundred participants composed of both genders. The study targeted students from the age of eight through ten. The study was a qualitative one, including a question in the form of a survey about students' lifestyle, specifically their exposure to second hand smoke at home. The data was collected recorded and analyzed thrice over the course of the school year. The first data point was collected prior to the initiation of the campaign and twice more after the campaign. It seems that our awareness campaign has had a slight impact on the children's behavior regarding those who smoke around them. More research needs to be done on educating children about the negative effects of second-hand smoke and finding ways for children to influence the adults around them about healthy choices for their households and the public places where there may be smoking present.

Determining the Impact of the ASP Health Club's Sports Initiative Awareness Campaign on Elementary Students' Physical Activity Habits.

Ever increasing sedentary lifestyles have brought on many issues in the health and wellness of school aged children, particularly those in the third grade through fifth grade level. According to a literature review by the Dominican University of California, awareness is directly associated with an increase in fitness levels; the relation between them a positive one. The purpose of this study was to determine if the awareness program at the American School of Palestine had any tangible effects on its students. It sought to measure the correlation between the school's activities in the awareness program conducted by members of the ASP Heart Health Club and two of its students' daily habits: time spent on electronic devices, and time spent on physical activities. The data was gathered from the subjects by means of a questionnaire and clinical charts recording the students' height and weight in order to calculate their individual BMIs. Participants in this study included all students of the third grade through the fifth grade level, featuring both genders, and amounting to approximately two hundred individuals. The data was collected thrice, recorded and analyzed for the presence of outliers which were removed. Our data indicated that we were able to decrease the amount of time students spent on electronic devices and increase the time spent on physical activity at the fourth grade level. There seemed to be a minimal or negative effect with the third and fifth grade students on average. We believe that a longer study duration and a more effective campaign program may lead to better awareness of the importance of maintaining a healthy and fit lifestyle.

Determining the Impact of the ASP Health Club's Nutrition Initiative Awareness Campaign on Elementary Students' Eating Habits

Recent modernization is day by day dominating our life more than ever before. That modernization impacts a lot of aspects, and one of the most crucial aspects is human nutrition. It impacts all ages; however, specifically, those in third grade through fifth grade. The purpose of this study was to measure the effectiveness and impact of the ASP Heart Health Club awareness campaigns on the students' daily eating habits that are affected by modern-day nutrition styles and to know the extent to which those little ones may be at risk and help them. We collected information including: weight, height, and BMI from approximately two hundred third through fifth graders of both genders along with a survey containing questions regarding their daily eating habits. The questions were about the number of fruits eaten in a day, and whether or not junk food was eaten also. The data was collected, recorded and analyzed thrice using a clinical chart to allot the results precisely. The data was processed for the presence of outliers, which were statistically removed. Based on the data collected, we found a slight increase the number of fruits and vegetables eaten on a daily basis, but no significant reduction in the amount of junk food eaten by the students. According to similar studies, these types of campaigns that aim to provide healthier food alternatives for kids have succeeded almost everywhere especially because those grades are the ones mostly at risk to develop unhealthy eating habits. We believe that longer study duration and a more effective campaign program may lead to better awareness of the importance of maintaining a healthy lifestyle and making better nutritional choices.

أثر إستراتيجية المشروع على المستوى التحصيلي لدى طلبة الصف الثاني الأساسي في مدرسة السواحة الشرقية الأساسية في مديرية ضواحي القدس

هدفت الدراسة إلى التعرف على أثر استخدام طريقة المشروع في التعليم للصف الثاني الأساسي في مادة التنشئة الوطنية في مدرسة السواحة الأساسية المختلطة في مديرية ضواحي القدس للعام الدراسي (2016-2017). كما هدفت إلى التعرف على الفروق في استخدام طريقة المشروع على المستوى التحصيلي للطلبة بين الذكور والإناث. وقد تكون مجتمع الدراسة من المجموعة التجريبية ويبلغ عددهم 30 طالب وطالبة، والمجموعة الضابطة ويبلغ عددهم 33 طالب وطالبة. وقامت الباحثة بالتنسيق مع مديرة المدرسة ومعلمة الصف لإجراءات الدراسة حيث بدأت بتحليل محتوى وحدة «حيوانات في بلاد» في المادة وقدمت القراءات العلمية حول الموضوع باستخدام الصور والأفلام القصيرة ثم خططت مجموعة من الأنشطة التي سيقوم بها الطلبة ونسقت إجراءات الزيارة الميدانية مع مديرة المدرسة والاستاذ المشرف ووزارة التربية والتعليم. وفي نهاية المشروع تم إنجاز مجموعة من الأعمال الفنية وتم عرضها في معرض صغير في الصف منتج من قبل الطلبة حيث عبروا عن تعلمهم ورأيهم حول ما انتجوه وحول طريقة التعليم. واستخدمت الباحثة المنهج التجريبي. والاختبار التحصيلي هو أداة القياس وتم التأكد من صدق الأداة باستخدام صدق المحكمين، وكذلك التأكد من ثبات الأداة باستخدام معادلة كرونباخ ألفا حيث بلغت القيمة الكلية للثبات (0,65) وهي درجة مرتفعة، وقد تمت المعالجة الإحصائية للبيانات باستخراج المتوسطات الحسابية والانحرافات المعيارية، اختبار «ت»، اختبار وذلك باستخدام الرزم الإحصائية (SPSS). وقد توصلت إلى النتائج الآتية

* وجود فروق ذات دلالة إحصائية عند المستوى ($\alpha \geq 0.05$) بين مستوى التحصيل لدى المجموعة التجريبية والضابطة حيث كانت الدلالة الإحصائية > 0.05 وهي دالة إحصائية، وبذلك رفضت الفرضية الصفرية. فقد كانت الفروق لصالح طريقة المشروع، والتي كان متوسط تحصيل الطلبة فيها أعلى شيء بمتوسط حسابي (55.34)، مقابل (35.66) للمجموعة التي تم تدريسها بالطريقة التقليدية. * عدم وجود فروق ذات دلالة إحصائية التجريبية بين مستوى التحصيل لدى المجموعة التجريبية والضابطة حسب متغير الجنس، حيث كانت الدلالة الإحصائية < 0.05 ، وهي غير دالة إحصائية، وبذلك قبلت الفرضية الصفرية. وأوصت الباحثة بالعمل من قبل وزارة التربية

والتعليم بتعميق مفهوم التعلم القائم على المشاريع لدى معلمي المرحلة الأساسية الدنيا من خلال إجراء دورات تدريبية علمية هادفة للمعلمين حول توظيف تلك الطريقة في التعليم. وتوفير الأدوات والتقنيات اللازمة في المدارس التي تسهل طريقة التعلم القائم على المشاريع. وإجراء دراسات مماثلة وتجريبية خصوصا للمرحلة الأساسية الدنيا.