Conference Proceedings

2020 – 2nd International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 06-07 March, Melbourne

06-07 March 2020

CONFERENCE VENUE

Victoria University City Convention Centre, City Flinders Campus, Melbourne, Australia

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Preface:

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Our mission is to make continuous efforts in transforming the lives of people around the world through education, application of research & innovative ideas.
KEYNOTE SPEAKER

Dr. W. G. Samanthi Konarasinghe

Doctor of Philosophy (Ph.D.), Institution: PGIA, University of Peradeniya, Sri Lanka

Topic: Use and Misuse of Statistics in Life-Sciences & Healthcare

Dr. Samanthi Konarasinghe, an award-winning Scientist has served as a Statistical Consultant and a Senior Lecturer for more than two decades. She has developed various Mathematical and Statistical techniques. Among them, the “Sama Circular Model” is highly valued and applied in various fields of research. She was awarded the prestigious “IMRF Best Scientist Award” from India for valuing her contribution to the field of Statistics. She has shared her knowledge as a; keynote speaker, invited speaker, guest lecturer, guest of honor and chief guest in Thailand, Malaysia, Singapore, India, and Australia. She is a member of; American Statistical Association (ASA), Institute of Applied Statistics, Sri Lanka (IASSL) and National Science Foundation (NSF), Sri Lanka. Also an Editorial board member of the American Journal of Theoretical And Applied Statistics (AJTAS). Her educational background is; Doctor of Philosophy (Ph.D. in Statistics), Master of Science (MSc in Applied Statistics), Master of Business Administration (MBA), PG Diploma (Industrial Mathematics) and Bachelor of Science (BSc-Mathematics). Most interestingly, she is not only a Scientist but also an Artist; a Violinist, Painter, Writer, Drama producer, and Actress. Her scientific and artistic lives are intertwined.
PRESENTERS

Be Aware of this Crab, Save Yourself from Cancer

Noreena Aslam
MBBS, UCMD, UOL, University of Lahore, Kharian City, Punjab, Pakistan

Abstract

Background: Breast cancer is malignancy of breast tissue and is the second leading cause of death in women. One out of every 37th female die due to breast cancer. Its incidence is increasing in Pakistan with highest mortality in Asian countries.

Aims and objectives: The aim of this study was to assess the knowledge, practice and attitude of women about risk factors, early warning signs and breast self-examination lying within reproductive age group (14-49) years. The settings for conducting this study were teaching hospitals of University of Lahore.

Materials and methods: A cross sectional descriptive study was conducted on a sample size of total 200 females. They were interviewed using a self-administered questionnaire. The data was then analyzed by SPSS version 21.

Results: Research conducted on 200 females of reproductive age yielded that 89.5% women knew that BC is more common in females, 74.5% marked increasing age as a significant risk factor, 65.5% women also thought that smoking is also a risk factor, 75.5% thought that lump or thickening of skin in the underarm area is an early sign, only 25% had the knowledge about breast reconstruction, 57% knew about breast self-examination and 44% were aware of the available treatment options of breast cancer.

Conclusions: From our research we have concluded that the knowledge of women about breast cancer was not adequate and hence more awareness must be created among women regarding breast cancer. For this purpose seminars should be conducted for the general population, awareness campaigns should be initiated on mass level and the platform of social as well as print media should also be utilized for instigating breast cancer awareness among women of reproductive age.

Keywords: Breast Cancer, Risk Factors, Signs, Awareness, Knowledge, Pakistan

Tension between Jews and Arabs Increases Risk to Health: Variance in Heart Rate Variability among Jewish and Muslim Women in Afula and Nazareth

Saadi Diana
Porter School of the Environmental and Earth Sciences, the Faculty of Exact Sciences, Tel Aviv University

Agay-Shay Keren
The Azrieli Faculty of Medicine, Bar Ilan University, Zefat, Israel

Tirosh Emanuel
Bnei Zion Medical Center (emeritus), The Rappaport Family Faculty of Medicine, The Technion, Israel Institute of Technology, Haifa, Israel

Schnell Izhak
Porter School of the Environmental and Earth Sciences, the Faculty of Exact Sciences, Tel Aviv University

This research was supported by the Ministry of Science & Technology, Israel, the Porter School of the Environment and Earth Sciences, the, Department of Environmental studies, the Faculty of Exact Sciences, Tel Aviv University, Foundation of Smaller and Winikob for outstanding environmental character collaboration, the Jewish National Fund L’Israel, and Tami Stienmetz for Peace Research, Tel Aviv University.

Abstract
Studies show that ethnic groups' autonomous nervous system respond to exposure to discrimination. We test responses of Muslim and Jewish women to exposure to alien ethnic environments increasing by thus risk to health.

In field experiment study, We tested 72 young and healthy Muslim and Jewish women measuring their HRV in intra and inter-ethnic park, town center and residential neighborhood in an Arab and a Jewish adjacent towns. The subjects stayed half an hour in each of the six environments contributing eight HRV measurements in each environment and measurements of exposure to thermal load, CO, and noise. Levels of HRV were higher among Jewish women in their intra-ethnic environments.

For both groups' levels of HRV increased once crossing ethnic boundaries. However, some ethnic differences emerged: Muslim experienced higher increase in LF/HF while crossing boundaries. Muslim experienced higher risk for health in residential neighborhoods than in town centers. Jewish women experienced higher levels of risk for health in town centers relative to residential neighborhoods. Muslim and Jewish women differently activated their sympathetic and parasympathetic systems in response to environmental exposures. Higher correlations between HF and LF among Muslims means that the sympathetic and the parasympathetic tones are working in more harmony among Muslim women helping them better adopt to environmental challenges. In conclusion, there are ethnic differences in response to crossing alien ethnic boundaries. A further study is needed to understand the causes of these differences, whether they are associated with differences in lifestyle, discrimination and physiology.

Muhammad Ginsau
ERCICRLSH2002057

Examination of Blood for Hepatitis B Virus (HBV) and possible Transmission by Mosquito (Aedes Aegypti)

Muhammad Ginsau
Department of Science Laboratory Technology, Jigawa State Polytechnic, Dutse, Nigeria

Abstract

Hepatitis is an inflammation of the liver tissue and its presentations ranges from complete asymptomatic to severe liver failure. Among others, the causes include viruses and parasites. In 2005, chronic hepatitis B infected 343 million people worldwide. Blood tests and clinical picture are sufficient for diagnosis. Seroepidemiological survey of volunteers was conducted. Three volunteers out of 100 were found infected. Aedes aegypti were artificially fed with positive blood samples and were allowed to bite rabbits. The rabbits presented geophagy, loss of appetite, thinning, loss of fur and inflammation of liver. This study provides an evidence for transmission of HBV through mosquito. However, this study is limited to transmission to rabbit. A study of transmission to human is recommended.

Keywords: Blood, Examination, Hepatitis B, Transmission, Virus

Abrar Ahmed
ERCICRLSH2002062

Formulation and Characterization of Poly-herbal Cream; Probing Anti-Melasma Potential

Abrar Ahmed
Punjab University College of Pharmacy, University of the Punjab, Lahore, Pakistan

Abstract

Introduction: Melasma is acquired chronic recurrent hyper pigmentary disorder characterized by symmetrically distributed hyper pigmented patches. It is characteristic pattern of facial hyperpigmentation which is usually marginated, mask like distribution that occurs on the cheeks, forehead, and chin. Objective: Multiple treatment strategies include hydroquinone, azelaic acid, kojic acid, retinoids, topical steroids, glycolic acid, mequinol, arbutin. The most well-known combination contains hydroquinone, which is a topical steroid, and retinoic acid. However its prolonged usage may lead to untoward effects like depigmentation and exogenous ochronosis. Azelaic acid inhibits DNA synthesis and mitochondrial enzymes, thereby producing direct cytotoxic effects toward the abnormal melanocyte. The journey for the search of safer alternative results in the development of potential poly-herbal preparation for melasma with other potential effects. Main objective of the project is to provide safer and effective formulation to the patient with melasma or hyper pigmentation, with minimum side effects. Also characterizing the dosage form and examining its clinical sufficiency. Methodology: This research is aimed to formulate stable water in oil (w/o) cream by using ethanolic extracts of Glycyrrhiza glabra 2%, Aloe vera 4%, Allium cepa 1%, Citrus limon1% as active component.
of the formulation. Base material is free from other active ingredient. Peppermint oil and rose oil is added for fragrance. It is tested on the basis of organoleptic properties, pH, viscosity, conductivity. Rheological properties of placebo formulation and final formulation showed that viscosity was increased by the addition of active ingredients. Results and Discussion: Formulation showed no irritancy on albino mice in patch test. Open label single arm study is done on human volunteers with N=35 participants. 57% participants had melasma pigmentation all over the face which showed better results within 4 weeks. 14% as excellent and 51% marked it as a good product. However 82% participants have no adverse reaction. Hence it can be concluded that it is safe and effective formulation.

Keywords: Melasma, Pigmentation, Poly-Herbal, Glycyrrhiza Glabra, Aloe Vera, Allium Cepa, Citrus Limon

Karl Mokake
ERCICRLSH2002063

Business Ethics in the Scenario of Corporate Governance
Karl Mokake
(Humanities), University of Fernando Pessoa - Portugal and (Management) Institute Polytechnic of Braganca, Porto, Portugal

Abstract
INTRODUCTION: Business morals is a sort of applied morals. It is the use of good or moral standards to business. The term morals have its beginning from the Greek word "ethos", which means character or custom-the distinctive character, conclusion, moral nature, or managing convictions of an individual, gathering, or establishment. Morals is a lot of standards or guidelines of human direct that administer the conduct of people or association. Morals can be characterized as the order managing moral obligations and commitment, and clarification what is great or not useful for other people and for us. Morals is the investigation of good choices that are made by us throughout execution of our obligations. Morals is the investigation of attributes of ethics and it likewise manages the ethical decisions that are made in association with others. Business morals contains the standards and measures that guide conduct in the lead of business. Organizations must adjust their craving to boost benefits against the requirements of the partners. Keeping up this equalization frequently requires tradeoffs. To address these one of a kind parts of organizations, rules-verbalized and understood are created to control the organizations to win benefits without hurting people or society. Morals is worried about truth and equity, concerning an assortment of angles like the desires for society, reasonable challenge, advertising, social duties and corporate conduct.

Isaac Kofi Dasilveira
ERCICRLSH2002068

Human Resource Management Practices and Employee Turnover Intentions Nexus: Does the Mediating Role of Job Satisfaction Matter?
Isaac Kofi Dasilveira
Department of Business Administration, School of Management, Jiangsu University, P.R. China
Yang Jing Zhao
Department of Business Administration, School of Management, Jiangsu University, P.R. China
Isaac Adjei Mensah
Institute of Applied Systems and Analysis (IASA), Jiangsu University, P.R. China
Alfred Quarcoo
Institute of Applied Systems and Analysis (IASA), Jiangsu University, P.R. China

Abstract
This current paper explores the nexus amid human resource management practices and employee turnover intentions in private organizations in an evolving economy, Ghana. Particularly, the study is centered on the mediating role of job satisfaction within the relationship between human resource management and employee turnover intentions. The study depended solely on a survey approach through purposive and simple random sampling techniques. The survey was conducted among the top ten private organizations in Ghana via purposive sampling approach whereas the simple random sampling method was used to select 20 respondents from each selected firm. A total of 200 questionnaires were administered of 186
were valid to be used representing a response rate of 93%. The application of a path analysis approach showed that; (i) both HRM practices and job satisfaction have a significant negative effect on employee turnover intentions, (ii) there is a significant positive relationship between HRM practices and job satisfaction, (iii) job satisfaction efficiently mediates the relationship between HRM practices and employee turnover intentions. The results from the analysis statistically indicates that leaders in various private organizations must well to develop a strategy by which they can improve management practices to enhance employee job satisfaction, which will then reduce or have a negative effect on employee turnover intensions. We thus conclude that, job satisfaction really matters within the affiliation between HRM practices and employee turn intentions.

Keywords: Human Resource Management, Employee Turnover Intentions, Job Satisfaction, Path Analysis, Ghana

Gestational Diabetes Mellitus - A Public Health Concern in Rural Communities of Nepal

Satya Narayan Yadav
Ph.D. Scholar, ASEAN Institute for Health Development, Mahidol University Thailand

Abstract

Introduction: Gestational Diabetes Mellitus (GDM) is in increasing trend recently. It is associated with adverse effects on both mother and fetus. Thus, diagnosis of GDM is an important public health issue. This study aimed to determine the frequency of gestational diabetes mellitus in three rural districts of Nepal.

Objective: To assess the Gestational Diabetic Mellitus of pregnant mothers at selected regions of Nepal.

Method: A hospital based study was conducted in three districts representing mountain, hill and Terain belts of Nepal during the period of July 2015 to June 2017. A total of 564 pregnant women were interviewed and tested for blood glucose as per WHO guideline.

Result: In Nepal, only 2.5% of pregnant women had GDM according to WHO criteria while it was 6.6% according to IADPSG criteria. Overall mean blood glucose among pregnant women was 72.1 (fasting) and 95.8 (after 2 hrs of 75 gm glucose intake) in which it was 62.8, and 75.1 in Sindhuli 78.7 and 88.9 in Mahottari and 98.3 and 99.3 in Ramechhap districts respectively. Pregnant women with increased age were significantly at high risk of having GDM than those of younger women (p=0.04). There were non-significant differences in GDM by District, Ethnic group and family history of DM.

Conclusion: Gestational diabetes in the rural areas of Nepal is variable with two different criterias (2.5% vs 6.56%). Increasing age was an important influencing factor. Special attention should be given on women with increasing age. There was no significant difference in prevalence of GDM in three Eco belts of Nepal despite of altitude and cultural variability.

Keywords: Gestational Diabetes Mellitus; Risk Factors; Rural Nepalese Women

Traditional Indian Herbal Plants Extract Used for the Management of Diabetes Mellitus by Improved Carbohydrate Metabolizing Enzymes

Dr. R. Kavitha
Associate Professor, Department of Biotechnology, Periyar University PG Extension Centre, Dharmapur – 636 701, Tamil Nadu, India

Abstract

Objective: Trichosanthes dioica Roxb. and Clitoria ternatea Linn. are used as a traditional remedy for different ailments, including diabetes mellitus. The present work was undertaken to investigate the bioactive compounds present and to study the effect of individual and combined ethanolic extracts of these two Indian medicinal plants on blood glucose level and the activities of some carbohydrate metabolizing enzymes in liver of normal and STZ-induced diabetic rats.

Methods: Sixty six healthy male adult Wistar Albino rats were randomly divided into eleven groups (n=6) were assigned into normal and diabetic groups (Group I to XI). Diabetes was induced in experimental animals (Group II to XI) by single dose intraperitoneal administration of STZ (60 mg/kg body weight), on confirming the diabetes after 48 h of injection. Group I and Group II which served as non-diabetic and diabetic controls respectively. The other diabetic groups (Group III to Group X) were treated with individual and combined ethanolic extracts of
leaf and fruit of T. dioica and leaf of C. ternatea at the doses of 200 and 400 mg/kg of body weight were administrated orally at a single dose per day for a period of 28 consecutive days. Group XI was treated with glibenclamide at a dose of 600 μg/kg body weight, a standard oral hypoglycemic drug used as a reference drug for comparison. Oral glucose tolerance test (OGTT) was evaluated at 30, 60, 120 and 180 min, respectively. After the expiration of the study, the animals were sacrificed and collected serum for measuring blood glucose and liver for estimating glycogen and carbohydrate metabolizing enzymes.

Khaliyd Mohammed Al Jubran
ERCICRLSH2002060

+  

Waheed Ahmad Baig
ERCICRLSH2002059

+ Tariq Chaudhry
ERCICRLSH2002060

Synergistic Anti-Cancer Effects of Nigella Sativa Seed Oil and Conventional Cytotoxic Agent against Human Breast Cancer

Khalid Mohammed Al Jubran
Assistant Professor, Prince Sultan Military College of Health Sciences, Dhahran, Saudi Arabia

Kholoud Alwosaibai
Oncology & Immunology Research Scientist, King Fahd Specialist Hospital, Dammam, Saudi Arabia

Waheed Ahmad Baig
Lecturer, Prince Sultan Military College of Health Sciences, Dhahran, Saudi Arabia

Tariq Chaudhry
Assistant Professor (Former), Prince Sultan Military College of Health Sciences, Dhahran, Saudi Arabia

Mahmood Akhtar
Sr. Principal Scientist, King Fahd Specialist Hospital, Dammam, Saudi Arabia

Abstract

Breast cancer is the most frequently diagnosed invasive non-skin malignancy and the leading cause of cancer related deaths in women throughout the world. Scientific research has shown that black seed oil (Nigella sativa) is an effective treatment for cancer in animal studies, and as effective as anti-cancer effects on some other types of cancer.

This study aimed to investigate possible synergistic cytotoxic effects of Nigella Sativa Seed Oil in combination with conventional cytotoxic agent (doxorubicin) for the treatment of human breast cancer cells.

Human breast cancer cells (MCF-7) were treated with Nigella Sativa seed oil either alone or in combination with doxorubicin to investigate the effect of the treatment. The cell proliferation and viability was analyzed by 3-(4,5-dimethylthiazol-2-yl)-2,5-biphenyl tetrazolium bromide (MTT) and cell proliferation assays, and cellular morphology by phase contrast inverted microscopy. Furthermore, the role of Nigella Sativa seed oil in decreasing cell tumorigenicity features by testing the cancer cell migration using wound healing assay.

Results showed that higher concentrations (50µg/ml) of Nigella Sativa seed oil changed the breast cancer cells morphology and decreased the cell proliferation and viability. We also found that breast cancer cells treated with black seed oil decreased the cell movement after 24 hours compared to the untreated cell as evident by wound healing assay. Only the higher concentration of doxorubicin (0.5µg/ml-2.5µg/ml) reduced the cell proliferation and the cell viability. Moreover, the combination treatment of 50µg/ml of Black seed oil with different concentration of doxorubicin caused a significant cell reduction and decreased viability with lower concentration (0.1µg/ml) of doxorubicin.

In conclusion, Nigella Sativa Seed Oil alone oil or in combination with doxorubicin was found to synergistically decreasing the cell proliferation and cell viability of MCF-7 breast cancer cells in dose-dependent manner, unveiling promising opportunities in the field of cancer treatment.

Keywords: Breast Cancer, Nigella Sativa, Doxorubicin Synergetic, Anti-cancer
Jinjin Chu
Pingmin Wei

Abstract
Objective HIV infection among Chinese college students is a serious issue. The aim of this study was to investigate the HIV-related KAP and infection features of HIV-positive college students and to provide novel evidence for the prevention and intervention of HIV prevalence on campus.

Design Cross-sectional study.
Setting This study was conducted in five districts of Nanjing.
Participants A total of 156 HIV-infected college students newly diagnosed were recruited to a cross-sectional survey by a face-to-face questionnaire interview.
Main outcome measures The data of social-demographic characteristics, infection features, and HIV-related KAP were collected and subjected to a statistical description.

Results Male students were the most influenced group (98.7%) by HIV on campus, and 96.1% of male infections were attributed to homosexual behavior. Nearly 30% of male students don’t know the severe status of the AIDS epidemic among MSM students. More than 80% of male students don't know the HIV infected status towards male regular and casual sexual partners, while the only lower half of them have a risk perception towards HIV infection from male regular and occasional sexual partners. Approximately one half and four-fifths of male students have more than two regular and occasional partners, respectively. However, only 62.5% of male students use condom commonly when intercourse with male and 66.3% with casual partners. Mobile App has become the most dominated routes for male students to meet sexual partners.

Conclusions This study provides novel information for designing effective interventions to deal with the HIV epidemic on campus. Education and public health sectors should work together to tailor policies included carried out AIDS prevention education early and timely, strengthened the risk warning education throughout the college stage, took full advantage of the App and student organization in programs for HIV prevention, to improve the level of HIV-related KAP among college students.

N.Vijayakumar
Assistant Professor, Department of Biochemistry and Biotechnology, Annamalai University, Annamalai Nagar-608002, Tamil Nadu, India

Abstract
In living organisms, ammonia is a key substrate for nitrogen in various reactions, and plays a main role in nitrogen homeostasis of cells. Hyperammonemia is a consistent finding in numerous neurological disorders including congenital urea cycle disorders, Reye Syndrome and hepatic failure. Naringin (4’, 5, 7-trihydroxy flavonone 7-rhamnoglucoside) a flavonoid extensively dispersed in grape fruit and citrus related species. Experimental hyperammonemia was induced in adult male albino Wistar rats (180-200g) by intraperitonial injection of ammonium chloride (NH4Cl (100 mg/kg body weight (b.w) thrice a week for 8 consecutive weeks. Treatment with NH4Cl illustrated that the elevated level of blood ammonia, plasma urea, oxidative stress markers (NO), liver marker enzyme (AST, ALT, ALP, γGTP), lipid peroxidation (TBARS, CD, HP), enzymatic antioxidants (CAT, SOD, GPx), non-enzymatic antioxidant (GSH, Vitamin C, E and A) and lipid profile (circulation, liver, kidney and brain) and histopathology (liver, kidney and brain) of normal and experimental animals were analyzed. Oral administration of naringin (80 mg/kg b.w) to hyperammonemic rats reverted back the level of blood ammonia and enhanced the level of urea stimulation. Naringin treated the levels of NO improved, significantly decreased the activity of liver marker enzymes, decreased levels of lipid peroxidation, enzymatic and non-enzymatic antioxidant levels were decreased in NH4Cl treated rats. Histopathology result illustrate that no pathological changes were observed in narnigin treated observed tissue like liver, kidney and brain experimental animals when compared with control animals. Our results specify that naringin applying the antioxidant potentials and maintaining the cellular integrity of the liver, kidney and brain tissue.
could offer protection against NH4Cl induced hyperammonemia. This study exemplifies wider evidence for the anti hyperammonemic, hepatoprotective, neuroprotective and antioxidant activities of naringin against NH4Cl induced hyperammonemia.

Keywords: Hyperammonemia, Naringin, Liver Marker Enzyme, Antioxidant, Lipid Profile, Histopathology

Hera Naheed Khan  
ERCICRLSH2002069  
Synthesis, Characterization and Antimicrobial potential of Keratin Hydrogels

Zoya Siddique

Hera Naheed Khan  
Department of Microbiology & Molecular Genetics, University of the Punjab, Lahore, Pakistan

Abstract
Keratin, a hydrophilic protein plays an undeniable role in imparting strength to animal and human hair, skin, nails, and claws. Keratin hydrogels in the form of powders have been used for wounds exhibiting heavy and uncontrolled bleeding due to the astringent properties of keratin. In our study, we suggest the use of the keratin hydrogel loaded with keratin-coated gold and silver nanoparticles to promote faster healing of wounds. The study focuses on combining the anti-bacterial properties of gold and silver nanoparticles and the bioactivity of keratin to formulate a wound healing gel. Keratin extracted from human hair, was purified and quantified using Bradford assay and thin layer chromatography (TLC), and it was then subjected to hydrogel formation. The formulated hydrogel was quantified using porosity testing, Scanning Electron Microscopy (SEM) and EDX and FTIR analysis. Gold and Silver Nanoparticles were synthesized using chemical synthesis and then coated with keratin. UV-Vis Spectrophotometry, FTIR, and SEM & EDX techniques were used for the characterization of keratin hydrogel, as well as the keratin-coated gold and silver nanoparticles. These agents were then tested for their antimicrobial potential against wound isolates i.e. Escherichia coli, Klebsiella pneumonia, and Staphylococcus aureus (culprit bacteria that hinder wound healing). The antibacterial activity of Keratin hydrogel and nanoparticles was also compared with Pyodine solution commonly recommended for wound healing. Observations signify the inhibitory potential of keratin hydrogel loaded gold & Silver nanoparticles. Hydrogel provides an efficient environment that enhance wound healing and nanoparticles help prevent and protect wound against bacterial infections.

Keywords: Keratin, Wound Healing, Antibacterial, Human Hair

Karda Abdul Fatawu  
ERCICRLSH2002071  
Job Satisfaction and Employee Performance Nexus; An Empirical Testimony of Ghana Health Service

Karda Abdul Fatawu  
Department of Management, Jiangsu University, Zhenjiang, China

Abstract
Job satisfaction or employee satisfaction is a measure of workers' contentedness with their job, whether or not they like the job or individual aspects or facets of jobs, such as nature of work or supervision. People are an integral part of organizational success. Depending on how well people are integrated into the management process, they can affect organizational performance or other aspects. When employees are satisfied with their work, they become more creative and innovative, and provide progress that enables organizations to grow as market conditions change. Generally, with reference to the background, this study purposely seeks to examine the degree to which employee job satisfaction impacts job performance among health workers in Ghana using various teaching hospitals in Ghana as case study. Significantly, the study delved into the dynamics of job satisfaction and its influence on employees’ performance among health workers in Ghana. It is thus anticipated that the study may provide worthy information not only to the academic community but also to health practitioners that may facilitate them to make knowledgeable managerial decisions in Ghana. The data collection instrument that was used for the collection of data for the purpose of this research was questionnaires. Data was obtained from 200 employees, which included doctors, nurses, and the administrative staff from the three (3) different teaching hospitals in
the various districts. By doing so, sampling techniques such as probability and non-probability techniques were used.

According to findings of this research paper, the employee job satisfaction affects job performance among health workers in Ghana. Factors affecting employee satisfaction and commitment are rewards, stress, leave, benefits and compensation given to the staff by the management which are important to improve the motivation level and employee satisfaction.

Keywords: Job Satisfaction, Job Satisfaction, Ghana, Job Performance, Health Workers

A Preliminary Study of Cognitive Training by Error-less Learning in Virtual Reality

Yuan Ma
Japan Advanced Institute of Science and Technology, Nomi, Japan

Qisen Wang
Japan Advanced Institute of Science and Technology, Nomi, Japan

Tsutomu Fujinami
Japan Advanced Institute of Science and Technology, Nomi, Japan

Abstract

We discuss the feasibility of cognitive training in the virtual reality (VR) environment by comparing both error-less (EL) and errorful (EF) ways with Pokémon characters as training material. We tested the performance of this application as a preliminary study and received the feedbacks from participants, who are young student. We found firstly that they could be engaged in the cognitive training with Pokémon theme. Secondly, they showed a better training effect under EL condition although they found the training under EF condition more fun than that under EL condition. Thirdly, participants were fond of the VR device as a presenting way. We plan to carry out another experiment with a modified version to collect feedbacks from the healthy elderly.

Keywords: Cognitive Training, Error-Less Learning, Virtual Reality, Pokémon, Engagement

Antibacterial activity of Acorus Calamus against Some Important Disease Causing Bacteria

Santos Pandey
ASEAN Institute of Health Development, Mahidol University, Thailand

Binit Lamichhane
Mohan Sharma

Abstract

Medicinal plants were screened, namely Bojo (Acorus Calamus) for potential antibacterial activity against 4 medically important drug resistant bacterial strains, namely Escherichia coli, Staphylococcus aureus, Klebsiella spp., and Serratia spp. The antibacterial activity of Methanol, Ether, Chloroform and Ethyl acetate extracts was determined by agar well diffusion method. It showed different degrees of inhibition against different bacteria. It showed strong antibacterial activity against Serratia spp., S. aureus and E.coli. The Ethyl acetate extract showed no activity against Klebsiella spp. The maximum zone of inhibition was observed in case of Serratia spp. (17mm in 100mg/ml) of Ether extract and the minimum was against staphylococcus aureus, and Serratia spp. (7mm in 25mg/ml) of Ethyl acetate extracted. The highest Minimum inhibitory concentration (MIC) of the plant extract was found against Serratia spp., was 6.25 mg/ml, of A. calamus ether extract. A. calamus extracts possess an antimicrobial activity against the most common pathogenic bacteria. These antimicrobial finding open the possibility of new clinically effective antibacterial compounds.

Keywords: Acorus Calamus, Antimicrobial, Minimum Inhibitory Concentration, Zone of Inhibition
## LISTENERS

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<tr>
<th>Name</th>
<th>Affiliation</th>
<th>Registration ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qurat Ul Ain Zahra</td>
<td>Department of Biochemistry and Molecular Biology, University of Science and Technology of China, Hefei, China</td>
<td>ERCICRLSH2002056</td>
</tr>
<tr>
<td>Kidus Eshete</td>
<td>Quality Care Improvement Directorate, St. Paul’s Hospital Millennium Medical College, Addis Ababa, Ethiopia</td>
<td>ERCICRLSH2002058</td>
</tr>
<tr>
<td>Ajeck Jescovisegup</td>
<td>Nursing, St. Albert The Great, Reference Diagnostic Center, University Junction Molyko Buea, Cameroon</td>
<td>ERCICRLSH2002061</td>
</tr>
<tr>
<td>Shamiim Bhuyin</td>
<td>Mai Supermarket Pty Ltd, Johannesburg, South Africa</td>
<td>ERCICRLSH2002070</td>
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<td>Qamar Shahzad</td>
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<td>ERCICRLSH2002075</td>
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<td>Health Care, AHA, Kampala, Uganda</td>
<td>ERCICRLSH2002076</td>
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<tr>
<td>David Nzeyimana</td>
<td>Head of Innovation and Performance Society, Society Innopes, Bujumbura, Burundi</td>
<td>ERCICRLSH2002077</td>
</tr>
<tr>
<td>Vijay Kumar</td>
<td>Affiliation: Maharshi Dayanand University (M.D. University), Rohtak, Haryana, India</td>
<td>ERCICRLSH2002078</td>
</tr>
<tr>
<td>Shaukat Ali</td>
<td>Warraich Petroleum, Sargodha, Pakistan</td>
<td>ERCICRLSH2002079</td>
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<tr>
<td>Barutwanayo Hilaire</td>
<td>Healthcare, Aha Burundi, Burundi</td>
<td>ERCICRLSH2002081</td>
</tr>
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<td>Izere Guy- Arsène</td>
<td>Health-Care, Aha Burundi, Burundi</td>
<td>ERCICRLSH2002082</td>
</tr>
<tr>
<td>Henry Smith Okoye</td>
<td>Physics, Radiation and Medical Physics, Nasararwa State University, Abuja, Nigeria</td>
<td>ERCICRLSH2002083</td>
</tr>
</tbody>
</table>

## Upcoming Conferences

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