CONFERENCE PROCEEDINGS

2018 - 4th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 13-14 Oct, Kuala Lumpur

13–14 October, 2018

CONFERENCE VENUE

The Regency Scholar's Inn @ UTM, Universiti Teknologi Malaysia, Jalan Semarak, 54100, Kuala Lumpur, Malaysia

Email: convener@eurasiaresearch.info

https://eurasiaresearch.org

https://hbsra.org/
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Particulars</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Preface</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>Keynote Description</td>
<td>4-5</td>
</tr>
<tr>
<td>3.</td>
<td>List of Presenters</td>
<td>6-22</td>
</tr>
<tr>
<td>4.</td>
<td>List of Listeners</td>
<td>23</td>
</tr>
<tr>
<td>5.</td>
<td>Upcoming Conferences</td>
<td>23-24</td>
</tr>
</tbody>
</table>
Preface:

Healthcare And Biological Sciences Research Association (HBSRA) is an international forum of researchers, academicians and practitioners for sharing knowledge and innovation in the field of healthcare and life-sciences. HBSRA aims to bring together worldwide researchers and professionals, encourage intellectual development and providing opportunities for networking and collaboration. This association meets with its objectives through academic networking, meetings, conferences, workshops, projects, research publications, academic awards and scholarships. HBSRA strives to enrich from its diverse group of advisory members. Scholars, Researchers, Professionals are invited to freely join HBSRA and become a part of a diverse academic community, working for benefit of academia and society through collaboration and vision.

For this conference around 50 Participants from around 9 different countries have submitted their entries for review and presentation.

HBSRA has now grown to 2353 followers and 786 members from 37 countries.

Membership in our scholarly association HBSRA is completely free of cost.

List of members: https://hbsra.org/membership/list-of-members/

Membership Application form link: https://hbsra.org/membership/

Proceedings is a book of abstracts, all the abstracts are published in our conference proceedings a day prior to the conference.

You can get our conference proceedings at: https://hbsra.org/conference/proceedings/

Facebook is a very popular free social networking website that allows us to keep in touch with friends, family and colleagues.

We hope to have an everlasting and long term friendly relation with you in the future.

In this context we would like to share our social media web links: https://www.facebook.com/iaphlslr/

You will be able to freely communicate your queries with us, collaborate and interact with our previous participants, share and browse the conference pictures on the above link.

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

Nizar Abdul Majeed Kutty
Department of Physiotherapy at University Tunku Abdul Rahman, Malaysia

Mr. Nizar is Head of Department and Senior Lecturer in Department of Physiotherapy at Universiti Tunku Abdul Rahman, Malaysia. His commitment to teaching excellence earned him accolades during his tenure at UTAR. His research interest spans a variety of topics in multi-sensory reweighting, core stabilization training and diabetic neuropathy. Mr. Nizar presented his research findings at international conferences and published articles in ISI and Scopus indexed journals. A few of his academic articles have been translated into other languages. He serves as editor and reviewer of high-end scientific journals from the United States. He is invited as Keynote speaker for international conferences. He writes articles on health care for popular periodicals.

Web link:
KEYNOTE SPEAKER

Dr. Palanisamy Sivanandy
Department of Pharmacy Practice, School of Pharmacy
International Medical University, Kuala Lumpur, Malaysia

Dr. Palanisamy Sivanandy is an eminent academician and researcher has more than 10 years of teaching and research experiences. He has more than 20 years of experiences in the pharmacy field. He has started his career as a Dispensing pharmacist in the year 1997 as a Diploma Pharmacist; in 2005 he has completed his Pharmacy Undergraduation (B.Pharm) from the Madurai Medical College, Tamilnadu; in 2007 he obtained his Post Graduation (M.Pharm) in Pharmacy Practice from Sri Ramakrishna Institute of Paramedical Sciences, Coimbatore, Tamilnadu. He has completed his Ph.D., in the year 2013 from the prestigious Tamil Nadu Dr.MGR Medical University, Chennai and Good Clinical Practice Licensure Exam from Ministry of Health (MoH), Malaysia in 2014. He has published more than 59 research papers in various national and international indexed peer-reviewed journals and has been serving as an editorial board member of repute for more than 10 international journals. He has received many grants from Indian Council of Medical Research, New Delhi, India; Department of Science & Technology, New Delhi, India; Centre for International Co-operation in Science, Chennai, India; and International Medical University, Kuala Lumpur, Malaysia. He has presented many research papers in conferences in various countries like Turkey (Istanbul), USA (New York and Texas), South Korea (Seoul), Singapore, Thailand (Bangkok), and Malaysia. His main area of interest is Pharmacovigilance, Drug Safety Monitoring, Prescription Auditing, Clinical Research and Development, Clinical Trials and Patient Safety.
<table>
<thead>
<tr>
<th>Author/Institution</th>
<th>Title</th>
<th>Abstract/Summary</th>
</tr>
</thead>
</table>
| Usman Alhaji mohammed ERCICRLSH1803051 | Ecology Of Snails In Relation To Epidemiology And Transmission Of Schistosomiasis In Bauchi South Senatorial Zone, Nigeria | Usman Alhaji mohammed Aminu saleh College of Education Azare, Bauchi State, Nigeria  
Abstract  
A twelve-month epidemi-o-ecological study on the prevalence, water contact activities, and water quality and vector aspects of schistosomiasis was conducted in Bauchi South senatorial zone, Nigeria in 2016. Eight hundred 800 samples each of urines and faeces were collected and examined microscopically for schistosomes eggs. Twenty three 23(2.9%) out of the entire volunteers urine sample examined had eggs of S. haematobium and three 3(0.4%) had eggs of S. mansoni in their faecal samples. Some selected water bodies within the area were surveyed for the intermediate hosts of the parasite. Standard key were employed to identify the snail vectors while cercariae emergence was determined by exposing snails to sunshine for 30 minutes. They were also collected for water quality. Six hundred and fifty (650) snails were collected and examined, only 24(3.7%) Bulinus globosus shed cercariae while none of the Biomphalaria pfeifferi shed cercariae during the study. Eight hundred (800) structured questionnaires were distributed in order to get the information of the participants. The infection rates by the parasite in different sexes was not statistically significant (p>0.05) while in different age groups, individuals using different water sources, types of toilet facilities and occupation were all statistically significant (P<0.05). The water quality seemed to have effect on the infectivity of the snails as only 24(3.7%) snails were infected in the water with low pH value and high dissolved oxygen content. Health education is recommended to maintain the non-endemic nature of the disease in the study area.  
Keyword: Epidemiology, Schistosomiasis, Bulinus, Biomphalaria, Cercariae |
| Karimullah Karimullah ERCICRLSH1803052 | The agonistic Behaviours of Free-Ranging Pig-tailed Macaques Troop in Roadside and Forest Areas in Perak, Malaysia | Karimullah Karimullah  
Faculty of Biosciences, University of Leipzig, Germany  
Shahrul Anuar  
School of Biological Sciences Universiti Sains Malaysia  
ABSTRACT  
Non-human primate (NHP) especially (genus Macaca) are extensively dispersed, expressively adaptable and highly opportunistic omnivores. Due to proximity to human societies and interface around potential macaque, food sources effects in a high rate of human-primate interaction for macaques. A troop of Macaca nemestrina observed in northern region of peninsular Malaysia that live in the area of Pondok Tanjung (N 04° 57, E 100° 43), in both roadside and in forest areas. Inter-group contacts lasted longer and were further prospective to comprise aggression in the roadside than in the forest. In certain, adult males and adult females when in front or closed to public showed a significantly higher level of the most thrilling forms of agonism, such as attacking, fighting, and chasing than when found in the forest. The collected data are described in relation to feeding |
patterns and ecological alterations and show the abundant of flexibility of
social activities in these primates. Inherent selection for a high level of
violent behaviour in a roadside population of macaques is not considered
likely.

Keywords: intergroup agonistic, Ecological alterations, Social behaviour,
Macaca nemestrina

Lawal Nura
ERCICRLSH1803053

Effect of antioxidant-rich nutraceutical on serum glucose, lipid profile and
oxidative stress markers of salt-induced metabolic syndrome in rats

Lawal Nura
Biochemistry & Molecular Biology, Federal University Dutsinma Katsina
state, Nigeria, Katsina, Nigeria

L.S.Bilbis
Department of Biochemistry, Usmanu Danfodiyo University, Sokoto
Nigeria

RA.Umar
Department of Biochemistry, Usmanu Danfodiyo University, Sokoto
Nigeria

AA.Sabir
Department of Medicine, Usmanu Danfodiyo University Teaching
Hospital, Sokoto Nigeria

ABSTRACT

Metabolic syndrome (MS) a high risk condition involving obesity,
dyslipidemia, hypertension and diabetes mellitus is prevalent in Nigeria. The
study aim to formulate an antioxidant rich nutraceutical from locally
available foodstuff (onion, garlic, ginger, tomato, lemon, palm oil, water
melon seeds) and investigate their effects on blood pressure, body weight,
serum glucose, lipid profile, insulin and oxidative stress markers in salt-
induced rats. The rats were placed on 8% salt diet for 6 weeks and then
supplementation and treatment with nutraceutical and nifedipine in the
presence of salt diet for additional 4 weeks. Feeding rats with salt diet for 6
weeks increased blood pressure and body weight of the salt-
loaded rats relative to control. Significant (P<0.001) increase in serum blood
glucose and lipid profile, and decrease in high density lipoprotein-
cholesterol (HDL-C) was observed in salt-loaded rats as compared with control. Both
supplementation and treatment (nifedipine) lowered the blood pressure
but only supplementation lowered the body weight. Supplementation with
nutraceutical resulted in significant (P<0.001) decrease in the serum blood
glucose, lipid profile, malonyldialdehyde (MDA), insulin levels, insulin
resistance, and increased HDL-C and antioxidant indices. The percentage
protection against atherogenesis was 76.5±2.13%. There is strong positive
correlation between blood pressure, body weight and serum blood glucose,
lipid profile, markers of oxidative stress and strong negative correlation
with HDL-C and antioxidant status. The results suggest that the
nutraceuticals are useful in reversing most of the component of metabolic
syndrome and might be beneficial in the treatment of patients with
metabolic syndrome.

Keywords: Metabolic syndrome, obesity, dyslipidemia, hypertension and
Binta Ibrahim Muhammad
ERCICRLSH1803054
Impact of digital technology in textiles industrial
Binta Ibrahim Muhammad
Fashion Design and Clothing Technology, Hussaini Adamu Federal Polytechnic Kazaure, Jigawa, Nigeria

Abstract
It has been observed that computer has contributed immensely in manufacturing of goods and services. Virtually every activity in the manufacturing or production of goods and services requires computation and information as such cannot be carried out perfectly by human. In spite of these, there has been indifferent attitude among some producers and organizations towards the role of digital technology in decision making and efficiency of productivity. This research into the impact of digital technology in textiles as well as any manufacturing industry is imperative and useful to give a clear picture on its relevance and how effective and efficient digital technology are in the textile industry. It also traced how digital technology is used in making colourful designs, which is more important to textile industries in making of attractive goods. Despite the limitations of digital technology, which the research work try to trace, it’s role in ensuring effective administration in decision – making and accountability cannot be over emphasized. Therefore it is important for manufacturers to recognize the contribution of digital technology in textiles and manufacturing industries as a whole.

KEY WORDS: Computer, Textile, Technology, Industrial

---

Arip Ambulan Panjaitan
ERCICRLSH1803056
Adolescent behavior in unwanted pregnancy prevention among students at faith-based

Arip Ambulan Panjaitan
Akademi Kebidanan, Panca Bhakti, Indonesia
Windiyati
Akademi Kebidanan Panca Bhakti, Pontianak, Indonesia
Megalina Limoy
Akademi Kebidanan Panca Bhakti, Pontianak, Indonesia
Devi Elvira
Akademi Kebidanan Panca Bhakti, Pontianak, Indonesia

Abstract
Introduction: Adolescent are at high risk of unwanted pregnancy, including abortion, STIs, HIV/AIDS. Risky sexual behavior is one of the entrance transmissions of unwanted pregnancy. Such behavior can be influenced by various factors, beyond and within the individual factors. Teens need the support and motivation in deciding not to do risky sexual behavior. The purpose of this study was to investigate the determinants of adolescent behavior in the prevention of unwanted pregnancy.

Methods: This research used cross-sectional design. The populations were students of MA in District Karangawan II Demak. The were 235 respondents chosen by cluster sampling technique for this study. All data were collected using questionnaires and then analysed using bivariate (chi square) and multivariate analysis (logistic regression).
### Results

The results showed that the majority of respondents did not have good knowledge about the prevention of unwanted pregnancy. Related variable is the level of parental education ($p=0.001$), the support of parents/guardians ($p=0.009$), support teachers ($p=0.005$), peer support ($p=0.039$), residency ($p=0.009$), a pastime activity ($p=0.000$), knowledge of adolescents about reproductive health ($p=0.016$), perception ability of adolescents ($p=0.006$) and attitude of adolescents ($p=0.049$). Adolescent self-perception abilities are variables that most influence on the behavior of adolescents in the prevention of unwanted pregnancy.

### Conclusions

Efforts to improve reproductive health programs should be early and adolescent have responsibilities as well as healthy behaviors.

**Keywords:** Adolescents, Behavior, Unwanted Pregnancy

---

### Prevalence of overweight and obesity among public primary school students in arkaweet-khartoum-sudan

**Huda Abbass**  
Department of community medicine, Faculty of medicine, University of Khartoum, Khartoum, Sudan

**Abstract**

**Background:** childhood obesity is one of the most serious health challenges of the 21st century. The problem is global and the prevalence is increasing at an alarming rate.

**Objectives:** to determine the prevalence and associated risk factors of overweight and obesity among primary public school children (10-14) years old in arkaweet-khartoum-sudan

**Materials and methods:** a descriptive cross sectional school based study was conducted among primary schools student's males and females in arkaweet, Khartoum, Sudan. Simple random sampling was used. The data was collected through a self administered questionnaire. Height and weight of the subjects were measured and body mass index (BMI) was calculated, using growth charts of center of disease and control (CDC)

**Results:** a total of 161 children between ages of 10 and 14 were involved in the study. The prevalence of overweight and obesity was 34% and 4.97% respectively. Females had a higher prevalence of overweight 38.3% when compared to males 30%. Obesity also was highly prevalent in females(7.4%) than in males (2.4 %.) the majority of subjects studied healthy weight (50.9%). The mean weight is 48.1, mean height is 141.2

There was significance association between educational level of father ($p$ value=0.000), educational level of mother ($p$ value=0.000), job of mother ($p$ value=0.046), physical activities ($p$ value=0.034), watching TV ($p$ value=0.04) and playing video games ($p$ value=0.000) for long hours per day, number of daily meals ($p$ value=0.002), type of food, fast food ($p$ value=0.032) and soft drinks consumption ($p$ value=0.000) and family size ($p$ value=0.003)

There was obvious psychological impact among overweight and obese students, as they suffer a lot from their classmate bulling

**Conclusion:** The results of the current study provide alarming evidence based data on the considerable prevalence of childhood overweight and obesity among primary public school students in arkaweet-khartoum-sudan

---

### Assessment of some antibiotics residues in broiler meat and giblets in Egypt

**Abdelrahman Elbagory**  
ERCICRLSH1803058  
Assessment of some antibiotics residues in broiler meat and giblets in Egypt
Abdelrahman Elbagory  
Food Hygiene and Control, Menoufia University, Menoufia, Egypt

Yasein, N.A  
Dept. of Food Hygiene, Faculty of Veterinary Medicine, Cairo University

Elbayoumi, Z.H  
Dept. of Food Hygiene, Faculty of Veterinary Medicine, Cairo University

Yuosef, A.M  
Governmental General Veterinarian

Abstract
The goal of this study is to assess the level of some antibiotic residues as Doxycycline (DOC) and Oxytetracycline (OTC) in broiler meat and giblets and to evaluate the effect of various cooking methods on the level of such residues in examined broiler meat and giblets. A total of sixty random samples of fresh broilers meat, liver and kidney (20 each) were purchased from different markets at various localities in Menoufia governorate, Egypt. Each sample was extracted and analyzed using HPLC for determination the level of DOC and OTC residues. The obtained results indicated that the mean values of DOC residues were 8.39 ± 0.14, 1142.85 ± 21.09 and 1305.59 ± 27.68 µg/kg, while the mean values of (OTC) residues were 37.52 ± 0.41, 435.31 ± 12.86 and 62.123 ± 5.35 µg/kg for broilers meat, liver and kidney, respectively. The effect of different cooking methods (boiling and frying) on the level of such antibiotic residues in muscle and liver was also studied. The mean reduction % of DOC residues in meat samples after boiling was 85% and 95.6% after frying, while in liver samples the mean reduction % were 87.6% and 98.8% after boiling and frying, respectively. The mean reduction % of OTC residues in meat samples after boiling and frying were 79.2% and 96.2%, respectively and for liver samples were 85.6% and 97.5% after boiling and frying, respectively.

Key words: antibiotics; residues; broiler meat; giblets; Egypt

Ahmed Dawod Ismail Ahmed  
ERCICRLSH1803060

Modelling of Some Dairy Performance Indices upon Milk Somatic Cell Count in Holstein Dairy Cows

Ahmed Dawod Ismail Ahmed  
Department of Husbandry and Animal Wealth Development, Faculty of Veterinary Medicine, Sadat City University, Sadat City, Menofia, Egypt

Abdel-Hamid T.M.  
Animal Wealth Development Department, Faculty of Veterinary Medicine, Zagazig University, Sharkia, Egypt

Ramadan S.  
Animal Wealth Development Department, Faculty of Veterinary Medicine, Banha University, Tokh, Egypt

Fathalla M.  
Animal husbandry and Animal Wealth Development Department, Faculty of Veterinary Medicine, Alexandria University, Alexandria, Egypt
Fathalla S.,
Department of Husbandry and Animal Wealth Development, Faculty of Veterinary Medicine, Sadat City University, Sadat City, Menofia, Egypt

El Byoumi K.
Department of Husbandry and Animal Wealth Development, Faculty of Veterinary Medicine, Sadat City University, Sadat City, Menofia, Egypt

Abstract
This study was conducted to evaluate the standardized effects of some dairy performance parameters (lactation length, lactation season, parity, total and 305 milk yields) on somatic cell count (SCC) in Holstein dairy cows throughout modelling of these variables with the path analysis technique. For this purpose 617 cows enrolled into the experiment from 15±7.14 DIM till complete their lactation length. Milk samples were taken from each cow every 3 months then the fresh milk samples were subjected to somatic cell counting via automatic cell counter. Other data of days dry, lactation length, parity number, total and actual 305 milk yields were taken from the dairy farm recording system (Dairycomp). After collection of all data, the data were entered to AMOS software program version 24 in order to build conceptual path model among days dry, lactation length, parity number as independent variables and total, actual 305 milk yields as intermediate transitional variables and milk SCC as dependent variable.

The study was revealed that, the relationships between the above mentioned variables could be modelled via using the path analysis technique. Also, the study revealed that the SCC was directly affected by lactation length, total and 305 milk yields with standardized beta load of 0.446, -0.173, 0.367, respectively, while it indirectly affected with total milk yield by standardized beta load of 0.229. The study was concluded that the SCC could be controlled via applying adjustments for the dairy cow’s lactation length as the SCC was strongly affected with lactation length.

Keywords: Somatic cell count; Days dry; Dairy cows; Parity; Holstein Friesian

Rehab Tahoon
ERCICRLSH1803061
Causal Modeling of Relationships among Big Five Factors of Personality, Multiple Intelligences and Their Impacts upon Mind Habits in Faculty of Education Students

Rehab Tahoon
Educational psychology, Sadat City University, Monoufia, Egypt

The present study aimed to study the causal model which explains the direct and indirect effects of big five factors of personality and multiple intelligences on mind habits of Faculty of Education students, Sadat City University. A sample of (599) from second year students of both sexes was enrolled in the study during the period from 2016 to 2017. The study tools were the measures of big five factors of personality, multiple intelligences, and mind habits. The study reveals that, the causal relationships between big five factors of personality, multiple intelligences, and mind habits in the study sample could be modeled. Also, the study proved that the big five factors of personality could affect the multiple intelligences, as the extraversion affected the social intelligence with standard beta load of (0.31), moreover the openness to experience effected the Bodily intelligence.
with the standard effect of (0.30). The big five factors of personality affected the mind habits, as the effect of the conscience on the habit of control of managing impulsivity considered as a one the most important effects with standard beta load of (0.27). Followed by the habit of listening with understanding which record a standard beta load of (0.21). Multiple intelligences also affected mind habits, as the effect of the Bodily intelligence on the habit of taking responsibility is the most important effect, with the standard effect of (0.29). Moreover, the study revealed that the mind habits affected each other significantly, as the effect of habit of thinking clarity and precision on the habit of applying knowledge by standard value of (0.28). Also, multiple intelligences affected each others, as the Bodily intelligence affected the natural intelligence with standard beta load of (0.43). There were indirect effects of the big five factors of personality on multiple intelligences and on mind habits, also, the study revealed that the presence of indirect effects among multiple intelligences each other, as well as among mind habits each other. The study concluded that the causal model was able to explain the variable dimensions of the mind habits through the dimensions of multiple intelligences variable and dimensions of the big five factors of personality variable.

Dr. Akshay Shiwanand  
ERCICRLSH1803062  
An introduction to Sundhamata Conservation Reserve of Rajasthan, India

Dr. Akshay Shiwanand  
Deptt. of Zoology, Jai Narain Vyas University, Jodhpur, Rajasthan, India

Abstract
The Sundha Mata Conservation Reserve comprising the three forests Block in Jalore Forest division and one forest block, (Rahua Vadvaj) in Sirohi forest division. It is situated in the south west part of Rajasthan, India. Sundha Mata Conservation Reserve was notified by the Rajasthan Government in the year 2010 vide Govt. of Rajasthan notification no. P-3 (26) Forest-2008, Date: 20-07-2010 . The Conservation Reserve spread over an area of 117.49 km² over Aravali Plateau in the Jalore and Sirohi districts of Rajasthan. As per the working plan of Jalore, the Sundha Mata conservation reserve has Twenty two compartments (16 in Jalore and 6 in Sirohi ) comprising over all area of 117.49 km² ( 101.15 km²in Jalore and 16.34 km² in Sirohi ).

Keywords— Reserve, Rajasthan, India, Jalore, Sirohi.

Shakirah Md. Sharif  
ERCICRLSH1803063  
Process Evaluation Design and Methods Used in the Jom Mama Study (NMRR-16-387-29002)

Shakirah Md. Sharif  
Institute for Health Systems Research, Ministry of Health, Malaysia

Diane Chong Woei Quan  
Institute for Health Systems Research, Ministry of Health, Malaysia

Ainul Nadzihah Mohd Hanafiah  
Institute for Health Systems Research, Ministry of Health, Malaysia

Nur Azmiah Zainuddin  
Institute for Health Systems Research, Ministry of Health, Malaysia

Nurul Salwana Abu Bakar
Institute for Health Systems Research, Ministry of Health, Malaysia

Mohd Zaidan Zulkepli
Institute for Health Behavioural Research, Ministry of Health, Malaysia

Abstract

Introduction: Process evaluation is important to understand how complex interventions function in different settings and to provide insights to what made them successful or otherwise. This study aims to describe the process evaluation design and methods used in the Jom Mama study.

Methods: The identification of process evaluation elements was based on work processes in the intervention (Jom Mama Programme Theory Framework) that could affect the study outcome. The development of process evaluation tools followed the identification of elements. Process evaluation implementation was conducted in parallel with the implementation of the intervention.

Results: Four elements were identified (recruitment process, intervention implementation, community health promoters’ support sessions and attrition). Mixed methods were employed for assessment of identified elements. Focus group discussions and in-depth interviews were conducted with the researchers, participants, community health promoters and mentors. Real-time observation of recruitment process and support sessions were done when possible, to gather findings from the field. To evaluate the implementation of the intervention, audio recordings were obtained and analysed. Intervention’s routine monitoring data on recruitment progress, implementation of contact points according to the time plan, number of training sessions conducted and others complemented these methods.

Discussion/conclusion: The development of process evaluation design and methods focused on the collection of a breadth of information related to the implementation of the intervention. The collection of multi-perspective opinions from those involved in the study and the application of mixed methods could provide valuable insights for future health promotion programmes.

Keywords: process evaluation, mixed methods, complex intervention

A Comparative Analysis On Performance Efficiency in Lean Healthcare Initiatives at Emergency Department and Medical Ward of 52 MOH Hospitals

Zaiton Kamarruddin
Healthcare Quality Research Division, Institute for Health Systems Research, Ministry of Health Malaysia, Shah Alam, Selangor

Ku Anis Shazura
Institute for Health Systems Research

Nur Jihan Noris
Institute for Health Systems Research

Zalina Libasin

Zaiton Kamarruddin
ERCICRLSH1803068
Institute for Health Systems Research

Abstract
Background: Between 2015 and 2017, a total of 52 MOH hospitals implemented lean healthcare improvement initiatives using agile approach to improve efficiency on waiting time at ED and patient discharge process in medical ward. Objectives: A comparative analysis was done for the 52 hospitals by batches to study on the performance and the achievement at post 6 months and 1 year of the lean implementation. Methods: The first batch of 16 MOH hospitals in 2015 was selected based on high bed occupancy rate and overcrowding green zone patients at emergency department. All state hospitals were selected in the first batch followed by 20 major specialist hospitals in 2016 and 16 major and minor specialist hospitals in 2017. The project team from each department was given training on the lean thinking principles, tools and methodology prior to the implementation. Performance on efficiency at ED was measured based on four metrics: arrival to consult (ATC); length of stay (LOS); bed waiting time (BWT) and call not attended (CNA) while the medical ward performance were bed occupancy rate (BOR), discharge time (DT) and bed turnaround time (BTT). Data was analysed using SPSS. The progress in performance at post 1 year for each hospital was categorised into either Improved(I); Maintain(+) ; Maintain(-) or R(Reduced). The Improved performance was defined as efficient process. Results: The achievement on Improved(I) category at post 1 year for the Emergency Department was greater in batch 2016 (40% hospitals) compared to hospitals in 2015 (25% Improved) and 2017 (25% Improved). The achievement for Medical Ward was greater in batch 2015 (25% Improved) and 2016 (25% Improved) compared to hospitals in 2017 (12.5% Improved). Conclusions: The improvement in efficiency resulted from the 52 MOH hospitals provide evidence on the effectiveness of implementing lean in optimize available resources on improving the current work practice.

Keywords: Lean Healthcare, Emergency Department, Medical Ward, Performance Metrics, Process Efficiency

Mohd Shaiful Jefri Mohd Nor Sham Kunusagaran

Factors Associated with Antenatal Visits at Ministry of Health Facilities in Malaysia

Mohd Shaiful Jefri Mohd Nor Sham Kunusagaran
Health Economics Research Division, Institute of Health System Research, Setia Alam, Selangor

Abstract
Background: Ministry of Health has recommended antenatal visit of 10 and 8 visits throughout pregnancy for primigravida and multigravida respectively. However, the pattern of utilisation is increasing over the years. Objectives: This study aimed to identify the pattern and factors associated with the number of antenatal visits. Methods: This is a cross-sectional study designed using secondary quantitative data collected in 2016 from the clinic copy of maternal health registry. Stratified random sampling method was employed to select 6 primary healthcare clinics in the state of Negeri Sembilan. This study involves 369 pregnant women who utilized maternal care services with minimum of 7 antenatal visit at the selected MoH facilities. Results: The mean antenatal visit was 15.7 (95 % CI: 15.2 – 16.2) visits per patient per antenatal care. There was no
significant difference in the mean of visit among different pregnancy related issue. The main provider was by a nurse with 11.7 (95 % CI: 15.2 – 16.2) visits per patient per care, followed by a medical officer with 7.5 (95 % CI: 7.2 – 7.9) visits per patient per care and by a family medicine specialist with 1.5 (95 % CI: 1.3 – 1.7) visits per patient per care. Mean antenatal outreach visit was 2.7 (95 % CI: 2.5 – 2.9) visits per patient per care. Regression analysis showed that the mean antenatal visit was associated with the type of facilities and pregnancy related issue. There was no significant difference in the mean of visit among different ethnicity, nationality, marital status, education status and employment status. Conclusions: Mean antenatal visit almost double compared to the national recommended antenatal schedule by the Ministry of Health Malaysia. This indicates the presence of inefficiency in delivering the service; excessive utilisation as well as non-standard care across different facilities in the state of Negeri Sembilan.

Keywords: Factors, antenatal visit, Malaysia

Nur Amalina Zaimi
ERCICRLSH1803070

Estimating Cost-effectiveness of Pneumococcal Vaccine among Malaysian Hajj Pilgrims

Nur Amalina Zaimi
Institute for Health Systems Research (IHSR), Ministry of Health, Shah Alam, Malaysia

Abstract
Background: The Hajj is an annual Islamic pilgrimage to Mecca, Saudi Arabia, the holiest city for Muslims. Each year, millions of Muslims from all over the world including Malaysia converge in Mecca and its surrounding areas to perform the Hajj pilgrimage. Due to overcrowding condition during this period, pneumococcal disease is one of the commonest ailments among Hajj pilgrims and contributed to a substantial burden to the healthcare. Objective: To estimate the cost benefit of introducing the 23-valent polysaccharides pneumococcal vaccine (PPV23) among Malaysian Hajj pilgrims. Methods: A total of 40,837 Malaysian pilgrims in the year 2017 were included in this study. An economic evaluation was carried out by comparison of two cohorts – no vaccination and vaccinated with PPV23 – using a decision tree model to simulate the benefits, costs and health outcomes of introducing PPV23. The model was programmed to include pilgrims who had a one-off exposure to mass congregation for a one-year cycle length, with no further follow-up evaluation. The model framework incorporated data on epidemiology, disease incidence, vaccine efficacy and cost inputs that were retrieved from the Lembaga Tabung Haji, Malaysia, literature review of a similar population and intervention characteristics. The perspective of this study is from the Ministry of Health, Malaysia. Results: The universal PPV23 strategy showed cost-savings for inpatient and outpatient care costs. The cost averted was estimated to be between RM0.9 to 1.2 million. The hospitalization and outpatient visit rate per cohort will be reduced from 67 to 23 cases and from 1,633 to 571 cases, respectively. Herd immunity and quality of life will also be gained as intangible benefits. Conclusions: The findings from this evaluation could inform policymakers, health care managers and relevant stakeholders in decision and policy-making on pneumococcal vaccine to improve the health status of Malaysian Hajj pilgrims.
Identification of MDR strains of Mycobacterium tuberculosis through PCR-RFLP

Dr. Muhammad Riaz
Department of Allied Health Sciences, University of Sargodha, Sargodha, Pakistan

Zahed Mahmood
Department of Biochemistry, Government College University Faisalabad, Pakistan

Irum Javed
Department of Biochemistry, Government College Women University Faisalabad, Pakistan

Asma Irshad
Center of Excellence in Molecular Biology, University of the Punjab, Lahore, Pakistan

Haleema Sadia
Department of Biotechnology, Balochistan University of Information Technology, Engineering and Management Sciences, Quetta, Pakistan

Abstract
Tuberculosis (TB) is a chronic infectious disease mainly affecting the adult population worldwide. The current study was conducted to determine the Mycobacterium tuberculosis drug resistance through PCR-RFLP. The study population consists of random sputum samples (221) from patients and suspected of drug resistance (120) cases. PCR-RFLP was used to evaluate the genetic variation in drug resistant strains against isoniazid, ethambutol, streptomycin and ofloxacin. PCR analysis confirmed 91.5% cases infected with M. tuberculosis complex. The drug resistance was found in 8.2% cases from random samples and 73.3% from suspected drug resistance cases. Single drug resistance was found in 56.1% of the isolates, with two drugs in 33.3% and to more than two drugs in 10.6% of the isolates. Only 6.5% of the cases were found resistant to ofloxacin along with isoniazid, ethambutol and streptomycin. Isoniazid resistance was found in 61% cases, 50.4% to ethambutol and 43.1% cases to streptomycin. The study concluded that mutations in drug resistant TB cases can be rapidly detected through PCR-RFLP that may be used for the diagnosis of drug resistance TB cases at the earliest.

Keywords: Tuberculosis, drug resistance, isoniazid, ethambutol, streptomycin, ofloxacin

Effect of an Educational Intervention on Dietary Diversity Practices among Public School Students of Okhaldhunga

Binod Kumar Aryal
Program and Research, Global Health Alliance Nepal, Kathmandu, Nepal

Abstract

Background

2018 – 4th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 13-14 Oct, Kuala Lumpur
The Regency Scholar's Inn @ UTM, Universiti Teknologi Malaysia, Jalan Semarak, 54100, Kuala Lumpur, Malaysia
### Binod Kumar Aryal
**ERCICRLSH1803075**

**Dietary diversity (DD)** is the number of different foods or food groups consumed over a given reference period. While the average Nepalese consumes sufficient calories, staple food items constitute 72 percent of the average household diet from average 6.5 food groups. The school years cover a period that runs from childhood to adolescence; these are influential stages in people’s lives when lifelong dietary diversity related behaviors, beliefs and attitudes developed.

**Methods**

Cross sectional study design and quantitative method was applied for the baseline study. Educational package on dietary diversity was developed using P-model with contents being based on constructs of Health Belief Model (HBM) was applied for Quasi -experimental study (pretest-posttest control) design for intervention study. Students from grade 7and 8 were participated from randomly selected 4 secondary level public schools of of Okhaldhunga, as a study population for both baseline and intervention. The self-administered questionnaire was employed to collect the data which were entered in EpiData and analyzed on SPSS .

**Results**

During the baseline 38.6% participants with good DD practice and 18.1% of them had average or above knowledge on DD. From the descriptive analysis of intervention study, it is shown that the 15.8 % practice and 37.8% knowledge of dietary diversity has increased in post test of intervention group. Mean of perceived susceptibility, severity and benefit has increased and perceived barrier has decreased after the intervention. From hypothesis testing and independent test, it was concluded that the package was associated with knowledge and practice of dietary diversity and was effective in increasing perceived susceptibility, severity and benefit and decrease the perceived barrier.

**Conclusion**

This study reveals the poor dietary diversity knowledge and practice among participants. Educational intervention based on p-model using construct of HBM found effective to improve the knowledge, practice and belief on dietary diversity.

### Munira Shahbuddin
**ERCICRLSH1803076**

**Heteropolysaccharide hydrogels for the Removal of Bacterial in Wound**

Munira Shahbuddin  
Biotechnology Department, Kulliyyah of Engineering, International Islamic University of Malaysia, Kuala Lumpur, Malaysia

Siti Shazwani Mahamad  
Department of Biotechnology Engineering, Kulliyyah of Engineering, International Islamic University of Malaysia, P.O. Box 10, Jalan Gombak, 51300 Kuala Lumpur, Malaysia

Raha Abdul Raus  
Department of Biotechnology Engineering, Kulliyyah of Engineering, International Islamic University of Malaysia, P.O. Box 10, Jalan Gombak, 51300 Kuala Lumpur, Malaysia

**Abstract**

Hydrogels aid the process of wound healing by providing optimal physiological conditions such as promoting a natural debridement, hydrating necrotic tissues and ability to absorb slough and exudate. In this study, heteropolysaccharide hydrogels were developed by using Konjac...
Glucomannan (KGM) and Xanthan gum (XG) at different compositions. The hydrogels were tested in vitro for bacterial removal efficacy, using Escherichia coli species colonies from petri dish, which represented a wound bed. The colony forming unit (CFU) and optical density (OD) techniques were used to determine the number of bacterial colonies that were attached onto the hydrogels’ surface. Hydrogel with 50 : 50 % composition of blend KGM-XG was found to be the most effective in the removal of Escherichia coli colonies with 13x10³ CFU/mL at 95% water content. The blend KGM-XG hydrogels consist of more than 70% water, were able to sustain their shape for the use of bacterial removal and able to degrade over time in a controlled manner. The mechanism of interaction between physicochemical of hydrogels and bacterial adhesion was directed to the differences in the chemistry, water content, and the content of KGM and Xanthan in the hydrogel and play important role in adhesion of bacterial colonies onto hydrogels’ surface. Morphological studies of hydrogels showed flat interfacial morphologies, except the sample with 100% of Xanthan without KGM. We identified several factors that affect bacterial adhesion onto a polymer surface; polymeric surface charge, water content, and topography. High hydrophobicity enabled protein adsorption onto the polymer and encourage bacterial attachment. The results present in this study suggested that the biological activities of hydrogels were not controlled only by the chemical structure but also amount of water present in the hydrogels. Clearly, the difference in the structure and chemical properties of hydrogels affect bacterial adhesion on a substrate.

Dr. Akila S
ERCICRLSH1803077

Sports Participation and Sporting Interest During Pre- Post Gender Shift of Transgender

Dr. Akila S
Physical Education, Bharathiar University, Coimbatore, Tamilnadu, India

Abstract
The objective of the present investigation was to examine sports participation before and after gender shift of transgender and to know about their current interest in sports. Sampling: To achieve the purpose of the study 108 transgender subjects were randomly selected from Coimbatore district, Tamilnadu, India. Methods: A specially designed and validated Sports aptitude questionnaire was used to resolve the purpose of the study which drew answers to questions about leisure time hobbies of transgender, their exposure to sports pre and post gender transition, and sports participation interest. Data was collected through personal interview. Analysis: Their favorite pass time was digital media, watching television serials, few into dance and art. Their latest crush was into driving two wheelers. While studying the sports participation before gender transition, 90% of them had participated and also excelled in sports before they had been identified as transgender. 82% has participated in track and field events, 4% in Kabaddi, 2% in Volleyball, 1% in Throwball and 1% in other games. After the gender transition only 1% of the population that too very rarely had participated in games and sports. Keen watch on the current interest towards participation, 80% of the samples display interest in participation in track and field 24% in Kabaddi and track and field, those above 35years wanted to involve but in easy, simple games. Conclusion: The ecstasy of play has left no stone unturned, despite age, gender and the physical & emotional pain they suffered whilst gender
### The Relationship Between Age, Gender, And Complications Neuropathy with Incidence of Diabetes Mellitus In Dr. Sardjito Hospital

**Al Razi Sena**  
Department of Health Services and Information, Universitas Gadjah Mada, Yogyakarta, Indonesia

**Anisatul ‘Afifah**  
Department of Health Services and Information, Vocational Schools, Universitas Gadjah Mada Yogyakarta, 555281, Indonesia

**Marko Ferdian Salim**  
Department of Health Services and Information, Vocational Schools, Universitas Gadjah Mada Yogyakarta, 555281, Indonesia

**Abstract**

**Introduction.** Diabetes Mellitus (DM) at this time is one of the problems that have an impact on productivity and reduce human resources. Diabetes Mellitus sufferers increase every year around the world, even in 2015 Indonesia ranks fifth in the world for the highest prevalence of diabetics. One of the highest complications of diabetes mellitus is neuropathy with age and gender as an influencing factor.

**Aim.** To determine the relationship between age, gender, and neuropathic complications with the incidence of diabetes mellitus in Dr. Sardjito Hospital Yogyakarta.

**Method.** This study used cross sectional observational analytic study. The independent variables in this research are Diabetes Type 1 and Type 2, while the dependent variable is Age, Gender and complications of Neuropathy. Data analysis technique used is Univariate with frequency distribution and Bivariate with Chi Square test. Types of secondary data obtained from observations of medical records database of Diabetes Mellitus patients in 2011-2016 at Dr. Sardjito Hospital as many as 1554 patients.

**Results.** Chi square test results showed there was no correlation between the gender of DM patients (p-value = 0.4276 > α = 0.05), there is a relationship between DM with patient age (P-value = 2.2e-16 < α = 0.05), and there is a relationship between diabetes with complications of neuropathy (p-value = 5.736e-06 <α = 0.05).

**Conclusion.** The risk factors of age and complications of neuropathy has a relationship with the incidence of diabetes mellitus, whereas gender risk factors have no relationship.

**Keywords:** Diabetes mellitus, gender, age, neuropathy.

---

**Kayatri Govindaraju**  
Department of Biomedical Sciences, University of Nottingham, Malaysia Campus, Kajang, Malaysia

**MK Lee**  
Department of Biomedical Sciences, University of Nottingham Malaysia Campus, Jalan Broga, 43500 Semenyih, Selangor Darul Ehsan, Malaysia

---

**Intracellular Stored Calcium Plays a Minor Role in GQ-Coupled Receptor-Mediated Contraction In Rat Airway Smooth Muscle**

**Kayatri Govindaraju**  
Department of Biomedical Sciences, University of Nottingham, Malaysia Campus, Kajang, Malaysia

**MK Lee**  
Department of Biomedical Sciences, University of Nottingham Malaysia Campus, Jalan Broga, 43500 Semenyih, Selangor Darul Ehsan, Malaysia
Y Mbaki
School of Life Sciences, University of Nottingham, Medical School Queen’s Medical Centre, Nottingham NG72UH

KN Ting
Department of Biomedical Sciences, University of Nottingham Malaysia Campus, Jalan Broga, 43500 Semenyih, Selangor Darul Ehsan, Malaysia

Abstract
The general notion of activation of Gq-protein coupled receptors involves the mobilisation of stored and extracellular calcium and leads to smooth muscle tissue contraction. The aim of this study was to investigate the involvement of calcium mediated contractions in vascular and airway smooth muscles. Using the standard organ bath procedures, aortic and tracheal rings were obtained from 6 to 8 week-old male Sprague Dawley rats. To activate the Gq protein receptors, phenylephrine (PE), an α1-adrenoceptor agonist, and carbachol, a M3 cholinoreceptor agonist, was added to baths containing the aortic and tracheal rings, respectively. The maximum response (Emax) to PE was reduced from 158.8 ± 11.8% (n=6) to 62.5 ± 12.4 % (n=8) upon removal of extracellular calcium in Krebs-Ringer solution. Maximal response to PE was also suppressed in the presence of nifedipine, a L-type Ca2+ channel inhibitor, (70.3 ± 11 %, n=8) and SKF96365, a canonical transient receptor potential channel inhibitor, (26.7 ± 13.2 %, n=5) when the influx of extracellular calcium was blocked. Removal of stored calcium also attenuated the PE contraction (p<0.05). Contractile responses to carbachol in the airway were totally abolished in the absence of calcium in the Krebs-Ringer solution (208.6 ± 23 % [n=8] vs 10.7 ± 4.2 % [n=3]). This is different from the aorta where a measurable response was detected despite the absence of external calcium. Blockage of extracellular calcium influx in the presence of nifedipine and SKF96365 also showed similar lack of responses in trachea. Interestingly, removal of stored calcium did not affect the carbachol responses (p>0.05). From these observations, we conclude that the role of stored and extracellular calcium in Gq protein activation is not the same across different type of smooth muscle tissues.

Keywords : phenylephrine, carbachol, stored and extracellular calcium, aorta, trachea

Y Mbaki
School of Life Sciences, University of Nottingham, Medical School Queen’s Medical Centre, Nottingham NG72UH

KN Ting
Department of Biomedical Sciences, University of Nottingham Malaysia Campus, Jalan Broga, 43500 Semenyih, Selangor Darul Ehsan, Malaysia

Abstract
The general notion of activation of Gq-protein coupled receptors involves the mobilisation of stored and extracellular calcium and leads to smooth muscle tissue contraction. The aim of this study was to investigate the involvement of calcium mediated contractions in vascular and airway smooth muscles. Using the standard organ bath procedures, aortic and tracheal rings were obtained from 6 to 8 week-old male Sprague Dawley rats. To activate the Gq protein receptors, phenylephrine (PE), an α1-adrenoceptor agonist, and carbachol, a M3 cholinoreceptor agonist, was added to baths containing the aortic and tracheal rings, respectively. The maximum response (Emax) to PE was reduced from 158.8 ± 11.8% (n=6) to 62.5 ± 12.4 % (n=8) upon removal of extracellular calcium in Krebs-Ringer solution. Maximal response to PE was also suppressed in the presence of nifedipine, a L-type Ca2+ channel inhibitor, (70.3 ± 11 %, n=8) and SKF96365, a canonical transient receptor potential channel inhibitor, (26.7 ± 13.2 %, n=5) when the influx of extracellular calcium was blocked. Removal of stored calcium also attenuated the PE contraction (p<0.05). Contractile responses to carbachol in the airway were totally abolished in the absence of calcium in the Krebs-Ringer solution (208.6 ± 23 % [n=8] vs 10.7 ± 4.2 % [n=3]). This is different from the aorta where a measurable response was detected despite the absence of external calcium. Blockage of extracellular calcium influx in the presence of nifedipine and SKF96365 also showed similar lack of responses in trachea. Interestingly, removal of stored calcium did not affect the carbachol responses (p>0.05). From these observations, we conclude that the role of stored and extracellular calcium in Gq protein activation is not the same across different type of smooth muscle tissues.

Keywords : phenylephrine, carbachol, stored and extracellular calcium, aorta, trachea

Mohamed Marzok
ERCICRLSH1803085

Comparative antinociceptive and sedative effects of epidural romifidine and detomidine in buffalo (Bubalus bubalis)

Mohamed Marzok
Department of Veterinary Surgery, Faculty of Veterinary Medicine, Kafrelsheikh University, Kafrelsheikh, Egypt

S. A. El-khodery
El-khodery S. A, Department of Internal Medicine and Infectious Diseases, Faculty of Veterinary Medicine, Mansoura University, Mansoura 35516, Egypt

Abstract
In this study, comparative antinociceptive and sedative effects of epidural administration of romifidine and detomidine in buffalo were evaluated.
Eighteen healthy adult buffalo, allocated randomly in three groups (two experimental and one control; n=6) received either 50 μg/kg of romifidine or detomidine diluted in sterile saline (0.9 per cent) to a final volume of 20 ml, or an equivalent volume of sterile saline epidurally. Antinociception, sedation and ataxia parameters were recorded immediately after drug administration. Epidural romifidine and detomidine produced mild to deep sedation and complete antinociception of the perineum, inguinal area and flank, and extended distally to the coronary band of the hind limbs and cranially to the chest area. Times to onset of antinociception and sedation were significantly shorter with romifidine than with detomidine. The antinociceptive and sedative effects were significantly longer with romifidine than with detomidine. Romifidine or detomidine could be used to provide a reliable, long-lasting and cost-effective method for achieving epidural anaesthesia for standing surgical procedures in buffalo. Romifidine induces a longer antinociceptive effect and a more rapid onset than detomidine. Consequently, epidural romifidine may offer better therapeutic benefits in the management of acute postoperative pain.

A reality in a developing country: diagnosis of cancer with the activation of automated immunohistochemistry

Tiziano Zanin
S.C. Laboratorio di Genetica Umana, Via Volta 6, E.O. Ospedale Galliera, Genova, Italy

Abstract
From September 2015 at San Giovanni di Dio Hospital in Tangueta – Benin – a Clinical Pathology Laboratory is active with the aim to make diagnosis and address towards adequate therapeutic programs patients affected from cancer and other diseases. The Laboratory has been equipped with a telepathology system and from 2018 with an automatic system for immunochemistry

Keywords: Telepathology, Histopathology laboratory, Immunohistochemistry

Effect Of Drop Sets On Muscle Strength And Endurance Of Trunk Extensors Among Trained Men

Chin Hou Yin
Year BPT, Department of Physiotherapy, Universiti Tunku Abdul Rahman, Malaysia

Nizar Abdul Majeedkutty
Senior Lecturer, Department of Physiotherapy, Universiti Tunku Abdul Rahman, Malaysia

Mohammed Abdulrazzaq Jabbar
Senior Lecturer, Department of Population Medicine, Universiti Tunku Abdul Rahman, Malaysia

Abstract
Drop sets training has been suggested as one of the best high intensity training techniques of all time. Though several studies have shown the effect of drop sets on limb muscles; there is a relative dearth of research on
the effect of drop sets on spinal musculature. This study was aimed to determine the effect of drop sets on muscle strength and endurance of trunk extensors among trained men. A randomized controlled trial was conducted for 6 weeks among 30 trained men recruited through convenient sampling. Participants were randomly assigned into two groups; experimental group that underwent drop sets and control group submitted to high load resistance training. A pre-test and post-test measurement of muscle strength and endurance for both groups was carried out using 1RM Strength Test and Biering-Sorensen test respectively. Data were statistically analysed by Pearson correlation and t-student tests, with a significance level of p<0.05. At the end of the trial, significant changes are shown in pre-test and post-test scores of muscle strength (p=0.001) and endurance (p=0.003) of the trunk extensors in the drop sets training group. The findings proved that drop sets can simultaneously improve muscle strength and endurance of trunk extensors with short term training. In conclusion, drop sets training achieved superior gains in muscle strength and endurance of the trunk extensors compared to high load training. In this context, this programme could potentially be used to improve trunk extensor muscle performance in trained men.

Keywords: drop sets, high load resistance training, trunk extensors, muscle strength, endurance

Riyan Rahmat Ramadhan Tanjung
YRICRLSH1803052

The Changes In Eating Habit After Nutritional Education On Anemia Maternal

Riyan Rahmat Ramadhan Tanjung
Public Health Faculty, State Islamic University of North Sumatera, Medan, Indonesia

Samsul Askhori
public health, state islamic university of north sumatera medan, Indonesia

Zata Ismah
public health, state islamic university of north sumatera medan, Indonesia

Mariana
Public Health Sains Department, Faculty of Medicine Sriwijaya University, Indonesia

Abstract
According to WHO (2008), globally the prevalence of anemia in pregnant women worldwide is 41.8%. Anemic pregnant women are wrong factors due to poor diet. Nutrition education is one of the preventive activities in improving the diet of pregnant women. This study aims to determine changes in consumption of eating patterns in anemic pregnant women after being given nutritional education in the city of Palembang. This type of research uses quantitative methods with an experimental design. The population in this study were pregnant women in Palembang City. The study sample consisted of 41 respondents (18 anemia, 23 normal). The collection technique used random sampling technique. Statistical test results show that there is a significant influence between nutritional education and rice consumption patterns (p-value 0.013), animal protein consumption (p-value 0.015), vegetables (p-value 0.03) in pregnant women.

Keywords: Education, Nutrition, Pregnant Women, Anemia

2018 – 4th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 13-14 Oct, Kuala Lumpur
The Regency Scholar's Inn @ UTM, Universiti Teknologi Malaysia, Jalan Semarak, 54100, Kuala Lumpur, Malaysia
LISTENERS

Nashon Oruko  
Molecular Biology, National Public Health Laboratories, Nairobi, Kenya  
ERCICRSSH1803065

Olatunde Omotayo Abiodun  
Rector Offic, Moshood Abiola Polytechnic, Moshood Abiola Polytechnic Ojere, Abeokuta, Nigeria  
ERCICRLSH1803071

Christine Sangkula  
Department of Education, Health and Nutrition Section, Philippines  
ERCICRLSH1803073

Olabode Thomas Ayoola  
Department Of General Studies/ Moshood Abiola Polytechnic, Ojere, Abeokuta, Moshood Abiola Polytechnic  
Ojere Abeokuta, Abeokuta, Nigeria  
ERCICRLSH1803074

Kevin Sandhu  
Royal New Zealand College of General Practice, University of Auckland, Auckland, New Zealand  
ERCICRLSH1803078

Anisatul Afifah  
Department of Health Services and Information, Universitas Gadjah Mada,Yogyakarta, Indonesia  
ERCICRLSH1803080

Abdallah Harun Rasheed  
Turkish Language, Diltem, Cankaya, Ankara  
ERCICRLSH1803083

Sabry El-khodery  
Department of Internal Medicine and Infectious Diseases, Faculty of Veterinary Medicine, Mansoura University, Mansoura, Egypt  
ERCICRLSH1803084

Omar Montasser  
Dentistry,Future University in Egypt,Cairo, Egypt  
ERCICRLSH1803086

Upcoming Conferences

https://eurasiaresearch.org/hbsra

- 2018 – 5th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 17-18 Nov, Singapore
- 2018 – 6th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 24-25 Nov, Jakarta
- 2018 – 7th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 17-18 Dec, Mauritius
2018 – 8th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 22-23 Dec, Bangkok

2018 – 9th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 27-28 Dec, Dubai

2018 – 10th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 30-31 Dec, Bali

2019 – 2nd International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 08-09 Feb, Bangkok

2019 International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 27-28 Feb, Dubai

2019 – 3rd International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 16-17 March, Singapore

2019 – 4th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 12-13 April, London