

**Healthcare and Biological Sciences Research Association**

**CONFERENCE PROCEEDINGS**

**14th International Conference on Healthcare and Life Science Research  
(ICHLSR), 17-18 June 2017, Singapore**

**17-18 June 2017**

Conference Venue

Nanyang Technological University, Nanyang Executive Centre, Singapore

**KEYNOTE SPEAKER**



**NIZAR ABDUL MAJEED KUTTY**

**Department of Physiotherapy at University Tunku Abdul Rahman, Malaysia**



Narmeen Arshad  
GICICHLRSR1703051

**Elucidating Structure- Elucidating Structure-Function Polymorphism of p7 gene of Hepatitis C Virus.**

**N. A. Hussain**

**Memon Medical Institute Hospital Microbiology, Karachi/PK  
Federal Urdu University of Arts Science & Technology<sup>2</sup>, Microbiology,  
Karachi/PK**

**M. Khemani**

**Memon Medical Institute Hospital Microbiology, Karachi/PK**

**M. Ajaz**

**Federal Urdu University of Arts Science & Technology, Microbiology,  
Karachi/PK**

**H. Diwan**

**Memon Medical Institute Hospital Microbiology, Karachi/PK**

**Abstract**

**Purpose:** Hepatitis C Virus (HCV) is potential virus for liver infection known to cause cirrhosis which may end up in liver failure and hepatocellular carcinoma (HCC). It has been recognized that out of the ten encoded proteins of HCV genome, p7 gene also has an antiviral potential as it is an essential HCV protein and can be obstructed by prototypic (small molecule) p7 inhibitors. Evidences suggest that p7 is potential ion channel (viroporin) that modifies several cellular pathways by interacting different binding partner proteins. However, the exact nature of these interactions is essentially vague. The present study is an investigation to resolve the binding between p7 and host binding partner proteins to the level of amino acid.

**Methods & Materials:** In order to address the principal objective, the structure-function analyses of p7 protein, sequences were retrieved from UniProt/NCBI data bases and subjected to multiple sequence alignment using ClustalX. Molecular models of proteins were constructed to know the structural differences between these molecules. One representative sequence from observed genotype were subjected to develop the molecular model using iterative threading and homology modelling. The models were subjected to the structural and thermodynamic refinements and used to develop the potential hexamers on the basis of geometrical complementarity.

**Results:** Molecular modelling shows considerable structural variations among p7 protein of different genotypes implying varying role in the HCV associated pathogenesis. This observation is further strengthening by variations in the post translation modification profile.

**Conclusion:** The present study provides the first composite picture of the structural variations in p7 gene and their potential role in pathogenesis. Augmented with the further studies the present investigation may elucidate the potential targets for therapeutic intervention.

**Keywords:**

**p7 gene, hcv, antiviral therapy**



**Shrihari Ashok Pingle**  
GICICHLSR1703052

**EFFECT OF HEAT ON CALCIUM FROM DIFFERENT MILK SAMPLES FROM SANGAMNER TALUKA, MAHARASHTRA**

**Shrihari Ashok Pingle**

**Department of Zoology, Sangamner Nagarpalika Arts, D. J. Malpani Commerce and B. N. Sarada Science College, Sangamner, Maharashtra, India**

**Abstract**

Calcium is the most abundant mineral in human body. It is important for biological processes. The major source of Calcium for human consumption is milk. The aim of the present study was to determine the change in amount of calcium in milk samples from different sources with respect to heat. The sources of milk were Desi cow, Jersey cow, Goat, Buffalo and pasteurized milk. Amount of Calcium was determined by EDTA titration method. The amount of Calcium was highest in goat milk and lowest in pasteurized packaged milk. When non-processed milk was boiled, it was observed that the Calcium content reduced by 7-11%. The Calcium content reduced by 4-5% when pasteurized packaged milk was boiled. The decrease in Calcium content after boiling is associated to the change in ionic and soluble Calcium in the milk sample.



**SAMAN KHAN**  
GICICHLSR1703060

**Mechanistic insights of 3-(bromoacetyl) coumarin derivative anticancer effects: Interaction with cellular Cu (II) leads to free radical-mediated DNA damage and cell death**

**Saman Khan**

**Department of Biochemistry, Faculty of Life Sciences, Aligarh Muslim University, Aligarh, Uttar Pradesh, India**

**Imrana Naseem**

**Department of Biochemistry, Faculty of Life Sciences, Aligarh Muslim University, Aligarh, Uttar Pradesh, India**

**Abstract**

**Aim:** Despite various advancements in cancer research, cancer still remains one of the main causes of morbidity and mortality worldwide. Therefore, new chemotherapeutic agents and therapies against different malignancies should be developed. One such therapy is targeted cancer therapy which involves the use of drugs that block the cancer growth by interfering with specific molecules/pathways and spare the normal cells. The basic rationale of targeted cancer therapy is targeting chemical entities/mutated proteins that are specific to cancer cells and absent in normal cells. Unlike normal cells, cancer cells contain elevated copper levels which play an integral role in angiogenesis. Copper is an important metal ion associated with the chromatin DNA, particularly with guanine. Thus, targeting copper via copper-specific chelators in cancer cells can serve as effective anticancer strategy. Keeping in view these facts, we synthesized di-(2-picoly) amine: 3-(Bromoacetyl) coumarin (ligand-L) against malignant cells.



**Antonio M. Callanta Jr.**  
GICICHL SR1703062

**Peeking through the Clinical Eye: The Lived Experiences of Neonatal Intensive Care Unit (NICU) Nurses in the Philippines**

**Alvinez, Paul Ed M.**  
Manila Science High School

**Callanta, Antonio Jr. M.Dita**  
Manila Science High School

**Joshua Tristan N.**  
Manila Science High School

**Tolentino, Jean Kaye M.**  
Manila Science High School

**Abstract.**

Health research serves a deep foundation in a society's course to growth and development, and in this era of globalization by fast-paced technological advancements, the Philippine medical industry strives to provide quality medical services to its citizens, traversing to all sectors of age and social status. In this academic endeavor, the researchers have focused on Neonatal Intensive Care Unit (NICU) nurses on their unique experiences in the field, stemming from the interplay of the rewarding joys and the conflicting battles they face in active duty. Significant data were gathered through a qualitative research approach, in which phenomenology was utilized as the method for study. An in-depth interview was conducted with five NICU nurses as key participants, in which all of whom worked at the same hospital, with the same shifts, and the same rank. Results of the interview were transcribed and coded for subsequent analysis through which consonance and dissonance were annotated. Meaning making and theme making was used to exemplify a coherent diagram in which the study was amalgamated on. Results of this research were used to further model the primary rearing experiences of the Neonatal Intensive Care Unit (NICU) Nurses in Sta. Rosa Hospital and Medical Center, and to create a stepping stone for future researches in line with the study.

**Keywords:**

**Health Research, Neonatal Intensive Care Unit, NICU Nurses, Phenomenology**



**FU Wenjing**  
GICICHL SR1703067

**The status and associated factors of chronic wound patients involved in treatment decision making procedures**

**Wenjing Fu**  
West China Medical School, Sichuan university, Chengdu,China

**Xiaoling LI**  
West China Medical School, Sichuan university, Chengdu,China

**Abstract**

**Aim**

To investigate the status of chronic wound patients for involvement in treatment decision-making and to explore influencing factors from the chronic wound patients' perspective to promote the patients to involve in treatment decision-making.



Ritika Agarwal  
GICICHLSR1703070

Medical image segmentation based on morphological operators: A review

Ritika Agarwal  
Department of Applied Physics  
Indian Institute of Technology (Indian School of Mines), Dhanbad.

Abstract

Image Segmentation is the crux of image analysis and processing. It is used to extract meaningful and informative segments from an image and is an essential process in the field of medical images. Medical image segmentation is important for diagnostic purposes and for further treatment. It aids and eases the process of medical treatment. Segmentation techniques are used for blood vessel extractions, detection of harmful and cancerous cells, and many such other medical applications. However the variability and complexity of the anatomical structures in human body make segmentation a challenging task.

There are various image segmentation techniques such as morphological filtering, intensity thresholding, feature detection, region accumulation, etc. The purpose of this systematic review of published studies is to illustrate the importance of morphological filtering in image segmentation and analysis. Morphological filters form a vital class of operators used in the segmentation of medical images. The main focus of this paper is to review different image segmentation algorithms which employ key morphological operators such as erosion and dilation to extract relevant information from the images. Retinal blood vessels extraction (used for the diagnosis of diabetic retinopathy) algorithms with the help of morphological operators are reviewed. Also, different cell segmentation (for an example, red blood cells segmentation using morphological operators) and automated fetal femur length measurement (in fetal ultrasound images) algorithms, are reviewed to illustrate the importance of morphological filtering.

It can be inferred from this literature review that morphological operators are an immensely useful segmentation tool. Powerful algorithms can be developed with the aid of these operators. Morphology can also be used to develop automated segmentation techniques which would greatly simplify the tedious and complex task of medical image processing.

Keywords:

Medical image segmentation, Morphological operators, Image analysis, Image processing

Chuan-hsiu Liu  
GICICHLSR1703071

Cistanche tubulosa change the synaptic transmission properties in Drosophila

Chuan-Hsiu Liu  
Graduate Institute of Chinese Medicine, College of Chinese Medicine, China Medical University, Taichung 40402, Taiwan

Tsung-Jung Ho  
Graduate Institute of Chinese Medicine, College of Chinese Medicine, China Medical University, Taichung 40402, Taiwan

Hsin-Ping Liu  
School of Chinese Medicine, China Medical University, Taichung 40402, Taiwan


Wei-Yong Lin  
Graduate Institute of Integrated Medicine, China Medical University, Taichung 40402, Taiwan  
Department of Medical Research, China Medical University Hospital, Taichung 40447, Taiwan

Abstract

Our previous study showed Cistanche tubulosa (CT) can extend the lifespan and

	<p>increased antioxidant ability of <i>Drosophila</i>. The neuromuscular junction (NMJ) of <i>Drosophila</i> larvae can be utilized to evaluate the efficacy of Chinese herbal medicine on synaptic plasticity. In this study, we aimed to explore the impact of CT on synaptic structure and function in the <i>Drosophila</i> NMJ. Here, we analyzed miniature excitatory junctional currents (mEJCs), frequency, quantal content (QC) before/after high-frequency stimulation (HFS, 30Hz, 1ms, 20sec), and long term depression (LTD) at synapses of the <i>Drosophila</i> NMJ. The results indicated that CT treatment may decrease mEJCs frequency, increase quanta size and quantal content, and affect LTD in <i>Drosophila</i> neuromuscular synapse.</p>
 <p style="text-align: center;"><b>Mei-Ying Chen</b> GICICHLSR1703073</p>	<p style="text-align: center;"><b>The Toxic Effect of DEHP on <i>Drosophila</i></b></p> <p style="text-align: center;"><b>Mei-Ying Chen</b> The Department of Environmental Engineering, National Chung Hsing University, Taichung 40227, Taiwan</p> <p style="text-align: center;"><b>Wing-Ping Liao,</b> The Department of Environmental Engineering, National Chung Hsing University, Taichung 40227, Taiwan</p> <p style="text-align: center;"><b>Wei-Yong Lin</b> Graduate Institute of Integrated Medicine, China Medical University, Taichung 40402, Taiwan Department of Medical Research, China Medical University Hospital, Taichung 40447, Taiwan</p> <p style="text-align: center;"><b>Abstract</b></p> <p>Di (2-ethylhexyl) phthalate (DEHP) is a common Phthalate ester, used as a plasticizer to enhance the flexibility of plastic products. However, environmental exposure to DEHP leads to endocrine disruption, obesity and cardiotoxicity. To test the toxicity of DEHP, <i>Drosophila melanogaster</i> treated with 0.05 to 1% of DEHP was assayed for life span, body weight, reproductivity, learning, memory, and electroretinogram (ERG). We found that DEHP decreased 1) lifespan of both genders of <i>Drosophila</i> with 0.1% or higher, 2) reproductivity of female with 0.5% or higher, 3) retinal light sensitivity of female with 0.4% or higher, and increased body weight of offspring female <i>Drosophila</i> with 0.05% or higher concentrations. The learning and memory of <i>Drosophila</i> were not significantly altered by DEHP treatment within this concentration. In conclusion, our study showed the toxic effect of DEHP on lifespan, body weight, reproductivity, and ERG of <i>Drosophila melanogaster</i>.</p> <p><b>Keywords:</b> Di (2-ethylhexyl) phthalate; <i>Drosophila</i>; Toxicity; Lifespan; Electroretinogram; Learning; Memory</p>
<p style="text-align: center;"><b>Pei-Fang Ma</b> GICICHLSR1703074</p>	<p style="text-align: center;"><b>Comparison of Molecular Breast Imaging perform and Sonography in Measurement of tumor size</b></p> <p style="text-align: center;"><b>Pei-Fang MA</b> M.S. Institute of Medical Sciences, Tzu Chi University</p> <p style="text-align: center;"><b>His-Jian Lee</b> Ph.D. Institute of Medical Sciences, Tzu Chi University</p> <p style="text-align: center;"><b>Abstract</b></p> <p><b>Background:</b> Sonography is a recognized normal detection modality that can measure tumor and size. Molecular Breast Image (MBI) is a new detection instrument in recent years; it used the characteristic of abnormal cells which would absorb developer to detect tumors. We want to discover more about MBI's performance, so we compare the measurements of breast tumor size obtained from MBI and Sonography with those of</p>



<p><b>Rosita Handayani</b> GICICHLSR1703075</p>	<p>pathologic examination.</p> <p style="text-align: center;"><b>Anticancer Activity of Active Compound from Cabe Jawa (Piper retrofractum Vahl) Measured by Topoisomerase Activity in Mutant Yeast and Inhibition of Proliferation in Breast Cancer Cell Line MCF-7</b></p> <p style="text-align: center;"><b>Rosita Handayani</b> School of Pharmacy, Bandung Institute of Technology, Indonesia</p> <p style="text-align: center;"><b>Asep Gana Suganda</b> School of Pharmacy, Bandung Institute of Technology, Indonesia</p> <p style="text-align: center;"><b>Marselina Irasonia Tan</b> School of Life Sciences &amp; Technology, Bandung Institute of Technology, Indonesia</p> <p style="text-align: center;"><b>Abstract</b></p> <p><b>Background and Objectives :</b> Cabe jawa (Piper retrofractum Vahl) is one of Indonesia prospective plant which abundant in quantity. Traditionally it used to treat inflammation and as aphrodisiac agent. In many countries, it is used to treat various cancer disease but the scientific informations related anticancer activity was still limited. This study aims to determine anticancer activity of active compounds in Piper retrofractum Vahl related to topoisomerase inhibitory activity and proliferation inhibition of breast cancer cell line MCF-7. <b>Methods :</b> Topoisomerase activity assay was performed by Yeast Mecanism Based assay methods using mutant yeast from 3 strains : 1138 strain (yeast with rad5 protein deficiency), 1140 (yeast with topoisomerase I overexpression), and 1353 (yeast with topoisomerase II overexpression). Confirmation of activity was performed in breast cancer cell culture of MCF-7 using MTT (3-(4, 5-dimethylthiazolyl-2)-2,5-diphenyltetrazolium bromide) assay method. The most active fractions were selected and isolated and then characterized using two dimaltional TLC method, melting point test, functional group analysis using FTIR and structural determination using HNMR, CNMR and GC-MS. <b>Results :</b> Two active compounds from n-hexane fraction were obtained. Compound 1 was characterized as Piperin, giving IC<sub>12</sub> values 1684.82±47, 2113.54±252, 3034.48±139 µg/mL in 1138, 1140, and 1353 strains respectively and giving IC<sub>50</sub> 37.23±2.84 µg / mL in the cell proliferation inhibition assay of MCF-7. Compound 2 was characterized as Pellitorine, giving IC<sub>12</sub> values 2553.89±70, 2680.81±312, 3892.67±163 µg/mL in 1138, 1140, and 1353 strains respectively and giving IC<sub>50</sub> 15.8 ±2.43 µg/mL in the cell proliferation inhibition assay of MCF-7. Doxorubicin was used as a positive control, giving IC<sub>12</sub> values 125.33±17, &lt;60, 221.13±8 µg/mL in 1138, 1140, and 1353 strains respectively and giving IC<sub>50</sub> of &lt;2.5 µg/mL in the inhibition assay of cancer cell proliferation of MCF- 7. <b>Conclusions:</b> Both piperine and pellitorine had Topoisomerase I and II inhibition activity and inhibition in the proliferation of breast cancer cells, MCF-7.</p> <p><b>Keywords :</b> breast cancer, cabe jawa, MTT, piper retrofractum, topoisomerase, yeast.</p>
<div style="text-align: center;">  <p><b>B. Harinathan</b> GICICHLSR1703053</p> </div>	<p style="text-align: center;"><b>N SILICO PREDICTION OF POTENTIAL PROBABLE VACCINE CANDIDATE AGAINST MYCOBACTERIUM TUBERCULOSIS CDC 1551</b></p> <p style="text-align: center;"><b>B. Harinathan</b> Departemnt of Botany, Saraswathi Narayanan College, Madurai Kamaraj University, Madurai, Tamil Nadu, India.</p> <p style="text-align: center;"><b>S. Sankaralingam</b> Departemnt of Botany, Saraswathi Narayanan College, Madurai Kamaraj University, Madurai, Tamil Nadu, India.</p> <p style="text-align: center;"><b>S. Palpperumal</b> Departemnt of Botany, Saraswathi Narayanan College, Madurai Kamaraj</p>



University, Madurai, Tamil Nadu, India.

**D. Kathiresan**

Departemnt of Botany, Saraswathi Narayanan College, Madurai Kamaraj  
University, Madurai, Tamil Nadu, India.

**T. Shankar**

Department of Microbiology, Ayya Nadar Janaki Ammal College, Sivakasi.  
Tamil Nadu, India.

**K. Maheshwari**

Department of Microbiology, Ayya Nadar Janaki Ammal College, Sivakasi.  
Tamil Nadu, India.

**D. Prabhu**

Department of Microbiology, Ayya Nadar Janaki Ammal College, Sivakasi.  
Tamil Nadu, India.

**C. Meena**

Sai'S Bio Sciences, Research Institute, Chennai, Tamil Nadu, India.

#### Abstract

The need, then, for new anti-microbial treatments, both therapeutic and prophylactic, is obvious. Antibiotic drugs are one approach to realizing such treatments. Vaccines are another. Historically, the most successful vaccination strategies have been based on attenuated whole pathogenic agents: viruses or bacteria. However, interest is now turning to more rationally designed vaccines. At one extreme of the size range, these can be genetically modified pathogens and at the other protein antigens or isolated T cell epitopes. Here the modern vaccinologist can make use of genomic data information from the many genomic sequencing projects focusing on pathogenic microorganisms. One of the key disciplines helping the discovery of new vaccines is the use of informatics strategies, primarily bioinformatics and molecular modeling. Phenomenal progress has been made in the field of TB vaccine development during the past decade. Now that a comprehensive picture of the Tuberculosis genome is in hand, multiple protective antigens have been proposed and tremendous advances in adjuvants and vaccine delivery systems have been made. Thus, the development of an effective tuberculosis vaccine, a questionable prospect only a few years ago, is now becoming a reality. Mycobacterium tuberculosis CDC 1551 was retrieved from SWISS PROT with the length of 400 amino acid by FASTA. In our present investigation, the identified MHC Class II molecules are DRB1 class and subtype 01 and DRB7 class and subtype 01 which is represented as DRB1\* 0101(DR1) and DRB1\*0701(DR7) respectively. For our input sequence, it was found that allele HLA DRB1\*0101 and HLA DRB1\*0701 showed least IC50 (nM) value of 6.2 which infers high affinity and strong binding between the positions 1:52-60 for the peptide sequence RAGLVMEKGAKVKYR compared to other positions. It was found that, TMHMM result showed that, amino acids between 0-40 were found to be transmembrane in position for the allele DRB\*0101. Our current study depicted the epitope and paratope interaction is performed through Patch dock and has been visualized in Accelrys D.S 2.5. Our designed vector is 4126 bp long with the following components, CMV promoter(163-723), CMV promoter (669-750), T 7 promoter(1229-1247) and LAC promoter (1422-1451), F 1 origin (1815-2120) and Epitope cloning site (2466-2508).

**Key Words:**

Mycobacterium tuberculosis CDC 1551, MHC Class II molecule, Vaccine.

<p><b>Ching-Yu Chang</b> GICICHLSR1703054</p>	<p style="text-align: center;">Comparison of the step adjustment during stepping over obstacles between dancers and non-dancers</p> <p style="text-align: center;"><b>Ching-Yu Chang</b> Graduate Institute and Department of Physical Therapy, Medical College, National Cheng Kung University, Tainan, Taiwan</p> <p style="text-align: center;"><b>Chiung-Yu Cho</b> Graduate Institute and Department of Physical Therapy, Medical College, National Cheng Kung University, Tainan, Taiwan</p> <p style="text-align: center;"><b>Abstract</b></p> <p><b>Research Objectives:</b> Step adjustment played an important role in avoiding tripping on obstacles. If an unpredicted disturbance such as obstacles appeared during walking, people should adjust the step to find an alternative foot landing position. Tripping or stumbling on obstacles is one of the common falling conditions in daily life, but the exhaustive ability of obstacle avoidance, such as step adjustment is unknown. Dance-based training is considered to an effective intervention to improve agility, muscle power, balance, proprioception and control of limb trajectories which are essential for step adjustment. Therefore, the aims of this study is to compare whether the dancers have the better performance than the controls in step adjustment during crossing over obstacles. <b>Methodology:</b> We tested crossing virtual obstacle task in 21 healthy adults (control group, n = 10; dancer group, n = 11). The participants walked on a treadmill at a speed of 3 km/hr. Virtual obstacles were randomly projected on the belt of treadmill 75 times in three positions (distance to subject: 13.4/26.8/40.2cm), and participants should cross over them. Successful rates and kinematic data were calculated. We also tested balance, proprioception, muscle strength and reaction time for two groups. A two-way ANOVA with repeated measure was used to analyze the dependent variables. The significant level was set at <math>p &lt; 0.05</math>. <b>Results:</b> The dancer group had higher successful rate in crossing virtual obstacles (<math>p = 0.012</math>) than the control group and the reaction time was shorter in the dancer group (<math>p = 0.020</math>). While crossing obstacles, the subjects had higher hip flexion angle (<math>p = 0.001</math>), toe clearance (<math>p &lt; 0.001</math>), but lower successful rate (<math>p &lt; 0.000</math>) in the third position as compared to other positions. <b>Conclusion:</b> The dancer group had better performance during crossing over obstacles. Dance-based training may have a positive effect on avoiding obstacles. Future studies will investigate the intervention effect of dance-based training on older adults who are at high risk of falling.</p> <p><b>Key Words:</b> step adjustment, obstacles, dancer</p>
<p><b>Wei Lin</b> GICICHLSR1703055</p>	<p style="text-align: center;"><b>Systematic Review and Meta- Analysis of Effects by Pharmacology and Psychosocial intervention on Andropause syndrome Prevention and Treatment for Male</b></p> <p style="text-align: center;"><b>Wei Lin</b> Out Patient Department, Shih-Kong Memorial Hospital Taipei, Taiwan</p> <p style="text-align: center;"><b>Abstract</b></p> <p><b>Background:</b> Although with the advancement in medicine in recent years, the topic of male menopause, andropause, is still rarely studied and discussed. Similar to female menopause, andropause exhibits many symptoms such as hot flash, irritability and anxiety, depression, premature ejaculation, and erectile dysfunction. However, andropause differs from females, whereby the male hormone is reduced gradually and without acute symptoms such as the absence of periods. Therefore, the majority of men do not think they are</p>

	<p>experiencing menopausal symptoms and are reluctant in seeking medical advice. The majorities of andropause were treated with pharmacology interventions. However since menopause is a process and not a disease, andropause medications require a systemic literature review to elucidate their necessity and effectiveness.</p> <p><b>Purpose:</b> The purpose of this study is to compare the effectiveness between a combination of psychosocial therapy and pharmacology interventions and medication alone in treating andropause caused erectile dysfunction. The result of this research can be of benefit to maintain health and relief symptoms for andropause.</p> <p><b>Method:</b> Systematic review and meta-analysis of literatures was employed in this study. Both Chinese and English related literatures, published between 1993 and the December of 2016, were analyzed. The reviewed Chinese databases include: Airtelibrary (Chinese Electronic Periodicals Service [CEPS]), Chinese Electronic Theses and Dissertation Service (CETDS), and the Chinese Journal and Thesis Database (CJTD). The reviewed English database include: Cumulative Index to Nursing and Allied Health Literature (CINAHL), PubMed, MEDLINE, Journal of Sex and Marital Therapy, ProQuest, and the Cochrane Library. Erectile functions were investigated with meta-analysis to determine the effectiveness, measured by International Index of Erectile Function (IIEF), of each different treatment method.</p> <p><b>Result:</b> The results in andropause depression symptoms showed that apart from pharmacology interventions, exercise treatments such as cardiovascular exercise, Qigong, strength training were used as the main psychosocial treatment. The results showed that there was no significant correlation between overall intervention and the overall IIEF through heterogeneity analysis (<math>P = 0.0750</math>). However, after each of the three different treatments, the erectile function (<math>P &lt; 0.0001</math>; 95% confidence interval [CI] = 1.989 to 3.809) and overall satisfaction (<math>P &lt; 0.00001</math>; 95% CI = 1.758 to 3.417) scores were shown to be significantly correlated to IIEF. The results indicated that the different intervention methods, when assessed separately, showed significant correlations to erectile function and overall satisfaction. However, when the methods were assessed together, the overall score did not show a significant correlation. A possible reason for this phenomenon is that the number of sampled literatures is very few, and thus cannot elucidate an overall relationship. Finally, we also suggest that when using the IIEF index in assessing cases in a study, the detailed list assessed items should be listed to demonstrate of the index's practicality.</p> <p><b>Discussion:</b> In addition to pharmacology interventions, psychosocial interventions can be used in improving andropause related erectile dysfunction. Because andropause is not a disease, treatments of reduced drug use should be considered to avoid over-medication.</p> <p><b>keyword:</b> male, andropause, erectile dysfunction, pharmacology intervention, psychosocial intervention</p>
<p style="text-align: center;">Chiyong Lee GICICHLR1703056</p>	<p style="text-align: center;">Essential Features of Age-Friendly Cities in Korea: A Literature Review</p> <p style="text-align: center;">Chiyong Lee College of Nursing, Seoul National University, Seoul, Korea</p> <p style="text-align: center;">Yeon-Hwan Park</p>

	<p style="text-align: center;"><b>College of Nursing, the Research Institute of Nursing Science, Seoul National University</b></p> <p style="text-align: center;"><b>Abstract</b></p> <p><b>Research objective</b> Accessible community support services and senior-friendly environments have a major impact on active aging, independence and quality of life in older adults, which significantly affect their ability to “age in place”. The purpose of this study is to identify key attributes of age-friendly factors among the aged residing in urban cities in Korea.</p> <p><b>Methodology</b> The study will be conducted from February to May, 2017. Information on comprehensive healthcare resources has been collected through secondary analysis of data available in the city databases. Also, further data acquisition has been accomplished by site visiting and in-depth interviews with professionals and academics to explore the characteristics that are indicative of age friendliness.</p> <p><b>Findings</b> The framework for age-friendly communities encompasses the principles of active aging; social interaction, access to health care, civic engagement opportunities and environmental benefits. Therefore, it is important for cities to have sufficient infrastructure and social networks that actively involve, support and value geriatric people. Also, there is a clear need for linkage between health care and social services in providing effective home-based support as well as nursery programs.</p> <p><b>Research Outcomes</b> We need effective metrics to objectively assess factors that contribute to the development of age-friendly cities to generate preliminary results for developing an efficient strategy to improve the ability to age in place. Additional conclusion will be made from the analysis of collection data sets.</p> <p><b>Future Scope</b> Future studies should focus on developing measurements for the barriers, which impedes access to health and community support services. These new approaches will create livable communities for all ages, and ultimately support overall quality of life. Also, services for geriatric people will have to be segmented to meet and advocate the needs of specific person and situations, while including critical components of evidence-based approaches.</p> <p><b>Keywords</b> <b>Geriatric people, Age-friendly, Community health service</b></p>
	<p style="text-align: center;"><b>Nurses’ Perception and Experiences of infection control at Nursing home in South Korea</b></p> <p style="text-align: center;"><b>Min Hye, Lee</b> College of Nursing, Seoul National University, Seoul, Korea</p> <p style="text-align: center;"><b>Seong Hyeon, Lee</b> College of Nursing, Seoul National University, Seoul, Korea</p> <p style="text-align: center;"><b>Chi Young, Lee</b> College of Nursing, Seoul National University, Seoul, Korea</p> <p style="text-align: center;"><b>Yeon-Hwan, Park</b> College of Nursing, The Research Institute of Nursing Science, Seoul National University, Seoul</p>

	<p style="text-align: center;"><b>Abstract</b></p> <p><b>Research Objectives:</b> With rapid aging of Korean population, the number of residents in long-term care facilities (LTCFs) is increasing faster than expected. Although older adults are vulnerable to infections, there is no infection control guideline for LTCF in South Korea and research regarding current infection control practice in LTCF is scarce or lacking. This study aimed to describe Korean nursing home nurses' perceptions on current infection control practice and their experience of infection control in nursing homes.</p> <p><b>Methodology:</b> This was a qualitative study using focus group interviews (FGIs). Using a purposive sampling design, 11 eligible nurses were interviewed as two focus group from 4 nursing homes in South Korea. The recorded interviews were verbatim transcribed, followed by a thematic analysis.</p> <p><b>Findings:</b> Four main themes on nurse's experiences of infection control were 'epidemiological characteristics of infectious disease', 'screening, prevention, and early detection rather than treatment', 'need for evidence based resource', and 'barriers to infection control practice'. Participants perceived that scabies, influenza, pneumoniae, and urinary tract infection were critical healthcare associated infection. Their infection control practices were focused on screening on admission, prevention, and early detection of infectious disease. They had needs for evidence based infection control guidelines in Korean nursing homes and systematic educational programs for workers.</p> <p><b>Research Outcomes:</b> Nursing home nurses recognized the importance of infection control in nursing home. However, they experienced barriers to infection control practice such as conflict with family and non-healthcare worker, insufficient healthcare worker with infection control knowledge, and proficiency of care workers, etc.</p> <p><b>Future Scope:</b> Development of evidence based infection control guidelines tailored to Korean nursing home context is needed to help infection control practice.</p> <p><b>Keywords:</b> Aged, Infection control, Nursing home, Focus group</p> <p><b>Funding</b> This study was supported by Basic Science Research Program through the National Research Foundation of Korea (NRF) funded by the Ministry of Education, Science and Technology (NRF-2016R1A2B4008890).</p>
<p><b>Yeon-Hwan Park</b> GICICHL SR1703058</p>	<p style="text-align: center;"><b>Development of framework for classifying community-dwelling independent older adults.</b></p> <p style="text-align: center;"><b>Yeon-Hwan, Park</b> College of Nursing, The Research Institute of Nursing Science, Seoul National University, Seoul</p> <p style="text-align: center;"><b>Seong Hyeon, Lee</b> College of Nursing, Seoul National University, Seoul, Korea</p> <p style="text-align: center;"><b>Hee Kyung, Chang</b> College of Nursing, Gyeongsang National University, Jinju, Korea</p> <p style="text-align: center;"><b>Min Hye, Lee2</b> College of Nursing, Seoul National University, Seoul, Korea</p>

	<p style="text-align: center;"><b>Abstract</b></p> <p><b>Research Objectives:</b> In light of the increasing elderly population and the growing demand for elderly care, technology support is given increasing attention. Development of the technology support services should consider and analyze the characteristics and needs of elderly. This study aimed to develop and validate framework for classifying older adults, community-dwelling and independent living. This study will guide the further development of technology service for aged.</p> <p><b>Methodology:</b> This study was conducted by several steps. 1) <b>Development:</b> A literature review on studies in assessment or classification methods for elderly in Pubmed database, and the Delphi process with 8 experts on geriatric research and practice. 2) <b>Validation:</b> We conducted the cross-sectional survey of 411 community dwelling older adults (mean age: 75.81±5.98, female 68.4%) in South Korea.</p> <p><b>Findings:</b> We found that frailty status and living alone were critical criteria, rather than age, for classifying the elderly people. Identifying 6 functional status (instrumental activities of daily living, mental health, physical wellbeing, psychosocial wellbeing, safety &amp; prevention, and medication adherence) of older people provided a comprehensive framework for assessing needs for technological support. In the survey, living alone elderly were 39.4% and 10.7% of participants were classified as frail status. Living alone elderly or more frail older adults had lower level of function in physical wellbeing, psychosocial wellbeing, and safety &amp; prevention. There were no significant differences in instrumental activities of daily living, mental health, and medication adherence according to living status and frailty.</p> <p><b>Research Outcomes:</b> The findings suggest that the technological support services should be considered the living condition and frailty of community-dwelling independent elderly. It is needed that technology service assisting both physical and psychosocial wellbeing for frail living alone elderly.</p> <p><b>Future Scope:</b> Further research is needed about critical criteria for classifying characteristics of institutionalized dependent elderly and the technology service needs.</p> <p><b>Keywords:</b> Aged, Frailty, Living status, Technology, Classification</p> <p><b>Funding</b> This study was supported and funded by Korea Institute of Science and Technology (2E27210-17-051).</p>
<p>Seong Hyeon Lee GICICHLRSR1703059</p>	<p style="text-align: center;"><b>Demand and Acceptance for ADL Assistive Technology in Community-Living Elderly</b></p> <p style="text-align: center;">Seong Hyeon, Lee College of Nursing, Seoul National University, Seoul, Korea</p> <p style="text-align: center;">Min Hye, Lee College of Nursing, Seoul National University, Seoul, Korea</p> <p style="text-align: center;">Chi Young, Lee College of Nursing, Seoul National University, Seoul, Korea</p> <p style="text-align: center;">Yeon-Hwan, Park</p>

	<p style="text-align: center;">College of Nursing, The Research Institute of Nursing Science, Seoul National University, Seoul, Korea</p> <p style="text-align: center;"><b>Abstract</b></p> <p><b>Research Objectives:</b> In the face of aging and decreasing population, robot assistive technology has been recently suggested as a viable alternative for elderly care. The purpose of this study is to investigate the demand and acceptance for the activities of daily living (ADL) assistive technologies, and to evaluate their relations with sociodemographic characteristics and instrumental activities of daily living (IADL) in community-living elderly.</p> <p><b>Methodology:</b> A cross-sectional study involving 234 older adults (mean age: 75.71±5.76, female 70.9%) was carried out at a senior welfare center in Korea. The demand and the acceptance for the ADL assistive technologies were measured using 10-point visual analogue scale (VAS), while IADL was measured using the Korean Instrumental Activities of Daily Living (K-IADL) scale. The Student's t-test and the Pearson's correlation were used to analyze the data under the investigation. All statistical analysis was done with the SPSS version 21(SPSS Inc., U.S.A.).</p> <p><b>Findings:</b> The mean scores of the demand and the acceptance for ADL assistive technologies were 6.06±2.60 and 6.33±2.68, respectively, and were significantly relevant to age and educational level. There was no significant correlation between the demand and the acceptance for ADL assistive technology and K-IADL scores.</p> <p><b>Research Outcomes:</b> Age and educational level are related to demand and acceptance for ADL assistive technologies rather than IADL. Participants with young age and high educational level have more demand and acceptance toward ADL assistive technology.</p> <p><b>Future Scope:</b> Further study about awareness of assistive technology in older and less educated population is needed.</p> <p><b>Keywords:</b> Aged, Old Age Assistance, Activities of Daily Living, Self-Help Devices This study was supported and funded by Korea Institute of Science and Technology (2E27210-17-051).</p>
<p style="text-align: center;"><b>YI, YUMI</b> GICICHL SR1703061</p>	<p style="text-align: center;"><b>Relationship between exercise behavior and health related QOL in community-dwelling elders with musculoskeletal disorder: Secondary analysis</b></p> <p style="text-align: center;"><b>YuMi Yi</b> RN,MSN, Doctoral Student College of Nursing, Seoul National University</p> <p style="text-align: center;"><b>Yeon-Hwan Park</b> PhD, RN, Associate Professor College of Nursing, Seoul National University</p> <p style="text-align: center;"><b>JiYeon H</b> RN,MSN, Doctoral Student College of Nursing, Seoul National University</p> <p style="text-align: center;"><b>SunHee Moon</b> PhD, RN, Seoul National University College of Nursing</p> <p style="text-align: center;"><b>MinHye Lee</b> RN,MSN, Doctoral Student College of Nursing, Seoul National University</p>



Abstract

**Objectives**

Musculoskeletal disorders are a common condition resulting in the loss of independence and frail and a reduced quality of life for elderly people. Exercise is the most important component for prevention and treatment of musculoskeletal disorder.

The purpose of this study was to investigate the relationship between health related QOL(HrQOL) and exercise (behavior, duration, frequency and type of exercise) in community-dwelling elders with Musculoskeletal disorders and to identify target disease group and exercising strategies for exercise interventions.

**Methodology**

This study was a secondary analysis of data sets obtained from a larger study entitled Health Status of Community Dwelling Older Adults: Community-Based Prospective Study, performed during 2013 to 2014 at one representative senior center in Seoul, South Korea. Sociodemographic characteristics, exercise behavior and HrQOL(EQ-5D) data were collected with self-report questionnaires or face to face interviews. 164 participants, who had one more Musculoskeletal disorders (arthritis(n=91), osteoporosis(n=61), and low-back pain & sciatica(n=35)) over 3months, selected from raw data.

**Findings**



The mean age of the participants was 74.96±6.41 years. The proportion of female was 84.8% (n=139) and male was 15.2%(n=25). 79.3% of the participants did exercises. The average exercise duration was 59.27min./time, mean exercise frequency was 5.52times/week. Walking topped the list with 52.4%, followed by dancing(13.4%), cycling(12.8%), weightlifting(3.7%), and etc. in type of exercise.

In dimensions of “mobility”, “self-care”, “usual activities”, “pain/discomfort” and “anxiety/depression” of the EQ-5D, moderate problems were found in 31.1%, 3.7%, 13.4, 51.2% and 22.65% of participants, respectively. 9.1% and 5.5% participants had severe problems in only “pain/discomfort” and “anxiety/depression” dimensions. In dimension “mobility” and “pain/discomfort”, exercise behavior showed significant association with HrQOL(p<.007, p<.024). Over 60 minutes of exercise increased HrQOL in “anxiety/depression” dimensions. The frequency, and type of exercise were not related to HrQOL in musculoskeletal disorder. Within the arthritis group, regression analysis showed that exercise was associated with higher HrQOL: “pain/discomfort”(p<.003) and “usual activities”(p<.012) dimension. In osteoporosis and low-back pain & sciatica group, exercise behavior was not associated with HrQOL.


**Future Scope**

In conclusion, this study revealed that community-dwelling elders with musculoskeletal disorder reported more decreased HrQOL in “pain/discomfort” and “anxiety/depression” dimensions. Among the musculoskeletal disorders, only arthritis group had a significant relationship between exercise behavior itself and HrQOL: “pain/discomfort” and “usual activities” dimensions. Interventions to help the elderly with arthritis keep exercise should be strategies to improve their HrQOL: “pain/discomfort” and “usual activities”. Further work-up is needed in the appropriate exercise duration for aged people with arthritis to increase HrQOL in “anxiety/depression” dimension.

	<p><b>Key word:</b> arthritis, osteoporosis, QOL, exercise, aged <b>Funding:</b> This study was supported and funded by College of Medicine, Seoul National University (800-20150098)</p>
	<p style="text-align: center;"><b>Balance Performance during Turning in Patients with Benign Paroxysmal Positional Vertigo (BPPV)</b> <b>Yi-Chun Huang</b> Department of Physical Therapy, College of Medicine, National Cheng Kung University, Tainan, Taiwan</p> <p style="text-align: center;"><b>Tzu-Tung Tsai</b> Department of Neurology, National Cheng Kung University Hospital, Tainan, Taiwan</p> <p style="text-align: center;"><b>Jiunn-Liang Wu</b> Department of Otolaryngology, National Cheng Kung University Hospital, Tainan, Taiwan</p> <p style="text-align: center;"><b>Wei-Ting Lee</b> Department of Otolaryngology, National Cheng Kung University Hospital, Tainan, Taiwan</p> <p style="text-align: center;"><b>Sang-I Lin</b> Department of Physical Therapy, College of Medicine, National Cheng Kung University, Tainan, Taiwan</p> <p style="text-align: center;"><b>Yi-Ju Tsai</b> Department of Physical Therapy, College of Medicine, National Cheng Kung University, Tainan, Taiwan</p> <p style="text-align: center;"><b>Pei-Yun Lee</b> Department of Physical Therapy, College of Medicine, National Cheng Kung University, Tainan, Taiwan</p> <p style="text-align: center;"><b>Abstract</b></p> <p><b>Background and Purpose:</b> Benign paroxysmal positional vertigo (BPPV) is a common peripheral vestibular disorder, which is caused by free floating debris moving in the semicircular canals. Patients with BPPV usually suffer from positional vertigo and nystagmus during certain head movements. Despite the episodes of vertigo usually last one minute or less, the patients still refrain from performing head movements to avoid vertigo. Turning is a common movement requiring head movements during activities of daily living. It is unknown whether the symptoms of BPPV would affect such movement involving head movements. Therefore, the purpose of this study was to investigate balance performance during turning in patients with BPPV. <b>Method:</b> Twenty-five healthy young adults (22.6±2.0 years) and twenty-five patients with BPPV (54.9±14.7 years), examined with Dix-Hallpike test, were recruited in the study. Patients whose Dix-Hallpike test result was negative were excluded. All subjects completed a set of physical examination including visual acuity, muscle strength and cutaneous sensation of the feet. Balance performance during quick turning responding to an auditory cue was</p>

	<p>examined with a force plate (Kistler model 9286A, Winterthur, Switzerland). Independent t-test was used to compare differences of the center of pressure (COP) parameters obtained from the force plate between the two groups. Results: The BPPV patients had significantly poorer visual acuity (<math>p &lt; 0.05</math>) and cutaneous sensation (<math>p &lt; 0.05</math>) than the young adults. No significant difference was found in muscle strength of the lower extremities between the two groups, except hip flexors. The BPPV patients showed longer duration (<math>p = 0.002</math>) and larger elliptical sway area (<math>p = 0.009</math>) to complete the turning task than the young adults. The sway length during turning in anterior-posterior (<math>p = 0.001</math>) and medial-lateral (<math>p = 0.006</math>) direction was significant longer in the BPPV patients than the young adults. In addition, the BPPV patients changed sway directions significantly more frequently than the young adults (<math>p = 0.002</math>). Conclusion: BPPV patients required a longer time to complete a turn, and exhibited larger sway area and longer sway length during turning than healthy young adults. The results provided new insight of turning strategy in patients with BPPV. Whether the balance performance during turning could be improved with canalith repositioning manoeuvre requires further investigation.</p> <p><b>Key words:</b> benign paroxysmal positional vertigo (BPPV), balance performance, turning</p>
<p style="text-align: center;"><b>Karen G. Sablas</b> GICICHLR1703065</p>	<p style="text-align: center;"><b>Coping Behaviour And Lifestyle Practices Of Seafarers' Wife: An Input For Wellness Enhancement</b></p> <p style="text-align: center;">Karen G. Sablas. College Of Nursing, Pamantasan Ng Lungsod Ng Maynila, Manila, Philippines</p>
<div style="text-align: center;">  <p><b>Ma. Cecilia O. Martinez</b> GICICHLR1703066</p> </div>	<p style="text-align: center;"><b>LEVEL OF COMPLIANCE OF REGISTERED NURSES TO NATIONAL CORE COMPETENCY STANDARDS FOR A TRANSFORMED PROFESSIONAL CARE SERVICE PROGRAM</b></p> <p style="text-align: center;">Ma. Cecilia O. Martinez RN, RM, MAN, EdD. College Of Nursing, Pamantasan ng Lungsod ng Maynila, Manila, Philippines</p> <p style="text-align: center;"><b>Abstract</b></p> <p>Nursing is a profession that play a crucial role in patient-care especially that present-day health services are highly complex and high quality care is obligatory. They must always ensure that they give the best care possible, as it is necessary for assessing and evaluating their clinical competence which is central to patient care outcomes. Consequences of having competency included "safety of patients, high standards of patient care, application of core knowledge, and internal motivation for continued care.</p>
<div style="text-align: center;">  <p><b>Shahnawaz Mushtaq</b> GICICNM1703051</p> </div>	<p style="text-align: center;"><b>EFFECTIVENESS OF MINDFULNESS BASED COGNITIVE THERAPY ON QUALITY OF LIFE, LIFE SATISFACTION AND DEPRESSION OF PATIENTS WITH HIV/AIDS</b></p> <p style="text-align: center;">Shahnawaz Mushtaq Research Scholar, Department of Psychiatry, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh, U.P, India, 202002</p> <p style="text-align: center;">Sarah Javed Research Scholar, Department of Psychiatry, Jawaharlal Nehru Medical</p>

	<p style="text-align: center;">College, Aligarh Muslim University, Aligarh, U.P, India, 202002</p> <p style="text-align: center;"><b>ABSTRACT</b></p> <p>Background of the study: Mindfulness based cognitive therapy (MBCT) is a psychological therapy designed to aid in preventing the relapse of depression, specifically in individuals with Major Depressive disorder. It uses traditional Cognitive behavioural therapy (CBT) methods and adds in newer psychological strategies such as mindfulness and mindfulness meditation. MBCT helps in promoting successful aging in people with HIV. The total number of people living with HIV in India is estimated at 2.4 million with uncertainty bounds of 1.93 to 3.04 million in 2009. People who are infected with HIV are faced with a profound sense of loss of many levels. It can lead to depression and has a profound effect on the quality of life and life satisfaction. Material and Method: This study was conducted at the outpatient clinic for HIV at Anti Retroviral centre (ART) of Jawaharlal Nehru Medical College and Hospital, Aligarh Muslim University. 50 HIV/AIDS diagnosed patients aged 18-60 years were taken for the study between, January 2016 to June 2016. MBCT was offered as a group therapy to patients as an addition to the basic treatment. Result and Discussion: In this study 25 patients were selected for MBCT and 25 did not. It was found that patients who received MBCT an addition to pharmacotherapy showed significant improvement in QOL, life satisfaction and level of depression as compared to those who only receive pharmacotherapy.</p> <p><b>Key Words:</b> Mindfulness, HIV/AIDS, Quality of Life.</p>
<p style="text-align: center;">Wenjing FU GICICNM1703052</p>	<p style="text-align: center;">Study on the correlation between self-efficacy of health behavior and social support for tachyarrhythmia patients</p> <p style="text-align: center;">FU Wen-jing WestChinaSchoolofNursing, West China Hospital of SiChuan University , ChengDu, 610041</p> <p style="text-align: center;">ZOU Qin WestChinaSchoolofNursing, West China Hospital of SiChuan University , ChengDu, 610041</p> <p style="text-align: center;">LI Xiao-ling WestChinaSchoolofNursing, West China Hospital of SiChuan University , ChengDu, 610041</p> <p style="text-align: center;"><b>Abstract</b></p> <p>Aim To study the state of self-efficacy of health behavior and social support for tachyarrhythmia patient and analyze the correlation between them, by that means to provide basis for the formulation of nursing interventions to improve self-efficacy of health behavior and strengthen social support Method we investigated 120 patients with self-rated abilities for health practices scale (SRAHP) and social support scale. Result the score of SRAHP was (58.36 ± 21.53) points, the score of social support scale was (39.91 ± 7.62) point. which both reached the medium levels, the degree of education, whether own a job and medical insurance are important influencing factors for self efficacy and social support, the score of social support had the moderate positive correlation</p>

	<p>with the score of SRAHP (<math>r=0.551, P&lt;0.01</math>). Conclusion the states of self-efficacy and social support for tachyarrhythmia patient are below the average level. the higher of social support level is, the higher of the self-efficacy of health behaviors is. In order to strengthen patients' social support and promote the development of health behaviors, we should pay more attention to assess patients' degree of education, whether own a job and medical insurance.</p> <p><b>Keyword</b> tachyarrhythmia self-efficacy of health behaviors social support</p>
 <p style="text-align: center;"><b>Jinyao Wang</b> GICICNM1703053</p>	<p style="text-align: center;"><b>Quality of life and its influencing factors for the caregivers of ischemic stroke patients</b></p> <p style="text-align: center;"><b>Wang Jinyao</b> Neurology department, West China Hospital, West China Hospital of Sichuan University, Chengtu, China.</p> <p style="text-align: center;"><b>Gan Li, Geng Dan, Miao Xiaohui, Yang Rong.</b></p> <p style="text-align: center;"><b>Abstract</b></p> <p><b>Objective</b> To realize and investigate the level and influencing factors of the quality of life for the caregivers of ischemic stroke patients. <b>Methods</b> A total of 208 caregivers of patients with ischemic stroke were investigated with basic demographic information, Simplified Coping Style Questionnaire (SCSQ) and WHOQOL-BREF. <b>Results</b> The mean score for the quality of life of ischemic stroke patients' caregivers was (<math>85.69 \pm 6.32</math>), and dimensions in descending order were as follows: social dimension, environmental dimension, psychological dimension and physiological dimension. The total scores of the quality of life was positive correlated with active coping style (<math>P &lt; 0.01</math>), and was negative correlated with negative coping style (<math>P &lt; 0.01</math>). Multiple linear regression analysis showed that the influencing factors of the quality of life for the caregivers of ischemic stroke patients were the physical health, active and negative coping styles of them (<math>P &lt; 0.05</math>), which explained 32.6% of the total variance. <b>Conclusion</b> Nurses should detect the existing problems among caregivers of ischemic stroke patients through communication, and take advantage of group discussion, telephone follow-up, home visits and faith support in order to improve the health of caregivers, and enhance their quality of life finally.</p> <p><b>Key words</b> ischemic stroke; caregivers; coping style; quality of life</p>
	<p style="text-align: center;"><b>RELATIONSHIP OF COMFORT LEVELS WITH TRAINING IN SEXUAL COUNSELLING AMONG MIDWIFERY STUDENTS</b></p> <p style="text-align: center;"><b>Neriman Zengin</b> Associate Professor, İstanbul University, Faculty of Health Science, Midwifery Department</p> <p style="text-align: center;"><b>Besey Ören</b> Assistant Professor, Sağlık Bilimleri University, Faculty of Health Science,</p>

	<p style="text-align: center;"><b>Midwifery Department</b></p> <p style="text-align: center;"><b>Saadet Yazıcı</b> Associate Professor, Sağlık Bilimleri University, Faculty of Health Science Midwifery Department</p> <p style="text-align: center;"><b>Abstract</b></p> <p><b>Introduction and aim:</b> Midwives, as related to their main field of study, should have a good comfort level in factors affecting the sexual life of women and the management of these factors. In accordance with this aim, the study was conducted to examine the comfort levels about providing sexual counselling to midwifery students.</p>
 <p><b>Efris Kartikasari</b> GICICNM1703057</p>	<p style="text-align: center;"><b>The Effect of Probiotic on Red Blood Cell Count and Haemoglobin Concentration in Sepsis Rats</b></p> <p style="text-align: center;"><b>Ns. Efris Kartika Sari, M.Kep</b> School of Nursing, Faculty of Medicine, University of Brawijaya</p> <p style="text-align: center;"><b>Dr. Titin Andri Wihastuti, S.Kp, M.Kes</b> School of Nursing, Faculty of Medicine, University of Brawijaya</p> <p style="text-align: center;"><b>Wahyu Ardiansyah</b> School of Nursing, Faculty of Medicine, University of Brawijaya</p> <p><b>Abstract</b></p> <p><b>Introduction:</b> Sepsis can lead to change various haematological parameters, not only the white blood cell but also red blood cell (RBC) and haemoglobin (Hb). Probiotic appears to show a potential role to improve RBC and Hb profile in sepsis condition.</p> <p><b>Aim:</b> The aim of this study was to assess the effect of probiotics (<i>Lactobacillus</i> spp) on RBC count and Hb concentration in sepsis rats (<i>Rattus norvegicus</i> strain wistar) induced by LPS from <i>E. coli</i>.</p> <p><b>Method:</b> This study was experimental research. Twenty one rats were divided into three groups, that were normal group (n= 7), sepsis group (n= 7), and probiotic group (n= 7). Rats were enterally administered probiotic (109 CFU/Kg weight/day) for a period 14th days, then induced with LPS <i>E. coli</i> (1 mg/Kg weight) at the 15th day.</p> <p><b>Result:</b> The study indicated that normal group had an average value of RBC (7.21±4.19 x 10<sup>6</sup> cells/mm<sup>3</sup>) higher than sepsis group (6.55±752 x 10<sup>6</sup> cells/mm<sup>3</sup>) and probiotic group (5.88±1.99 x 10<sup>6</sup> cells/mm<sup>3</sup>), but not significantly difference (p= 0.836). Probiotic group had an average value of Hb concentration (8,9±0,27 mmol/L) higher than normal group (8,01±0,76 mmol/L) and sepsis group (8,43±0,5 mmol/L). Statistical analysis of Hb showed significant differences between groups (p= 0.02).</p> <p><b>Conclusion</b> Probiotic has no effect on RBC count, but has effect to improve haemoglobin concentration in sepsis rats.</p> <p><b>Keywords:</b> Probiotic, sepsis, RBC, Hb</p>
<p><b>Khaula Sahida</b></p>	<p style="text-align: center;"><b>Parent-Child Characteristics and Its Correlation to Parental Rejection of</b></p>




GICICNM1703058	<p style="text-align: center;"><b>Autism Spectrum Disorders Children</b></p> <p style="text-align: center;"><b>Khaula Sahida</b> Nursing Science, Faculty of Nursing, Universitas Indonesia, Depok, West Java, Indonesia</p> <p style="text-align: center;"><b>Allenidekania</b> Nursing Science, Faculty of Nursing, Universitas Indonesia, Depok, West Java, Indonesia</p> <p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives:</b> This study aims to determine the correlation between parent and children characteristics with parental rejection level of children with autism spectrum disorders.</p> <p><b>Methods:</b> Cross-sectional analytic was performed in this study. The variable was categorical and numerical. The participant of this study were sixty one parents of ASD children in South Jakarta that recruited by cluster random sampling. This study used parental acceptance-rejection questionnaire which adapted from Parent Acceptance-Rejection Questionnaire (PARQ) and modified by researcher.</p> <p><b>Results:</b> Bivariate analysis showed that there was no significant correlation between parent gender (<math>p=0,145</math>; <math>r=0,264</math>), parent age (<math>p=0,104</math>; <math>r=0,425</math>), parent ethnic (<math>p=0,123</math>; <math>r=0,345</math>), parent religion (<math>p=0,072</math>; <math>r=0,345</math>), parent occupation (<math>p=0,138</math>; <math>r=0,285</math>), parent income (<math>p=0,010</math>; <math>r=0,938</math>), amount of children (<math>p=0,121</math>; <math>r=0,353</math>), and child gender (<math>p=0,088</math>; <math>r=0,499</math>) with parental rejection of ASD child. In contrast, there was a significant correlation between parent education level (<math>p=0,008</math>; <math>r=0,337</math>) and child age (<math>p=0,020</math>; <math>r=0,296</math>) with the levels of parental rejection.</p> <p><b>Conclusion:</b> This result showed that it is quite important to all nurses for giving more attention to factors that may related to parental acceptance which can be affect to child care.</p> <p><b>Keywords:</b> Autism Spectrum Disorders, ASD, Child Care, Acceptance, Rejection, Parents</p>
Mia Astridivia GICICNM1703059	<p style="text-align: center;"><b>OBSTRUCTIVE SLEEP APNEA AND BLOOD PRESSURE ON HYPERTENSIVE PATIENT IN COMMUNITY HEALTH CENTER IN DEPOK INDONESIA</b></p> <p style="text-align: center;"><b>Mia Astridivia</b> Nursing Science, Universitas Indonesia Depok Indonesia</p> <p style="text-align: center;"><b>Kuntarti</b> Department Basic of Nursing Basic Nursing Faculty of Nursing, Universitas Indonesia, Depok Indonesia</p> <p style="text-align: center;"><b>Abstract.</b></p> <p>Over the past few years, the number of patient of hypertension in Indonesia has increased rapidly. Previous studies have investigated that the OSA independently is important risk factor of hypertension. In Indonesia, there are still lacks of study between OSA and blood pressure on population-based or</p>



	<p>clinical-population. The objective of this study was to know the relation of OSA to blood pressure on hypertensive patients. This study design was descriptive correlation with cross-sectional approach on 96 hypertensive patients at one of the community health center in Depok city, who were selected with consecutive sampling technique. The OSA was assessed by using the Berlin questionnaire, blood pressure was assessed by aneroid sphygmomanometer, and anthropometric measurements was assessed by weight scale and stature meter. This study showed that 57,3% subjects had the high risk for OSA. The result of analysis by using the Mann-Whitney test showed that OSA related to systolic blood pressure (<math>p= 0.028</math>; <math>CI95\%= 0.000-0.066</math>) but was not related to diastolic blood pressure (<math>p= 0.231</math>; <math>CI95\%=0.229-0.416</math>), although there was difference of 10 mmHg, higher on hypertensive patient with high risk OSA. This study showed that OSA related to increasing morbidity of hypertension because its effect on elevated blood pressure. The assessment and management of OSA needs to be implemented in providing health care, in order to increase the quality of life for patients especially on hypertensive patients.</p> <p>Keywords: Berlin Questionnaire; Hypertension; Obstructive Sleep Apnea; Sleep</p>
<p><b>Ridhoyanti Hidayah</b> GICICNM1703060</p>	<p style="text-align: center;"><b>CARE DEMANDS DURING CARING FOR CHILDREN WITH AUTISM SPECTRUM DISORDER (ASD): A PHENOMENOLOGY STUDY</b></p> <p style="text-align: center;"><b>Ridhoyanti Hidayah</b> School of Nursing, Faculty of Medicine, University of Brawijaya, Malang, Indonesia</p> <p style="text-align: center;"><b>Abstract</b></p> <p><b>Introduction:</b> Autism Spectrum Disorder (ASD) is a complex neurological disorder which cause impairments in multiple areas development include social interaction, communication, and behavior. The parents of children with ASD face many caring demands as the disorder is associated with many behavior problems.</p> <p><b>Objective:</b> This study aimed to explore care demands of parents who caring for children with Autism Spectrum Disorder (ASD)</p> <p><b>Method:</b> This descriptive phenomenology study used in-depth semi-structured interviews to explore parents experiences related to care demands during their activity with ASD children. Fifteen participants were recruited from The Center of Autism Services in Malang City, East Java, Indonesia by using purposive sampling. The interviews were digitally recorded and transcribed verbatim. The thematic were analyzed using Colaizi's phenomenological method.</p> <p><b>Result:</b> Seven themes were extracted according to the spesific purposes: (1) special nutritional needs; (2) child safety guarantees; (3) child behavior control; (4) independence ability; (5) fulfillment of formal education; (6) sleeping needs; and (7) special medical needs.</p> <p><b>Conclusion:</b> It can be concluded that three major care demands for parents during caring for children with ASD is difficulty of providing special nutritional needs, child safety guarantee and controlling child behavior while in a public area.</p> <p>Keywords: care demands, parents, Autism Spectrum Disorder</p>
<p><b>Tiara Tiara</b></p>	<p style="text-align: center;"><b>Nurses Preparedness for Disaster Management in Lampung Province,</b></p>

GICICNM1703061	<p style="text-align: center;">Indonesia.</p> <p style="text-align: center;">Tiara Departement of Nursing Science Khon Kaen University</p> <p style="text-align: center;">Skep, Ns Departement of Nursing Science Khon Kaen University</p> <p style="text-align: center;">Associate Professor Dr. Earnporn Thongkrajai Departement of Nursing Science Khon Kaen University</p> <p style="text-align: center;"><b>ABSTRACT</b></p> <p>Indonesia is located on the ring of fire where volcano eruption accounts for 65% of its natural disaster. Disaster preparedness is very important role for all health professions particularly in nurses as it has a great impact on individual family and community health. The great volcano eruption in Indonesia and the world history took place in South Lampung, in Lampung Province on Sumatra Indonesia, when Mother Krakatau erupted there were 36.417 people died. At the present, there appears Anak Krakatau which is in the active stage in the same area of Mother krakatau in Lampung Province, Sumatra Island (Hadisantono, 2007).</p> <p>This descriptive study aimed to investigate nursing preparedness with regarding to their level of knowledge, attitude and skills for disaster management. The study was carried out among 136 selected nurses in three hospitals and a community hospital in Lampung Province, Indonesia. The data collection tools used included Demographic Data and Working Information Questionnaire (DDWIQ) and Nurses Preparedness Evaluation Tool (NPAT) modified from the work of Khalailah (2009).</p> <p>Results show that nursing preparedness for disaster management according to knowledge, attitude and skills are at moderate levels although it seems that the lowest score of mean score is skill. There are some factors that appeared to have association with levels of knowledge, attitude and skills in preparedness for disaster management, namely, educational background, and experience for caring patient with knowledge of nurses for disaster preparedness (p-value &lt;0.01 and &lt;0.026) respectively, educational background and experience in caring patient in disaster with attitude (p-value &lt;0.01, &lt;0,00) respectively. nurses who has been working longer, training with skill of nurses for disaster management (p-value&lt;0.026,&lt;0.006) respectively. The findings suggest further training and equipment of all nurses in this area in disaster management by preparing them during their basic training as well as on the job training.</p> <p><b>Keywords :</b> Disaster, Nurses Preparedness, Knowledge,Attitude and skill</p>
Uray Fretty Hayati GICICNM1703062	<p style="text-align: center;"><b>COGNITIVE BEHAVIORAL THERAPY WITH 5 SESSION IN ADOLESCENT AFTER FLOOD DISASTER GARUT INDONESIA</b></p> <p style="text-align: center;">Uray Fretty Hayati Master of Nursing, Faculty of Nursing, Padjadjaran University</p> <p style="text-align: center;">Sari Fatimah Master of Nursing, Faculty of Nursing, Padjadjaran University</p>

	<p style="text-align: center;"><b>Ai Mardhiyah</b> Master of Nursing, Faculty of Nursing, Padjadjaran University</p> <p style="text-align: center;"><b>Abstract</b></p> <p><b>Background:</b> Cognitive Behavioral Therapy is one therapy in overcoming post traumatic stress disorder in children and adults. Based on several studies that have been done before, CBT therapy is given as much as 10-12 sessions in adolescents. This is very different from the CBT study ever conducted in Indonesia that CBT is given in just 5 sessions in adults. So researchers need to prove the effectiveness of CBT as much as 5 sessions among adolescents after flood disaster on Garut Indonesia.</p> <p><b>Objective:</b> The Author evaluated the effectiveness of cognitive behavioral therapy (CBT) with 5 sessions among adolescents victims of flood Garut Indonesia.</p> <p><b>Methods:</b> This research uses Quasi Experimental Design using pretest-posttest design approach. Subjects were selected five months after the flood disaster. Of the 63 among adolescents victims of the flood were traumatized screening. Subjects selected 19 adolescents with symptoms of PTSD (post traumatic stress disorder) according to the CPSS instrument (The Child PTSD Symptom Scale). Individual CBT therapy with 5 sessions for 2 times a week according to the 5 CBT guidelines. After that re-evaluated with CPSS instrument and then analyzed paired T test.</p> <p><b>Results:</b> The severity of posttraumatic stress symptoms decreased significantly after CBT in adolescents (<math>p &lt; 0,05</math>).</p> <p><b>Conclusion:</b> The findings show that CBT with 5 sessions effectively reduces symptoms of posttraumatic stress disorder among adolescents after flood disaster so that CBT can also be given as many as 5 sessions among adolescents. The future this research can compare with other sessions.</p> <p><b>Keywords:</b> Flood, Adolescents, Cognitive Behavioral Therapy.</p>
<p style="text-align: center;"><b>Qi Xiao</b> GICICNM1703063</p>	<p style="text-align: center;"><b>Correlations between Social Support Network Typologies, Health Outcomes and Health-related Behaviors in Chinese Older Adults</b></p> <p style="text-align: center;"><b>Qi Xiao,</b> Huazhong University of Science and Technology, Wuhan, China,</p> <p style="text-align: center;"><b>Tieying Zeng,</b> Huazhong University of Science and Technology, Wuhan, China</p> <p style="text-align: center;"><b>ABSTRACT</b></p> <p><b>Objectives:</b> 1) To identify the social support network typologies of Chinese older adults and to identify differences and socio-demographic risk factors of each type. 2) To examine the correlations between social network typology, multiple health outcomes (physical, cognitive, subjective, self-rated well-being and self-rated QoL) and health-related behaviors by older Chinese.</p> <p><b>Methods:</b> Data from the Chinese Longitudinal Healthy Longevity Survey (N=9749) were employed. Descriptive statistics, one-way ANOVA, multiple logistic regression with the SPSS 22.0 program and latent profile analysis, path analysis with the Mplus 6.12 program were used.</p> <p><b>Results:</b> Four social network typologies was constructed as social dependent</p>

	<p>(16.46%), family-without-spouse dependent (14.70%), family-with-spouse dependent (47.00%) and social independent (21.84%). Older adults belonging to different network types showed statistical differences of multiple health outcomes and health-related behaviors. Elders in social independent networks possessed the greatest health status and the highest health-related behaviors score, while elders belonging to social dependent networks suffered the worst in all networks. In addition, old adults with characteristics of more aged, female, without spouse, living in rural place, less household incomes and living alone were more tend to be in worse network typologies. Moreover, the conceptual model of downstream pathway to health proposed by Berkman was identified. Health-related behaviors played the moderated role on social network typologies to health outcomes, and social network typologies have the mediated impact on health-related behaviors to health outcomes.</p> <p><b>Conclusion:</b> These findings demonstrate that the social network typologies were significant correlated to health outcomes and health-related behaviors. Understanding of these correlations could be of practical references to interpersonal interventions application and relevant policies formulation. The following research will be focused on the longitudinal study and intervention study to further discuss the reciprocal associations between social network typology, multiple health outcomes and health-related behaviors in Chinese elderly.</p> <p><b>Keywords:</b> Social Support Network Typologies, Health Outcomes, Health-related Behaviors, Correlations</p>
 <p>Anirban Sengupta YRSICHL SR1703051</p>	<p><b>SQSTM1/p62 plays a keyrole in balancing the Autophagy-Apoptosis axis and nrf2-keap1 pathway in Cerebral Malarial Infection</b></p> <p><b>Anirban Sengupta</b> Immunology Laboratory, Department of Zoology, University of Calcutta, 35, Ballygunge Circular Road, Kolkata 700019, West Bengal, India</p> <p><b>Samrat Sarkar</b> Immunology Laboratory, Department of Zoology, University of Calcutta, 35, Ballygunge Circular Road, Kolkata 700019, West Bengal, India</p> <p><b>Tarun Keswani</b> Immunology Laboratory, Department of Zoology, University of Calcutta, 35, Ballygunge Circular Road, Kolkata 700019, West Bengal, India</p> <p><b>Arindam Bhattacharyya</b> Immunology Laboratory, Department of Zoology, University of Calcutta, 35, Ballygunge Circular Road, Kolkata 700019, West Bengal, India</p> <p><b>Abstract</b></p> <p><b>Objective of the study:</b> To find the status of Autophagy &amp; Proteasomal Degradation and the impact on Nrf2-Keap1 pathway in Mice Spleen and Macrophages during Cerebral Malarial infection. We previously published the report on the apoptosis of the splenocytes during the cerebral malaria infection. In continuation with that Type I cell death, we have studied the type II cell death i.e autophagy . bcl2 anti apoptotic protein balances the autophagy rate and apoptosis by binding to</p>

	<p>pro autophagic factor beclin. We studied the tripartite role of autophagy , apoptosis and proteasomal degradation as the host response to infection guided by the cytokine profile change.</p>
 <p><b>Adeela Rehman</b> YRSICHLSR1703052</p>	<p style="text-align: center;"><b>Governance of Healthcare System: Frameworks for Gender Mainstreaming into Public Health</b></p> <p style="text-align: center;"><b>Adeela Rehman</b> PhD Scholor, Department of Sociology &amp; Anthropology, International Islamic University</p> <p style="text-align: center;"><b>Dr. NurAzzura Mohammad Diah</b> Associate Professor, Department of Sociology and Anthropology, KIRKHS, International Islamic University Malaysia</p> <p style="text-align: center;"><b>Abstract:</b></p> <p>Governance of health system is very important to be considered for the equitable distribution of health care services to the population. Governance of health system is based on equitable provision of resources, design appropriate strategies to improve the health conditions and well being of people, assured proper and adequate rules and procedural guidelines for measuring its actions. This paper reflects the gender based analysis of health policy and different governance frameworks designed by health organization was analyzed to measure the health system. The governance frameworks were adopted through the annual reports of International health organizations and analyzed through gender lens. Although the progress has been going on to improve the health status of women in Pakistan, but there is still a long way to go to deliver gender sensitive health care practices. In past, the issue of health governance was the responsibility of national government only but with the increasing demands and overlapping system, it has been distributed to regional or district levels as well. Unfortunately the process of planning and financing of health care services lacks accountability in health system of Pakistan. For the gender balanced structure of governance in health system of Pakistan, there is a need for integrating gender perspective at all levels of health system from the policy level to its implementation.</p> <p><b>Keywords:</b> Health System, Governance, Frameworks, Gender Analysis</p>

## Listeners

<p><b>Mohammed Shihabuddin.</b> Director, Anti Drug Human Rights &amp; Social Justice, Moulvibazar, Bangladesh GICICHLSR1703063</p>
<p><b>Jennifer P. Reyes.</b> College of Nursing, Pamantasan ng Lungsod ng Maynila Manila, Philippines GICICHLSR1703068</p>
<p><b>Onoriode Ejoywo.</b> Department of social science, Poltac Institute of Human Science Lagos Lagos, Nigeria</p>

<b>GICICHLSR1703069</b>
<b>Butoyi Ladislas</b> <b>Clinic Sciences Department, National Institute of Public Health of Burundi, Burundu</b> <b>GICICHLSR1703072</b>
<b>Song ran</b> <b>Department of Nursing Education, Shanghai united family hospital and clinics, China</b> <b>GICICNM1703055</b>
<b>Philippe Judlin</b> <b>Department Of Obstetrics &amp; Gynecology Chru Of Nancy ,University Of Lorraine,Nancy, France</b> <b>GICICHLSR1703076</b>