Abstracts

6th Annual International Conference on
Health & Medical Sciences
7-10 May 2018
Athens, Greece

Edited by Gregory T. Papanikos
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Preface

This book includes the abstracts of all the papers presented at the 6th Annual International Conference on Health & Medical Sciences (7-10 May 2018), organized by the Athens Institute for Education and Research (ATINER).

In total 69 papers were submitted by over 80 presenters, coming from 22 different countries (Albania, Algeria, Australia, Brazil, Canada, Egypt, Finland, France, India, Indonesia, Ireland, Italy, Kazakhstan, Libya, Poland, Portugal, Rwanda, Saudi Arabia, Turkey, UAE, UK and USA). The conference was organized into 20 sessions that included a variety of topic areas such as mental health, ethical care, diseases, trends in public health and more. A full conference program can be found before the relevant abstracts. In accordance with ATINER’s Publication Policy, the papers presented during this conference will be considered for inclusion in one of ATINER’s many publications.

The purpose of this abstract book is to provide members of ATINER and other academics around the world with a resource through which to discover colleagues and additional research relevant to their own work. This purpose is in congruence with the overall mission of the association. ATINER was established in 1995 as an independent academic organization with the mission to become a forum where academics and researchers from all over the world could meet to exchange ideas on their research and consider the future developments of their fields of study.

It is our hope that through ATINER’s conferences and publications, Athens will become a place where academics and researchers from all over the world regularly meet to discuss the developments of their discipline and present their work. Since 1995, ATINER has organized more than 400 international conferences and has published nearly 200 books. Academically, the institute is organized into seven research divisions and 37 research units. Each research unit organizes at least one annual conference and undertakes various small and large research projects.

For each of these events, the involvement of multiple parties is crucial. I would like to thank all the participants, the members of the organizing and academic committees, and most importantly the administration staff of ATINER for putting this conference and its subsequent publications together. Specific individuals are listed on the following page.

Gregory T. Papanikos
President
ATINER’s conferences are small events which serve the mission of the association under the guidance of its Academic Committee which sets the policies. In addition, each conference has its own academic committee. Members of the committee include all those who have evaluated the abstract-paper submissions and have chaired the sessions of the conference. The members of the academic committee of the 6th Annual International Conference on Health & Medical Sciences were the following:

1. Gregory T. Papanikos, President, ATINER.
2. Nicholas Pappas, Vice President of Academic Membership, ATINER & Professor of History, Sam Houston University, USA.
3. Andriana Margariti, Head, Medicine Unit, ATINER & Lecturer, Centre for Experimental Medicine, Queen’s University Belfast, U.K.
4. Vickie Hughes, Director, Health & Medical Sciences Division, ATINER & Assistant Professor, Johns Hopkins University, USA.
5. Ketan Ruparelia, Head, Pharmaceutical Unit, ATINER & Research Fellow and Part-time Lecturer, De Montfort University, U.K.
6. Jean Marco, Professor, LLA-CREATIS, University of Toulouse-Jean Jaurès, France.
7. John Moraros, Associate Professor, University of Saskatchewan, Canada.
8. Yelena Bird, Associate Professor, University of Saskatchewan, Canada.
9. Bruno Cotter, Associate Professor, University of California, San Diego (UCSD), USA.
10. Elizabeth Mary Chiarella, Professor, The University of Sydney, Australia.
11. Rachael Vernon, Associate Professor and Associate Head, School of Nursing and Midwifery, University of South Australia, Australia.
12. Terri Gibson, Program Director, Postgraduate and International, School of Nursing and Midwifery, University of South Australia, Australia.
13. Joseph Gambacorta, Associate Dean for Clinical Affairs, School of Dental Medicine, University at Buffalo, USA.
14. John Trougakos, Academic Member, ATINER & Associate Professor, University of Toronto, Canada.
15. Mary Jane Welch, Associate Professor, Rush University Medical Center, USA.
16. Lorna Guse, Associate Professor, University of Manitoba, Canada.
17. Karen Egenes, Associate Professor, Loyola University Chicago, USA.
18. Heni Rachmawati, Associate Professor, Bandung Institute of Technology, Indonesia.
19. Richik Tripathi, Academic Member, ATINER & Assistant Professor, Banaras Hindu University, India.
20. Neil Kelly, Senior Lecturer, Coventry University, U.K.
21. Afrim Tabaku, Academic Member, ATINER & Lecturer and Researcher, Aldent University, Albania.
22. Ghada Albandak, Assistant Professor of Nutrition and Science & Head of Department of Nutrition & Dietetics, American University of Madaba, Jordan.
23. Sophia Kelaini, Research Fellow, Queen’s University Belfast, U.K.
24. Marcos Roberto Tovani Palone, Specialist in Pediatric Dentistry, University of São Paulo, Ribeirão Preto Medical School, Brazil.
25. Siddharth Gupta, University of Delhi, India.
26. Olga Gkounta, Researcher, ATINER.

The organizing committee of the conference included the following:

1. Fani Balaska, Research Assistant, ATINER.
2. Hannah Howard, Research Assistant, ATINER.
3. Despoina Katzoli, Researcher, ATINER.
4. Eirini Lentzou, Administrative Assistant, ATINER.
5. Konstantinos Manolidis, Administrator, ATINER.
6. Vassilis Skianis, Research Fellow, ATINER.
7. Kostas Spyropoulos, Administrator, ATINER.
# FINAL CONFERENCE PROGRAM

6th Annual International Conference on Health & Medical Sciences, 7-10 May 2018, Athens, Greece

## PROGRAM

Conference Venue: Titania Hotel, 52 Panepistimiou Street, 10678 Athens, Greece

### Monday 7 May 2018

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<td>Neil Kelly, Senior Lecturer, Coventry University, UK.</td>
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### 09:30-11:00 Session I (Room C-10th Floor): Mental Health*

**Chair:** Olga Gkounta, Researcher, ATINER.

1. **Stacy Blythe**, Director, School of Nursing and Midwifery/Senior Lecturer, Western Sydney University, Australia. Promoting and Protecting the Mental Health of Substance Exposed Infants.
2. **Paul Slater**, Lecturer, Ulster University, Ireland, Felicity Hasson, Lecturer, Ulster University, Ireland, Patricia Gillen, Lecturer, Ulster University, Ireland, Anne Gallen, Director, Nursing Midwifery Planning and Development, Ireland & Randal Parlour, Assistant Director, Nursing Midwifery Planning and Development, Ireland. An Evaluation of the Virtual Dementia Training Programme among Health Professionals and Carers.

### 09:30-11:00 Session II (Room D-10th Floor): Medical Curriculum & Enhancing Patient Care*

**Chair:** Ketan Ruparelia, Head, Pharmaceutical Unit, ATINER & Research Fellow and Part-time Lecturer, De Montfort University, U.K.

1. **Chee Kai Chan**, Assistant Professor, Nazarbayev University, Kazakhstan. Medical Students’ Learning Style Preferences and their Relationship with Performance in Different Subjects within the Medical Curriculum.
2. **Ali AlHaqwi**, Consultant / Professor, King Saud Ben Abdul-Aziz University / King Abdul-Aziz Medical City, Saudi Arabia. Toward Promoting Patient-Centered Care; Do our Patients Want to Participate in Clinical Decision-Making?
3. **Jason Pritchard**, Course Director CYP Nursing, Coventry University, UK & Louise Price, Senior Lecturer, Coventry University, UK. Mapping Clinical Simulation Scenarios to Fulfil the Needs of a Collaborative Nursing Curriculum. Enhancing Patient Care.
4. **Seham Elgamal**, Assistant Professor, King Saud bin El-Sawy. Synthesis, Docking Studies and Anticancer Activity of Novel Tetrazolyl - and (triazolyl) Thiazole Glycosides and Acyclic Analogs.

### 09:30-11:00 Session III (Room E-10th Floor): Recent Trends in Pharmaceutical Chemistry and Drug Discovery*

**Chair:** Wael El-Sayed Shendy, Professor, National Research Centre, Egypt, Asmaa F. Kassem, National Research Centre, Egypt, Eman M. H. Abbas, National Research Centre, Egypt, Dina S. El-Kady, National Research Centre, Egypt & Hanem M. Awad, National Research Centre, Egypt. Toward Promoting Patient-Centered Care; Do our Patients Want to Participate in Clinical Decision-Making?

1. **Heni Rachmawati**, Associate Professor, Bandung Institute of Technology, Indonesia, Benita Rachel, MSc Student, Bandung Institute of Technology, Indonesia, Neng Fisher Kurniati, Assistant Professor, Bandung Institute of Technology, Indonesia & Catur Riani, Assistant Professor, Bandung Institute of Technology, Indonesia.

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<td>3. Przemyslaw Zalewski, Associate Professor, Poznan University of Medical Sciences, Poland, Karolina Kilinska, PhD Student, Poznan University of Medical Sciences, Poland, Judyta Cielecka-Piontek, Associate Professor, Poznan University of Medical Sciences, Poland, Robert Skibiński, Associate Professor, Medical University of Lublin, Poland, Daria Szymanowska, Associate Professor, Poznan University of Life Sciences, Poland, Andrzej Mklaszewski, Poznan University of Technology, Poland &amp; Waldemar Bednarski, Associate Professor, Polish Academy of Sciences, Poland. Radiostability of the Imipenem and Cilastatin in the Solid State.</td>
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*This session is jointly offered with the Nursing Unit

*This session is jointly offered with the Nursing Unit

*This session is jointly offered with the Pharmaceutical Unit

| 11:00-12:30 Session IV (Room C-10th Floor): Quality Management, and Professional Ethical Care I* | 11:00-12:30 Session V (Room D-10th Floor): Health Care I* | 11:00-12:30 Session VI (Room E-10th Floor): Infection and Transmitted Diseases |
6th Annual International Conference on Health & Medical Sciences, 7-10 May 2018, Athens, Greece: Abstract Book

**Chair:** *Terri Gibson, Program Director, Postgraduate and International, School of Nursing and Midwifery, University of South Australia, Australia.

1. *Mary Jane Welch, Associate Professor, Rush University Medical Center, USA. Identifying Specific Concepts and Controversies of Informed Consent.
2. Karla Wolsky, Chair, School of Health Sciences and Allied Health, Lethbridge College, Canada. Can Students who Choose to Participate in Acts of Academic Dishonesty have the Ethical Compass Necessary for their Future Nursing Careers?

**Chair:** Andriana Margariti, Lecturer, Centre for Experimental Medicine, Queen’s University Belfast, U.K.

1. *Lorna Guse, Associate Professor, University of Manitoba, Canada. Preparing Nursing Students for Nursing Homes.
2. Panagiota Rempelou, Medical Doctor, Santorso Hospital, Italy, Federica Albertini, Medical Doctor, University of Padova, Italy, Federica Gasparotti, Medical Doctor, University of Padova, Italy, Francesco Finatti, Medical Doctor, University of Padova, Italy, Valérie Tikhonoff, Medical Director, General Hospital of Padova, Italy, Antonio Maria Lapenta, Hypnotist, Institute Franco Granone, Italy, Enrico Facco, Hypnotherapist, Studium Patavinum, University of Padova, Italy & Edoardo Casiglia, Medical Doctor, University of Padova, Italy. Hypnotic Analgesia Can Be Obtained Via a Transceiver.

**Chair:** *Siddharth Gupta, University of Delhi, India.

1. Lu-Yuan Lee, Fred Zechman Professor, University of Kentucky, USA. Role of TRPV1 Channel in Bronchial Hypersensitivity Associated with Airway Inflammatory Diseases.
2. *Jean Moraros, Associate Professor, University of Saskatchewan, Canada. Factors Associated with Self-Reported Sexually Transmitted Infections among Postsecondary Students in Canada.
3. *Yelena Bird, Associate Professor, University of Saskatchewan, Canada. Prevalence and Origin of Urinary Tract Infections of Bejaia Children (Algeria).

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**Chair:** *Elizabeth Mary Chiarella, Professor, The University of Sydney, Australia.

1. *Aris Eliades, Director, Clinical Services Research and Evidence-based Practice, Akron Children’s Hospital, USA. Developing and Testing the Mesko-Eliades Pain Area Locator Tool to Assess Pain Location in Children.

**Chair:** *Mary Jane Welch, Associate Professor, Rush University Medical Center, USA.

1. *Vincenzo De Angelis, Director of Transfusion Medicine Department, Udine University Hospital, Italy & Antonio Breda, Director of Regional Blood Transfusion Coordinating Centre of Veneto, Italy. Trends in Plasma Toll Fractionation for Medicinal
| Anne Hofmeyer, Senior Lecturer, University of South Australia, Australia, & Luisa Toffoli, Senior Lecturer, University of South Australia, Australia | Research Nurse / CLAHRC Research Fellow, Barts Health NHS Trust / Queen Mary University of London, UK. Development of Self-Management in Paediatric Inflammatory Bowel Disease (IBD): A Qualitative Exploration. | Products Self-Sufficiency in Italy. |
| Rachael Vernon, Associate Professor and Associate Head of School of Nursing and Midwifery, University of South Australia, Australia | Abeer Orabi, Assistant Professor, King Saud bin Abdulaziz University for Health Sciences, Saudi Arabia, & Nawal Abdulkhaleg, Nurse, King Saud bin Abdulaziz University for Health Sciences, Saudi Arabia. Exploring Knowledge and Attitudes of Nurses toward Herbal Medicine Use during Pregnancy and Breastfeeding. | 2. Patrycja Kleczkowska, Adjunct Lecturer, Medical University of Warsaw, Poland, & Magdalena Bujalska-Zadrożny, Department Head, Medical University of Warsaw, Poland. Divergent |
| Elizabeth Mary Chiarella, Professor, The University of Sydney, Australia | Neil Kelly, Senior Lecturer, Coventry University, UK. What are Registered Mental Health Nurses’ Experiences of non-Medical Prescribing in Adult Acute Hospital’s Mental Health Liaison Teams? | 3. Anna Lesniak, Researcher, Medical University of Warsaw, Poland, & Magdalena Bujalska-Zadrożny, Medical University of Warsaw, Poland. Chronic Disulfiram Treatment Increases Analgesia and Reduces Tolerance Induced by Morphine but with Increased Toxic Effects. |

* Rachael Vernon, Associate Professor and Associate Head, School of Nursing and Midwifery, University of South Australia, Australia & Elizabeth Mary Chiarella, Professor, The University of Sydney, Australia. Leading for System Wide Safety and Quality through the SA Health Nursing and Midwifery Professional Practice Framework.
## Cannabinoid System Activity in High (HA) and Low (LA) Opioid Sensitivity Mouse Lines – Evidence for a Common Pathway.

1. **Elizabeth Mary Chiarella**, Professor, The University of Sydney, Australia & Rachael Vernon, Associate Professor and Associate Head, School of Nursing and Midwifery, University of South Australia, Australia. How can Nurses Demonstrate Insight?
2. Stephen McNally, Deputy Dean, Learning and Teaching, Western Sydney University, Australia. Academic Literacy: Relationship to Future Professional Clinical Practice.
3. *Karen Egenes*, Associate Professor, Loyola University Chicago, USA. “What Are We doing Here?”: Students’ Use of a Clinical Log to Demonstrate Critical Reflection during an International Experience.
4. *Elif Ates*, Lecturer, Acibadem University, Turkey & Bahire Ulus, Lecturer, Acibadem University, Turkey. Evaluation of Nursing Students’ Diagnoses and Interventions Using the Omaha System.
5. *Demet Aktas*, Assistant Professor, Toros University, Turkey, Nurcan Ertug, Assistant Professor, Ufuk University, Turkey, Handan Boztepe, Assistant Professor, Hacettepe University, Turkey & Sevil Cınar, Lecturer, Hacettepe University, Turkey. Turkish Adaptation, Validity and Reliability of Nursing Anxiety and Self-Confidence with Clinical Decision Making Scale (NASC-CDM).
6. *Behire Sancar*, Assistant Professor, Toros University, Turkey, Nazife Akan, Assistant Professor, Toros University, Turkey & Fugen Ak, Professor, Toros University, Turkey. A Method that is Tried to Increase the Professional Motivation of Nursing Students.

*This session is jointly offered with the Nursing Unit*

## 14:00-15:00 Lunch

## 15:00-16:30 Session X (Room C-10th Floor):

**Chair:** *Rachael Vernon*, Associate Professor and Associate Head, School of Nursing and Midwifery, University of South Australia, Australia.

1. *Rezarta Shkrelli*, Head of Pharmacy Department, Aldent University, Albania, Klodiola Dhamo, Lecturer, Aldent University, Albania & Afrim Tabaku, Researcher and Lecturer, Aldent University, Albania. Knowledge, Attitude and Practice of Pharmacists towards Pharmacovigilance and Reporting of Adverse Drug Reaction.
2. *Hanin Bogari*, Assistant Professor, King Abdulaziz University, Saudi Arabia. Implementation of Pharmacy Preceptor Orientation Program at Hospitals and Impacts.
3. *Enkelejda Goci*, Head of Pharmacotherapeutic Research Center, Aldent University, Albania, Entela Haloci, Associate Professor, University of Medicine, Albania & Jona Berberi, Pharmacist, Community Pharmacy, Albania. Antibacterial Soaps with Essential Oils Content.

*This session is jointly offered with the Pharmaceutical Unit*

## 15:00-16:30 Session XI (Room D-10th Floor):

**Chair:** *Heni Rachmawati*, Associate Professor, Bandung Institute of Technology, Indonesia.

1. *Elif Ates*, Lecturer, Acibadem University, Turkey & Bahire Ulus, Lecturer, Acibadem University, Turkey. Evaluation of Nursing Students’ Diagnoses and Interventions Using the Omaha System.
2. *Demet Aktas*, Assistant Professor, Toros University, Turkey, Nurcan Ertug, Assistant Professor, Ufuk University, Turkey, Handan Boztepe, Assistant Professor, Hacettepe University, Turkey & Sevil Cınar, Lecturer, Hacettepe University, Turkey. Turkish Adaptation, Validity and Reliability of Nursing Anxiety and Self-Confidence with Clinical Decision Making Scale (NASC-CDM).
3. *Behire Sancar*, Assistant Professor, Toros University, Turkey, Nazife Akan, Assistant Professor, Toros University, Turkey & Fugen Ak, Professor, Toros University, Turkey. A Method that is Tried to Increase the Professional Motivation of Nursing Students.

*This session is jointly offered with the Nursing Unit*
the Global Health Community*

Chair: *Yelena Bird, Associate Professor, University of Saskatchewan, Canada.

1. Sydney Dillard, Assistant Professor, DePaul University, USA, Rati Kumar, Assistant Professor, Central Connecticut State University, USA, Agaptus Anaele, Assistant Professor, Emerson College, USA & Raihan Jamil, Assistant Professor, Zayed University, UAE. Walking the Talk by Bridging Theory to Practice: Utilizing the Culture-Centered Approach (CCA) to Address Gaps in Community Based Participatory Research (CBPR) Processes. (Monday afternoon)

2. Shokufeh Ramirez, Assistant Director, Tulane Center of Excellence in Maternal and Child Health, Tulane University, USA, Amelia Brandt, PhD Student, Tulane University, USA, Bert Cramer, Independent Researcher, Tulane University, USA & Carolyn Johnson, Professor, Tulane University, USA. An Evaluation of Maternal and Child Health (MCH) Leadership Education at Tulane University.


4. Sirpa Salin, Principal Lecturer, Tampere University of Applied Sciences, Finland & Hannele Laaksonen, Principal Lecturer, Tampere University of Applied Sciences, Finland. Bringing Informal Caregivers and Recipients to the Digital Age Project.

*This session is jointly offered with the Nursing Unit

18:00-20:00 Session XIII (Room A-Mezzanine Floor): A Symposium Discussion on Global Health

Chair: Vickie Hughes, Director, Health & Medical Sciences Division, ATINER & Assistant Professor, Johns Hopkins University, USA.

1. Elizabeth Mary Chiarella, Professor, The University of Sydney, Australia. "Australian Primary Health Care: A Curate's Egg?"

2. John Moraros, Associate Professor, University of Saskatchewan, Canada. "Obesity - A Global and Canadian Perspective".

3. Stefano Neri, Associate Professor, University of Milan, Italy. "Governing Southern European NHSs in the era of the economic crisis. The case of Italy".

4. Neil Kelly, Senior Lecturer, Coventry University, UK. "Changes in mental health service provision".

5. Adel Zeglam, Professor, Tripoli University, Libya. "Health and Medical Challenges in Libya".

6. Ali AlHaqwi, Consultant / Professor, King Saud Ben Abdul-Aziz University / King Abdul-Aziz Medical City, Saudi Arabia. "Hajj and Mass Gatherings: Considerations for Global Health”.

7. John Trougakos, Associate Professor, University of Toronto, Canada. "Is Work Making us Sick? The Social, Economic, and Personal Costs of Workplace Stress and Burnout”.

21:00-23:00 Greek Night and Dinner (Details during registration)

Tuesday 8 May 2018

07:45-11:00 Session XIV: An Educational Urban Walk in Modern and Ancient Athens

Chair: Gregory Katsas, Head, Sociology Research Unit, ATINER & Associate Professor, The American College of Greece-Deree College, Greece.

Visit to the Most Important Historical and Cultural Monuments of the City (be prepared to walk and talk as in the ancient peripatetic school of Aristotle)

(Note: The simple registration fee of the conference does not cover the cost of this session. More details during registration).

11:15-13:00 Session XV (Room C-10th Floor): Family Centred-care*

Chair: *Karen Egenes, Associate Professor, Loyola University Chicago, USA.

1. *Joseph Gambacorta, Associate Dean for Clinical Affairs, School of Dental Medicine, University at Buffalo, USA, Tammy Austin-

11:15-13:00 Session XVI (Room D-10th Floor): Cancer*

Chair: *Bruno Cotter, Associate Professor, University of California, San Diego (UCSD), USA.

1. Richik Tripathi, Assistant Professor, Banaras Hindu University, India. Trauma to the Oral Mucosa from 3rd Molar Tooth as Contributory
Ketch, Professor and Dean for MS/DNP Programs; University at Buffalo, USA, James Harris, Assistant Dean; Clinical Outreach Director, University at Buffalo, USA, Linda Paine Hughes, Clinical Assistant Professor, University at Buffalo, USA & Molli Waruneck, Clinical Assistant Professor, University at Buffalo, USA. Challenges to Coordinating Clinical Outreach to Improve Inter-Professional Practice Initiatives.


3. Nida Kiyici, Nurse, Ondokuz Mayis University, Turkey, Cennet Büşra Alici, Nurse, Ondokuz Mayis University, Turkey, Zeliha Koç, Associate Professor, Ondokuz Mayis University, Turkey & Zeynep Sağlam, Lecturer, Ondokuz Mayis University, Turkey. Factors Affecting Professional Behavior and Attitude in Intensive Care Nurses. (Tuesday)

4. Hannele Laaksonen, Principal Lecturer, Tampere University of Applied Sciences, Finland, Annukka Tuppurainen, Radiographer, Kuopio University Hospital, Finland & Milla Lamminpera, Radiographer, Tampere University Hospital, Finland. Conflicts and their Prevention at Home Care in Finland.

5. Esma Ayse Ozturk, PhD Student, Ondokuz Mayis University, Turkey, Asuman Şener, Lecturer, Ondokuz Mayis University, Turkey, Sevil Masat, Research Assistant, Ondokuz Mayis University, Turkey, Tuğba Kavalali Erdogan, Research Assistant, Ondokuz Mayis University, Turkey & Zeliha Koç, Associate Professor, Ondokuz Mayis University, Turkey. Emotional Control and Affecting Factors in Nursing Students.

*This session is jointly offered with the Nursing Unit

Factor towards Development of Oral Cancer.

2. Ebü Aydin, Nurse, Ondokuz Mayis University, Turkey, Zeynep Sağlam, Lecturer, Ondokuz Mayis University, Turkey & Zeliha Koç, Associate Professor, Ondokuz Mayis University, Turkey. Knowledge, Awareness and Practices of Health Sciences Faculty Students in Respect to Cervical Cancer, HPV and HPV Vaccination.

3. Zuhal Kilic-Kurt, Postdoctoral Research Assistant, Ankara University, Turkey, Filiz Bakar-Ates, Assistant Professor, Ankara University, Turkey, Yeliz Ozmay, Researcher, Baskent University, Turkey & Ozgur Kutuk, Assistant Professor, Baskent University, Turkey. Evaluation of in vitro Antitumor Activities of some Pyrrolo[2,3-d] Pyrimidine Derivatives against Human Lung and Prostat Cancer Cell Lines.

*This session is jointly offered with the Pharmaceutical & Nursing Units

13:00-14:00 Lunch

14:00-15:30 Session XVII (Room D-10th Floor): Diabetes*

Chair: *Jean Marco, Professor, LLA-CREATIS, University of Toulouse-Jean Jaurès, France.

1. Fatima Regina Mena Barreto Silva, Professor, Universidade Federal de Santa Catarina (UFSC), Brazil, Postal Barbara Graziela, Professor, Universidade Federal de Santa Catarina (UFSC), Brazil, Camila Pires Mendes, Universidade Federal de Santa Catarina (UFSC), Brazil, Allisson Jhonatan Gomes Castro, Universidade Federal de Santa Catarina (UFSC), Brazil, Paola Miranda Sulis, Universidade Federal de Santa Catarina (UFSC), Brazil, Marisa Jândia Silva Frederico, Universidade Federal de Santa Catarina (UFSC), Brazil, Carlos Henrique Blum da Silva, Universidade Federal de Santa Catarina (UFSC), Brazil & Flávio Reginatto, Universidade Federal de Santa Catarina (UFSC), Brazil.

3. Paola Miranda Sulis, PhD Student, Universidade Federal de Santa Catarina, Brazil, Marisa Frederico, Universidade Federal de Santa Catarina, Brazil, Alessandra Mascarello, Universidade Federal de Santa Catarina, Brazil, Ricardo José Nunes, Universidade Federal de Santa Catarina, Brazil, Rosendo Augusto Yunes, Universidade Federal de Santa Catarina, Brazil & Fatima Regina Men Barreto Silva, Universidade Federal de Santa Catarina, Brazil. Effect and Mechanism of Action of Sulfonylthiourea Derivative on Glycaemia Homeostasis.

4. *Siddharth Gupta, MBA - Health Care Administration, University of Delhi, India. Ancient oil Pulling Therapy in Patient Management with Oral and Dental Symptoms of Diabetes Mellitus.

*This session is jointly offered with the Pharmaceutical & Nursing Units

**15:30-17:00 Session XVIII (Room C-10th Floor): Health Care II**

1. Molli Warunek, Clinical Assistant Professor, University at Buffalo, USA; Joseph Gambacorta, Associate Dean for Clinical Affairs, School of Dental Medicine, University at Buffalo, USA, Tammy Austin-Ketch, Professor and Dean for MS/DNP Programs; University at Buffalo, USA, James Harris, Assistant Dean; Clinical Outreach Director, University at Buffalo, USA & Linda Paine Hughes, Clinical Assistant Professor, University at Buffalo, USA. Global Health Humanitarian Team Addressing Healthcare Needs of Refugee Population.

2. Linda Paine Hughes, Clinical Assistant Professor, University at Buffalo, USA, Tammy Austin-Ketch, Professor and Dean for MS/DNP Programs; University at Buffalo, USA, Molli Warunek, Clinical Assistant Professor, University at Buffalo, USA, Joseph Gambacorta, Associate Dean for Clinical Affairs, School of Dental Medicine, University at Buffalo, USA & James Harris, Assistant Dean; Clinical Outreach Director, University at Buffalo, USA. Fluoride Varnish Application: Sustainable and Cost Effective Prevention for Refugees.

3. Margarida Abreu, Associate Professor, ESEP - Escola Superior de Enfermagem do Porto, Portugal, Alcione Silva, Associate Professor, Universidade de Aveiro, Portugal & Nilza Costa, Professor, Universidade de Aveiro, Portugal. Caring for Dependent Elderly at Home: Design a Psychoeducational Program to Support Family Caregivers based on Action Research.

**15:30-17:00 Session XIX (Room D-10th Floor): Cardiovascular Disease & Educational and other Issues**

1. *Bruno Cotter, Associate Professor, University of California, San Diego (UCSD), USA. HIV and Cardiovascular Disease. (Tuesday)

2. *Jean Marco, Professor, LLA-ČRÉATIS, University of Toulouse-Jean Jaurès, France, Martin Lestra, Postdoctoral Fellow, LLA-ČRÉATIS, University of Toulouse-Jean Jaurès, France, Monique Martinez, Professor, LLA-ČRÉATIS, University of Toulouse-Jean Jaurès, France, Cédric Aït-Ali, LLA-ČRÉATIS, University of Toulouse-Jean Jaurès, France & Bruno Péran, LLA-ČRÉATIS, University of Toulouse-Jean Jaurès, France. At the Heart of the Problem: A Transformative Learning Approach in a Group of Early Career Graduates in Interventional Cardiology, before, during and after a Large Meeting.

3. Engjellushe Hasani, Cardiologist, Health Center 3 Tirana, Albania, Rezartu Shkreli, Head of Pharmacy Department, Aldent University, Albania, Kliodiela Dhamo, Lecturer, Lecturer, Aldent University, Albania & Afrim Tabaku, Researcher and Lecturer, Aldent University, Albania. Serum Levels of Cooper, Zinc and Selenium in Patients with Cardiovascular Disease.

5. Dilek Kilyaz, PhD Student, Ondokuz Mayis University, Turkey, Selin Keskin Kiziltepe, Lecturer, Duzce University, Turkey, Tugba Cinarli, Lecturer, Ondokuz Mayis University, Turkey, Tugce Ayar, Graduate Student, Ondokuz Mayis University, Turkey, Sevil Masat, Researcher Assistant, Ondokuz Mayis University, Turkey, Tugba Kavalali Erdogan, Researcher Assistant, Ondokuz Mayis University, Turkey & Zeliha Koc, Associate Professor, Ondokuz Mayis University, Turkey. Factors Affecting the Care Dependency in Elderly Individuals.

*This session is jointly offered with the Nursing Unit*

17:00-18:30 Session XX (Room C-10th Floor): Education, Health Informatics and Other Issues*

Chair: *Lorna Guse, Associate Professor, University of Manitoba, Canada.

1. Theodore Trafalis, Professor, University of Oklahoma, USA & Xiaomeng Dong, Student, University of Oklahoma, USA. Thyroid Nodule Ultrasound Image Analysis and Feature Extraction.


3. Tugba Cinarli, Lecturer, Ondokuz Mayis University, Turkey. Factors Affecting Self-Confidence Levels in Nursing Students.

4. Cansu Atmaca Palazoglu, Lecturer, Gümüşhane University, Turkey, Zeynep Saglam, Lecturer, Ondokuz Mayis University, Turkey, Tugba Kavalali Erdogan, Research Assistant, Ondokuz Mayis University, Turkey, Sevil Masat, Research Assistant, Ondokuz Mayis University, Turkey & Zeliha Koc, Associate Professor, Ondokuz Mayis University, Turkey. Nursing Students’ Leadership Orientations and the Affecting Factors.

5. Esra Danaci, Lecturer, Bülent Ecevit University, Turkey, Asuman Şener, Lecturer, Ondokuz Mayis University, Turkey, Sevil Masat, Research Assistant, Ondokuz Mayis University, Turkey, Tugba Kavalali Erdogan, Research Assistant, Ondokuz Mayis University, Turkey & Zeliha Koç, Associate Professor, Ondokuz Mayis University, Turkey. Factors Affecting Clinical Decision Making Skills of the Nursing Students.

*This session is jointly offered with the Nursing Unit*

18:30-18:40 (Room C-10th Floor): Closing Remarks

Dr. Vickie Hughes, Director, Health & Medical Sciences Division, ATINER & Assistant Professor, School of Nursing, Johns Hopkins University, USA.

20:00- 21:30 Dinner

Wednesday 9 May 2018
Mycenae and Island of Poros Visit
Educational Island Tour
Thursday 10 May 2018
Delphi Visit

Friday 11 May 2018
Ancient Corinth and Cape Sounion
Synthesis and Anticonvulsant Evaluation of New Compounds Derived from Diazaspiroalkanediones

The search for anticonvulsant compounds with enhanced activity and less toxicity continues to be an area of intensive research in medicinal chemistry. Thus, in this work, we investigated the anticonvulsant potential of novel structures of: 1-[(2-hydroxyethyl)(aryl)amino]-N substituted cycloalkanecarboxamides (IXa-l) and 2-[(1-substituted carbamoyl)cycloalkyl](aryl)amino] ethyl acetates (Xa-l) derived from the penultimate synthons diazaspiroalkanediones. All the newly synthesized compounds displayed 100% anticonvulsant activity in the scPTZ screen at a dose range from 0.0057-0.283 mmol/kg. The most potent compounds in the scPTZ screen were Xh (ED50 = 0.0012 mmol/kg), Xd (ED50 = 0.002 mmol/kg), Xf (ED50 = 0.004 mmol/kg), IXj (ED50 = 0.0047 mmol/kg), XI (ED50 = 0.0076 mmol/kg) and Xi (ED50 = 0.008 mmol/kg). It is noteworthy to mention that compound Xf was active as a new anticonvulsant agent in both scPTZ and MES screens. It showed ED50 of 0.016 mmol/kg in MES screens. None of the test compounds showed any minimal motor impairment at the maximum administered dose in the neurotoxicity screen. These compounds could be regarded as promising candidates as antiepileptic drugs.
Margarida Abreu  
Associate Professor, ESEP - Escola Superior de Enfermagem do Porto, Portugal  
Alcione Silva  
Associate Professor, Universidade de Aveiro, Portugal  
&  
Nilza Costa  
Professor, Universidade de Aveiro, Portugal

Caring for Dependent Elderly at Home:  
Design a Psychoeducational Program to Support Family Caregivers based on Action Research

Introduction: Family caregivers provide a significant part of the long-term care for older adults. Scientific evidence has shown family care to be a stressful experience. The psychoeducational programs are among the most effective strategies to offer support to the family caregivers.

Aims: This study aimed to design, implement and evaluate a psychoeducational program for family caregivers of dependent elderly people enrolled in a family health unit.

Methods: This action research study follows André Morin's integral action research. Participants were 18 family caregivers. The organization and the participants gave previously their consent. Data was generated from direct observation, field diaries, questionnaires administered before and after each session, and semi-structured interviews at the end of the study, in order to evaluate the overall program.

Results: The results showed that the psychoeducational program met the informational needs of most caregivers, allowing the discussion related to their caregiving role, promoting sharing of lived experiences and facilitating changes in their caring and health management skills. Some barriers were identified during the process: situational barriers (lack of time due to the caregiving tasks at home or professional activity), as well as psychosocial barriers (motivation in acquiring additional knowledge).

Conclusion: Psychoeducational programs for supporting caregivers, as stated in the Educa&Care project, are important contributions to reduce their problems and enhancing the well-being of both the caregiver and the person he/she are caring for. The evaluation highlighted the need for increasing flexibility to include more participants and offer tailored support.
Psychological Distress of Family Caregivers and Functional Decline of People with Dementia: A Cross-Sectional Study

**Aim:** Dementia is a complex syndrome mostly associated with elderly populations and its progressive nature will ultimately lead to death. It is estimated at 47.47 million the number of people living with dementia, reaching 75.63 million in 2030 and 135.46 million in 2050. This study aims to evaluate the degree of psychological distress in family caregivers of people with dementia.

**Methods:** A non-probabilistic sample of 54 dyads (people with dementia and family caregivers) was recruited. A sociodemographic questionnaire, the Brief Symptom Inventory (BSI) and the Barthel Index (BI) were used for data collection.

**Results:** The majority of people with dementia are women and have a mean age of 80.41 years. Caregivers are also mostly women and have a mean age of 60.76 years. A significant percentage of family caregivers (38.9%) showed psychological distress. Caregivers showed high scores in some BSI dimensions: somatization, obsessive-compulsion, interpersonal sensitivity, anxiety and paranoid ideation. Concerning the patients, 54.7% were in advanced stage of dementia (important factor in order to understand the distress on the family caregiver) and 46.3% were severely or totally dependent in self-care. Findings show that caregivers experience psychological distress when caring for people with severe cognitive and functional declines.

**Conclusions:** In this study, caregivers show significant values on psychological distress, in six dimensions: somatization, obsessive-compulsion, interpersonal sensitivity, anxiety, hostility and paranoid ideation. This means a potential increased risk of both psychological and physical morbidity, and a decreased capacity to care for the relative. If higher levels of dependency and severity of dementia increase the likelihood of greater psychological distress in caregivers, it is crucial that health systems are able to deliver integrated and palliative care, namely home-care support.

**Implications to practice:** Alleviating the caregivers’ distress is likely to have positive effects on the overall health and capacity to care. Frameworks for providing palliative care to people with advanced dementia and support the caregivers would enhance the quality of care provided and reduce the psychological distress on the caregiver.
Demet Aktas
Assistant Professor, Toros University, Turkey

Nurcan Ertug
Assistant Professor, Ufuk University, Turkey

Handan Boztepe
Assistant Professor, Hacettepe University, Turkey

&

Sevil Cinar
Lecturer, Hacettepe University, Turkey

Turkish Adaptation, Validity and Reliability of Nursing Anxiety and Self-Confidence with Clinical Decision Making Scale

Aims and objectives. To adapt and evaluate the validity and reliability of the Nursing Anxiety and Self-Confidence with Clinical Decision Making (NASC-CDM) scale.

Background: Nurses make very critical and important decisions in clinics every day. Clinical decision making (CDM) is one of the important concepts for nurses within their field of professional competence.

These decisions which are made by nurses mostly influence the patients’ outcomes directly. The course of Clinical decision making includes effective time management and coordination of the activities after prioritizing the problems or requirements of the patients to meet all needs. Therefore, self-confidence and anxiety of nurses are of the important factors that influence clinical decision making.

Design. This was a validity and reliability study.

Methods. The study population was 275 nursing students. This study was conducted with 275 students who had clinical practice experience and who continued to their education in the second, third and fourth classes of the nursing undergraduate program of a university in Ankara, Turkey. The validity of the scale was assessed using exploratory factor analysis, while the reliability of the scale was assessed using Cronbach alpha coefficient, split-half coefficient and intra-class correlation coefficient.

Results. Three subdimensions of NASC-CDM-TR scale account for 56.407% of the total variance of the self-confidence subscale and 54.743% of the total variance of the anxiety subscale. The Cronbach alpha coefficient of self-confidence subscale was found to be 0.934, and the Cronbach alpha coefficient of anxiety subscale was found to be 0.924.

Conclusions. Our study results show that the Turkish version of the NASC-CDM scale is a valid and reliable instrument.

Relevance to clinical practice. The NASC-CDM-TR scale can be used in measuring self-confidence and anxiety levels of Turkish nursing students during clinical decision making.
Toward Promoting Patient-Centered Care; Do our Patients Want to Participate in Clinical Decision-Making?

Objectives: To determine preferences of patients regarding their involvement in the clinical decision making process and the related factors in Saudi Arabia.

Methods: This cross-sectional study was conducted in a major family practice center in King Abdulaziz Medical City, Riyadh, Saudi Arabia, between March and May 2012. Multivariate multinomial regression models were fitted to identify factors associated with patients preferences.

Results: The study included 236 participants. The most preferred decision-making style was shared decision-making (57%), followed by paternalistic (28%), and informed consumerism (14%). The preference for shared clinical decision making was significantly higher among male patients and those with higher level of education, whereas paternalism was significantly higher among older patients and those with chronic health conditions, and consumerism was significantly higher in younger age groups. In multivariate multinomial regression analysis, compared with the shared group, the consumerism group were more likely to be female [adjusted odds ratio (AOR) =2.87, 95% confidence interval [CI] 1.31-6.27, p=0.008] and non-dyslipidemic (AOR=2.90, 95% CI: 1.03-8.09, p=0.04), and the paternalism group were more likely to be older (AOR=1.03, 95% CI: 1.01-1.05, p=0.04), and female (AOR=2.47, 95% CI: 1.32-4.06, p=0.008).

Conclusion: Preferences of patients for involvement in the clinical decision-making varied considerably. In our setting, underlying factors that influence these preferences identified in this study should be considered and tailored individually to promote patient-centered practice and achieve optimal treatment outcomes.
Elif Ates  
Lecturer, Acıbadem University, Turkey  
&  
Bahiye Ulus  
Lecturer, Acıbadem University, Turkey

Evaluation of Nursing Students’ Diagnoses and Interventions Using the Omaha System

Objectives: The nursing process guides the students in the diagnosing, planning, intervention and evaluation of patients/families, and it also gives a systematic point of view. The Omaha System (OS) is used as a nursing classification system in public health nursing course practice areas. It was conducted in order to examine the nursing diagnoses and interventions identified by the students according to the OS. Methods: It was a retrospective, analytical research. Practice files of 51 students who took the public health nursing course created the sample. Results: According to the Omaha problem classification list (PCL), the students in the study identified a total of 412 problems. According to Omaha PCL, the students mostly used the area of health behavior, followed by the physiological, psychosocial and environmental areas respectively. It was determined that 73% of the students had sufficient skills to use the OS and 26.8% of them were inadequate. Conclusion: It was observed that the nursing diagnoses identified by the students in line with the determined learning targets were sufficient.
Nursing Students’ Leadership Orientations and the Affecting Factors

**Aim:** This descriptive study was aimed at determining the leadership orientations of the nursing students and the relevant affecting factors.

**Material and Method:** The research was realized with the participation of 294 students who were currently studying in the nursing department of the Faculty of Health Sciences of a university and agreed to participate in the study between 03 May and 12 May 2017. Data were collected by the researchers via a 20-question questionnaire form that determines socio-demographic characteristics of students based on the relevant literature and by using the Leadership Orientations Instrument (self). Leadership Orientations Instrument is a 5-point Likert-type scale which was developed by Bolman and Deal and whose reliability and validity for Turkey was performed by Dereli. The scale, with a total of 32 expressions, consists of four subdimensions of Human Resource Leadership, Structural Leadership, Political Leadership, and Symbolic Leadership. A high score taken from a dimension indicates that the person exhibits leadership characteristics in that dimension while a low score indicating that the person does not exhibit any leadership at all. For data assessment, percentile method, One Way ANOVA, Tukey test, and t test were used.

**Findings:** It was determined that of the students 75.5% were female, 24.5% were male, 59.2% defined their family structure as protective, and 49.3% defined status of inter-family communication and 58.2% defined status of their communication with the social environment as “good.” Mean scores of students in subdimensions of Human Resource Leadership, Structural Leadership, Political Leadership, and Symbolic Leadership were 3.9±0.6, 3.7±0.6, 3.4±0.7, and 3.5±0.7 respectively. The highest score among the items of Leadership Orientations Instrument was obtained from the following expressions in the Human Resource Leadership subdimension: “I show high sensitivity and concern for others' needs and feelings (4.0±0.9)” and “I give personal recognition for work well done (4.0±0.9).”. In this study, a
statistically significant relationship was found between students’ Leadership Orientations Instrument score and their sociodemographic characteristics (p<0.05).

**Conclusion**: It was detected that students had high scores regarding Human Resource Leadership behaviors and low scores regarding Political Leadership behaviors. Human Resource Leadership behaviors were seen higher in the students, who were in their 1st year of nursing education, defined.
Knowledge, Awareness and Practices of Health Sciences Faculty Students in Respect to Cervical Cancer, HPV and HPV Vaccination

Aim: This study was conducted aiming to determine the knowledge, awareness and practices of the Health Sciences Faculty students with respect to cervical cancer, HPV and HPV vaccination.

Material and Method: The research was carried out between 21.09.2017 and 08.10.2017 with the participation of 647 nurses who were studying in the nursing and midwifery department of Ondokuz Mayis University Health Sciences Faculty. In this study, the data were collected using a questionnaire form which was developed by the researchers, which is composed of 49 questions and 45 statements including 14 false and 31 correct statements and which aimed to determine the knowledge, practices of the students in respect to cervical cancer, HPV and HPV vaccination. Descriptive statistics and One Way ANOVA, Tukey test and t-test were used for the analysis of the data.

Findings: Of the participating students, 54.9% were nursing students, 45.1% midwifery students, 84.5% were female and 15.5% were male students. The mothers of 53.6% and fathers of 38.2% of the students were primary school graduates. The families of 46.2% of the students were determined to live downtown. Their mean age was 20.3±2.2 years. Of the students, 98.8% considered the early diagnosis of cancer important. The cervical cancer risk factors were listed as early marriage and early sexual intercourse by 45% of the students, polygamous sexual partner by 42.5% of the students, having more than one sexual partner by 42.2% of the students. Only 51% of them did not know the methods used for early diagnosis, 40% of them reported that they did not have any idea about the benefit of the Pap smear test, 99.1% never had a pap smear test, % 52.6 of them never had heard of HPV before, 68.6% of them had never heard of HPV vaccine and never got HPV vaccine. As the reasons for not getting HPV vaccine, 75.9% of them stated that they did not have adequate information about the vaccine and 35.9% of them stated that they were sexually inactive. Only 15.8% of them were determined to want to get HPV vaccine. The mean knowledge score of the midwifery students on cervical cancer, HPV and HPV vaccine was 34.0 ± 1.3 while that of the nursing students was found to be 26.3 ± 1.1. However, the knowledge
level of the fourth-grade students of nursing and midwifery was observed to be higher than the other grades.

**Conclusion:** In this study, the knowledge level of the nursing and midwifery students on HPV infection and HPV vaccine was determined to be quite low and the majority of the students were determined not to want to get HPV vaccine.
Prevalence and Associated Factors of COPD among Aboriginal Peoples in Canada: A Cross-Sectional Study

**Background:** COPD among Aboriginal peoples in Canada is a major public health concern. This study was conducted in order to determine the prevalence and association between certain risk factors and COPD among the 35-year-old or older Aboriginal peoples in Canada.

**Methods:** This is a cross-sectional study. It uses data from Statistics Canada's Aboriginal Peoples Survey (APS), 2012. It consists of 8,117 self-identified Aboriginal peoples, aged 35 years old or older from all Canadian provinces and territories. The study outcomes centered on evaluating the prevalence and associated factors of COPD.

**Results:** This study found that 6.80% of the participants self-reported having COPD. Results of the logistic regression analysis show that COPD was significantly higher among daily smokers (odds ratio [OR], 2.28; 95% confidence interval [95% CI], 1.65-3.14), aged 55 years or older (OR, 3.04; 95% CI, 2.14-4.30), who earned $5,000-$9,999 per annum (OR, 4.21; 95% CI, 2.39-7.41) and needed health care over the past 12 months and did not receive it (OR, 1.83; 95% CI, 1.27-2.65).

**Conclusion:** The findings of our study show that COPD is strongly associated with Aboriginal peoples, who are older, smoke, have a low socioeconomic status (SES) and do not have access to health care when needed. Clinicians, health care professionals, medical/public health organizations, researchers and patients will greatly benefit from additional research in this common, serious and often overlooked disease among Aboriginal peoples in Canada.
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Promoting and Protecting the Mental Health of Substance Exposed Infants

Infants who are born substance exposed often experience symptoms of withdrawal due to becoming physically dependent to drugs of addiction while in utero. Treatment of these infants often necessitates admission to intensive care units, sometimes for several months. Extant research into the care of this vulnerable population focuses on symptom relief and the promotion of physiologic health. However, there is a scarcity of literature regarding the promotion of mental health in this vulnerable group of infants.

It is well established that infant brain development is experientially and environmentally dependent. Optimal brain development is reliant on the infant’s primary attachment relationship (who is most often the biological mother). Although current health and social policy recognise the significance of this attachment relationship to the infant’s health and well-being, the reality is many substance exposed infants have limited to no interaction with their mothers during hospitalisation. The reasons for this lack of interaction may include; poor maternal physical or mental health, maternal issues of addiction and the intervention of child protection services.

Using a descriptive case study methodology, this paper describes the experience of one hospitalised substance exposed infant in Australia to highlight the lack of interventions implemented to promote or protect the infant’s mental health in the absence of the primary care-giver. Based on the case study and the consistent evidence demonstrating persons with a compromised or absent primary attachment relationship during infancy develop significant long-term behavioural, psychological and emotional difficulties, there is a clear need to identify evidence based interventions which promote and protect the mental health of hospitalised substance exposed infants.
The Implementation of Pharmacy Preceptor Orientation Programs at Hospitals and their Impacts

Purpose: Improving training programs to achieve optimum goals, consistent input, and improve satisfaction and involvement of preceptors in different training programs.

Methods: A Preceptor orientation program was developed by the Faculty of Pharmacy approaching pharmacy preceptors at the hospitals which included two full day workshop and a monthly two hour workshop (total of 28 hours training) to discuss a variety of topics integral to preceptors development. The orientation program was divided into three main modules: professional precepting, rubrics for evaluation, and dealing with challenges. We collected Surveys from preceptors and students before establishing this program and a year after to measure effectiveness. Outcome measures include: student satisfaction, preceptor satisfaction, average scores of students, and number/ type of complaints raised to the Faculty of Pharmacy by students or preceptors.

Results: 40 preceptors were involved in this program from five different hospitals. 200 total number of pharmacy students, interns, and residents were included from a governmental Faculty of Pharmacy. Student satisfaction was 60 % in the pre-program survey and 85 % post program survey. Preceptor satisfaction was 65% pre and 95% post. Average scores of students was 83% pre-program and 89% post program, with reduction in the score inflation between preceptors by 20%. The number of complaints by students was 20% pre-program and 5% post program. Preceptors complaints were 10% pre-program and 1% post program.

Conclusion: Pharmacy preceptors orientation program implementation is effective to maintain training of pharmacy students, interns, and residents consistent with better utilization of training manual. We suggest such program to preceptors yearly to ensure quality of training and hospital preceptor better involvement.
Medical Students’ Learning Style Preferences and their Relationship with Performance in Different Subjects within the Medical Curriculum

Medical students as they begin their training bring with them different learning experiences and are often equipped with different preferred approaches to information gathering and processing styles. The first and second year medical curriculum consists of a range of different subjects ranging from biomedical sciences to more clinical applied subjects, which provide understanding of the health and diseases of different organ systems, to subjects teaching students regarding medical interviews and patient examination. It is useful to understand the students’ learning style preferences as it is helpful to an instructor to know how to best teach and prepare appropriate and effective instructional resources. Moreover, it is also helpful to the individual student to know the strengths and weaknesses of his or her preferred learning style and how to exploit it aptly.

We have surveyed the learning style preferences of two batches of medical students, once in their first year of training and again in their second year of training, using the Felder Silverman Index of Learning Style Questionnaire measuring the four dimensions of learning styles which are: sensing-intuitive, visual-verbal, active-reflective and sequential-global. The survey was conducted in a Central Asian university postgraduate medical school in Astana, Kazakhstan. We have previously demonstrated (Hernandez-Torrano et al 2017) that there is a significant association between those students with sensing-intuitive learning styles and their performance in the subjects Genetics and Anatomy ($p=0.026$, $R^2=0.09$ and $p=0.005$, $R^2=0.15$ respectively). We have shown from the cohort that we have surveyed, that there is greater preference of first year medical students for visual (80.8%) and sequential (60.5%) learning styles and males are more likely to prefer the visual learning style than females and females are more likely to be sequential rather global.

We have now further extended our study to examine the association of their learning style preference with a range of different subjects of their first and second years as medical students; including immunology, cardiology, basic medical interviewing and patient examination, clinical procedures and internship. We are also able to analyze if their learning style preferences evolves over the two years in which they are exposed to more problem based learning activities and case studies with practical applications. The findings of this extended study which we will be presenting will be of interest to medical instructors and medical educators to see how best to develop more
effective pedagogical strategies to help medical students best learn from their medical training.
How can Nurses Demonstrate Insight?

In the absence of a quantifiable and defensible mechanism for assessing continuing competence many regulatory jurisdictions have implemented continuing competence frameworks, using a variety of competence assessment tools. There is consensus internationally that continuing professional development (measured in hours), recency of practice (measured in hours) and assessment against specified competencies (practice standards), when used together are indicators of competence. However, if they were a guarantee of competence on any given day, then arguably no-one would present as a notification for lack of competence, because all registrants are required to meet these criteria annually for recertification (renewal of registration). So is there a missing indicator that is in reality competence awareness or insight?

This paper will report on a study that analyses the elements of the much discussed and acclaimed concept of "insight". When nurses and/or midwives have their names removed from the register, a common reason given for such a radical decision is that they lacked "insight" into their conduct or performance. When a decision is made to retain a nurse or midwife on the register despite the fact they have either made a dreadful mistake or done something that was harmful or detrimental to the well-being of the patient, the determining factor is often that they demonstrated "insight" into their behaviour. So what it is? What did these practitioners do? Or not do?

This study reviewed over 800 performance notifications about nurses or midwives relating to competence and/or patient safety concerns. A thematic analysis of those cases where insight was identified as a determining factor in the way the practitioner was managed has been undertaken. The aim is to be able to describe and identify those behaviours and attitudes that demonstrate insight.
Factors Affecting Self-Confidence Levels in Nursing Students

**Aim:** This study was planned as descriptive in order to determine the factors that affect self-confidence levels of the nursing students.

**Material and Method:** The research was realized with the participation of 316 students who were currently studying in the nursing department of the Faculty of Health Sciences of a university and agreed to participate in the study between 17 April and 28 April 2017. Data were collected by the researchers via a 20-question questionnaire form that determines socio-demographic characteristics of students based on the relevant literature and by using the Self-Confidence Scale. The Self-Confidence Scale is a 5-point Likert-type scale consisting of 33 items developed by Akın in order to measure the self-confidence of the individuals. The highest score that can be taken from this scale is 165 and the lowest score is 33. A high score from this scale indicates a high level of self-confidence since the scale has no negative items. Data were analyzed by percentile calculation, One Way ANOVA, Tukey test, t-test, Mann Whitney U test, and Kruskall Wallis Test.

**Findings:** Of the students, it was detected that 75.6% were female, 24.4% were male, mothers of 54.1% and fathers of 35.8% were primary school graduates, mothers of 42.1% lived in the provincial center, 76.6% had a nuclear family, 94.3% had social security, 67.7% had balanced income-expenditure, 60.8% had a protective family structure, 47.5% defined status of inter-family communications and 55.1% defined status of social relations as "good," 48.4% loved the nursing profession, 65.5% preferred nursing due to their love in the profession, 57.6% preferred this profession due to the employment opportunities, and 42.4% were happy with the education they received. In this study, the median score of the Self-Confidence Scale was 125.5 (74–165). A statistically significant relationship was found between the score of the Self-Confidence Scale and sociodemographic and occupational characteristics of students (p<0.05).

**Conclusion:** The study revealed that 67.1% of the students had high self-confidence while 31.3% had medium and 1.6% had low self-confidence. In accordance with the study findings, it was seen that the students, whose mothers were graduated from a high school and who had a democratic family structure, defined their inter-family and social communication as “good,” and were happy with the education they received had higher levels of self-confidence.
HIV and Cardiovascular Disease

The association between HIV infection, antiretroviral therapy and coronary heart disease (CHD) has been well recognized for many years. Due to the remarkable success of combination antiretroviral therapy (cART), HIV-infected patients today live longer and HIV infection has become a chronic disease. In regions with wide access to cART, there is a concurrent rise in the incidence of non-communicable diseases, particularly of CHD. The increased prevalence of CHD in the HIV-infected population is related to increased life expectancy, resulting from better access to cART, and high levels of traditional cardiovascular disease (CVD) risk factors, particularly in the HIV population. Globally, rates of HIV infection are highest in sub-Saharan Africa; Eastern Europe and Southeast Asia are now faced with an emerging epidemic due in part to the lack of preventive initiatives; however, in developed countries, with easy access to cART, HIV-infected patients live longer and diseases of older age (cancer, CHD) are now the prominent cause of death in this population.

Despite the evidence that HIV infection carries a higher risk of developing coronary artery disease (CAD), the mechanisms responsible for the heightened risk are not well understood. The etiopathogenesis of HIV and atherosclerosis results from complex interactions between traditional risk factors, direct effects of HIV infection and the harmful side effects of some antiretroviral therapy regimens. It is well recognized that there is an increased prevalence of traditional risk factors in HIV-infected individuals. In addition, the effects of certain cART regimens lead to dyslipidemia, insulin resistance and endothelial dysfunction, which are known to be associated with atherosclerosis. The immune system has a critical role in the development and progression of atherosclerosis in HIV-positive patients. Higher levels of inflammatory markers, such as C-reactive protein, interleukin-6, and tumor necrosis (TNF) have been found in HIV-positive patients compared with HIV-negative patients. The risk for myocardial infarction (MI) is increased more than 4-fold in patients with HIV infection and elevated C-reactive protein levels. Higher levels of interleukin-6, soluble TNF receptor I and soluble TNF II, kynurenine to tryptophan ratio and D-dimer at 1-year post cART therapy have been associated with the occurrence of myocardial infarction (MI) and stroke. Large observational studies in the United States and Europe have investigated the epidemiology of CHD in HIV-infected population. These and other studies suggest that HIV infection increases the overall risk for CHD by 1.5 to 2.0-fold. Interestingly, an analysis of cohorts over different timeframes suggests that the prevalence rates of
CHD are falling, presumably due to early recognition of risk factors and the use of newer antiretroviral agents.

Recent research focus has shifted to the detection of subclinical atherosclerosis as a surrogate for clinical events. The typical plaque in HIV-infected patients is a non-calcified atherosclerotic plaque. Noninvasive imaging studies, such as carotid intima-media thickness (cIMT) and coronary computed tomography angiography (CCTA), indicate an increased prevalence of subclinical atherosclerosis in HIV-positive patients compared with HIV-negative patients. A meta-analysis of 13 observational studies suggests a trend toward more increased cIMT in HIV-infected patients compared with HIV-negative patients. As early as childhood, HIV-infected children receiving cART have an increased cIMT, suggesting that CHD may already be heightened in HIV-infected patients at a younger age. A recent meta-analysis of 1,229 asymptomatic HIV-infected patients on cART demonstrated a 3-fold higher prevalence of non-calcified coronary artery plaques (vulnerable plaques) on CCTA, compared with HIV-negative control subjects. In addition, patients with low CD4+ cell counts had evidence of more vulnerable plaques, further supporting the finding that disease severity may contribute to increased CVD risk. Two studies in the United States have compared CCTA findings in HIV-positive and HIV-negative persons; one study conducted by Post et al. in the Multicenter AIDS Cohort Study (MACS) showed a higher prevalence of any coronary plaques and of non-calcified plaques in HIV-positive compared with HIV negative US men; while the other study, conducted by Lai et al, CCTA findings were similar between HIV-positive and HIV-negative African Americans with high levels of cocaine use.

New modern cART regimens have substantially altered the face of CVD among HIV-infected patients. Both HIV and CVD are global health issues. As the HIV population ages, the increase in CVD will pose future challenges to clinicians and health authorities. Available data suggest the presence of an accelerated process of CVD in HIV-infected population due to multiple risk factors, which include conventional risk factors, emerging new risk factors (i.e. effects of infection/inflammation) and the role of modern antiretroviral therapy.

Results of recent studies may somewhat attenuate the concerns about accelerated subclinical atherosclerosis in HIV-positive persons and support the notion that easy access to medical care with modern cART regimen and the well-established recommendation for early initiation for antiretroviral therapy in conjunction with aggressive primary and secondary preventive measures for CVD may have a significant impact in reducing CHD in HIV-infected population.
Factors Affecting Clinical Decision Making Skills of the Nursing Students

Aim: This study was planned as descriptive with the aim of determining the factors that affect clinical decision making skills of the nursing students.

Material and Method: The research was realized with the participation of 301 students who were currently studying in the nursing department of the Faculty of Health Sciences of a university and agreed to participate in the study between 04 March and 19 March 2017. Data were collected by the researchers via a 20-question questionnaire form that determines sociodemographic and clinical decision making characteristics of students and was prepared based on the relevant literature and by using the Clinical Decision Making in Nursing Scale. The Clinical Decision Making in Nursing Scale, is a scale developed by Jenkins and adapted into Turkish by Durmaz and Dicle consisting 4 subscales with 40 items. While the total of score that could be taken from the scale is 40 to 200 points, a high score corresponds to a high perception of decision-making and vice versa. Data were analyzed by percentile calculation, One Way ANOVA, Tukey test, t-test, Mann Whitney U test, and Kruskall Wallis Test.

Findings: Of the students, mothers of 51.2% and fathers of 34.2% were primary school graduates, 45.2% solved their problems by alone, and 51.2% reviewed options when s/he does not reach his/her goal during problem-solving. In the study, the median score of the Clinical Decision Making in Nursing Scale and the median subscale scores of Search for Alternatives or Options, Canvassing of Objectives and Values, Evaluation and Reevaluation of Consequences, Search for Information, and Unbiased Assimilation of New Information were 142 (105–182), 37 (23–50), 34 (25–46), 37 (23–49) and 34 (26–44), respectively. A statistically significant relationship was found between the score of the Clinical Decision-Making Scale and sociodemographic and occupational characteristics of students (p<0.05).

Conclusion: It was detected that the clinical decision-making perception of students was high. Students, who were in their 1st year of nursing
education, in the 17-19 age group, female and had a protective family structure, defined familial and social relations as “very good,” loved the nursing profession, preferred nursing due to their love in the profession, and were happy with the education they received, had higher perception of clinical decision making.
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Trends in Plasma Toll Fractionation for Medicinal Products  
Self-Sufficiency in Italy

Introduction: Until 2014, in Italy domestic plasma toll fractionation, done only by one company, have been limited in accessing different technologies and products and in cost competition; now four companies have been identified as competitive fractionators: CSL Behring, Kedrion, Grifols, Octapharma and Shire.

Results: In 2017, four companies acted as competitive toll fractionators of a total of 821.437 Kg of plasma collected in four partnerships of Italian regions. The higher yield granted by fractionators increased IgG production (from 11 % up to 41 %) significantly contributing to decrease market dependence, although the continuous rise in demand will still require market compensation. The decrease of albumin use (-2,6 % 2015 vs. 2014) is probably due to a better control on an impressively high (and inappropriate) demand (35,4 tons and 582 g/1000 population in 2015, highest in the world) but more must be done in this direction through clinical audits. Plasma derived Factor VIII demand is still higher than potential production (137.994.500 IU vs 1.061.496 IU) but, since all therapeutic options must be guaranteed to patients, domestic plasma cannot serve as the unique source of FVIII. The new tenders also allowed the enlargement of the basket of products; at present, the amount of domestic plasma collection is in large excess than that required for the national self-sufficiency of Factor IX, Prothrombin complex concentrates, Antithrombin, Fibrinogen and a-1-antithrypsin.

Conclusions: Competition resulted in better yields of Albumin and Ig, decreasing level of market dependence, an increase in the basket of plasma derived products, and a decrease in cost for fractionation (20 to 30 %), thus significantly contributing to national self-sufficiency.
Development of Self-Management in Paediatric Inflammatory Bowel Disease (IBD): A Qualitative Exploration

**Background:** Self-management programs in pediatric chronic conditions, such as asthma and diabetes were effective in improving health-related outcomes. Similarly, self-management in the context of adult inflammatory bowel disease (IBD) safely reduced healthcare costs. Nevertheless, evidence on self-management in pediatric IBD is scant. This study aims to explore self-management in pediatric IBD by exploring the childhood experience of IBD and how it is understood by the participants.

**Methods:** Using a constructivist grounded theory approach, seven participants aged 8-17 years old were recruited in a tertiary metropolitan pediatric IBD center. Semi-structured interviews using topic guides and optional draw-and-write methods were used for data collection. Multi-level coding and constant comparison methods were utilised during data analysis.

**Results:** The pediatric IBD self-management theory described the phenomenon of self-management through the relationship of categories that emerged from the study. Self-management starts off as a parent-dominant process that progressed to a more autonomous form with increasing disease experience. The experience was described as filled with struggles and a developing sense of control in managing these struggles. Autonomous self-management developed from the interaction of information, insight and integration. Enablers and deterrents were the contextual factors that influenced the development of self-management.

**Conclusion:** Establishing identity both as a psychosocial developmental task and a disease-specific task is the core of self-management in childhood IBD. Future self-management programs should explore the role of structures around the child (family, school and healthcare systems) and the implementation of a proactive philosophy of involving children in managing their condition.
Walking the Talk by Bridging Theory to Practice: Utilizing the Culture-Centered Approach (CCA) to Address Gaps in Community Based Participatory Research (CBPR) Processes

Many health communication scholars work closely with disenfranchised communities to address health inequity’s that contribute to global health problems such as the Ebola virus outbreak in 2014, the spread of H1N1 influenza in 2009, and the SARs epidemic in 2003, among others. Such health concerns continue to lead to large and small scale community-based health campaigns provided through governmental and non-profit funding agencies. Of these projects, community based participatory research (CBPR) has developed as a commonly used theoretical approach to investigate and alleviate stark health disparities among underserved populations, yet often times the effect sizes of many campaigns are less than significant. This paper provides alternatives to bridging the “theoretical” with the “practical” in developing community-based participatory research (CBPR) health communication projects. As illustrated through a review of campaign approaches used in CBPR, often times the theoretical orientations of CBPR become secondary to its praxis, as unspoken motives such as grant funding requirements and funding agendas become motivating factors in guiding community based initiatives.

In response, this paper reintroduces the culture-centered approach (CCA) as an additional metatheoretical lens that may be utilized in linking theory to practice. The use of reflexive exercises is recommended to draw out unseen power differentials within health communication partnerships, calling into question the fundamental objectives guiding the decision-making processes within CBPR projects. The study aspires to strengthen CBPR in practice and compel global health professionals implementing CBPR to become more authentic to the orientation’s original conceptualization.
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“What are we doing Here?”
Students’ Use of a Clinical Log to Demonstrate Critical Reflection during an International Experience

A focus on globalism, international health, and the development of cultural competence have led an ever growing number of schools of nursing to seek to opportunities for nursing students to participate in international experiences. Further documented, has been the use of reflection as a teaching strategy to enhance the student participants’ evaluation of their encounters with a health care system that is quite different from the one in which they are being educated. To date, the value of reflection has been most often reported in regard to nursing students’ encounters with poverty and scarcity of health care resources when they have been involved in service-learning experiences in developing nations.

Loyola University offers a course in Community Health Nursing, which is taught in England and affords students the opportunity participate in patient care experiences with employees of the National Health Care system. The opportunity to compare and contrast the British health care system with that of the United States causes many students to view health care in an entirely different light. Although the experience occurs in a developed country, the exposure to innovative approaches to health care nevertheless causes many students to examine their personal values and beliefs about health care delivery. The use of a clinical log to record reflections about their experiences has been found to be an important mechanism to enable students to process their experiences and to integrate new knowledge into both their nursing practice and their personal philosophies of health care delivery.

Through the analysis of the clinical logs of approximately fifty programme participants, this paper describes the impact of an international experience on nursing students’ personal and professional development. It further describes students’ reactions and coping mechanisms, and the role of faculty in facilitating the students’ progress through this phenomenon.
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&

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Exploring the Effect of Trauma Care Simulation on Undergraduate Critical Care Nursing Students’ Attitude at a College of Nursing in Kingdom of Saudi Arabia

Patient safety has become a priority and pre-requisite for the provision for effective quality care. Simulation is seen as one method to ensure patient safety as this method allows for the attainment of skills and promotes the transference of these skills into safe clinical practice. A pretest posttest research design was used. 34 Female critical care students were conveniently sampled from the College of Nursing, Jeddah, at the King Saud bin Abdul-Aziz University for Health Sciences. Data collection occurred in three phases: first phase pre simulation phase which included administering the KIDSIM Attitudes Questionnaire; second phase was the simulation on a trauma patient with hypovolemic shock; third phase was administering the KIDSIM Attitudes Questionnaire and Simulation Design Scale. The majority of the students have positive attitudes in both pre and post simulation practice in relation to the relevance of simulation (with Mean + SD 4.3 + 0.6 pre & 4.4 + 0.5 post) with no significant difference between pre and post simulation practice. Approximately two thirds of students were able to able to care for a trauma patients with hypovolemic shock. Student’s feedback about the simulation practice highlights that the majority of students provided positive feedback regarding the simulation session attended. One of the significant finding related to leadership provided during simulation was to ask non-response team members to leave when they are distracting. In addition, the results of this study revealed that within a team context, the roles on non-leading members of the team are just as important for good team functioning as the role of the leader. Limitations include space triangulation with a small sample size. Recommendations for future research propose qualitative studies to address the phenenomon at hand especially within a Saudi Arabian context.
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Developing and Testing the Mesko-Eliades Pain Area Locator Tool to Assess Pain Location in Children

Before surgery, children and parents are concerned about postoperative pain and studies indicate almost half of postoperative patients report inadequate pain relief. Pain management in pediatrics has been, and continues to be, a concern. This presentation describes a program of research on the development and testing of a picture communication tool, the Mesko-Eliades Pain Area Locator (PAL). Employing quantitative, comparative design, convenience samples of nurses and post-operative children were recruited at a pediatric hospital to participate in four studies. Post-anesthesia pediatric patients undergoing a broad range of same-day surgical procedures used the PAL to identify location of pain. The PAL was found to be a valid and reliable tool in children 3 to 9 years of age. There was an inconsistency between the nurse’s assessment of pain location and the pain location identified by the child using the PAL. To determine consistency between the pain location assessment by the nurse and child (using the PAL to determine pain location), the proportion of agreement, ranging from 0 to 1, was calculated. The mean proportion of agreement was 0.24 (SD = 0.435), t = 11.136, p = .000. Parent Satisfaction was measured through completion of a ten item satisfaction survey. Parent survey responses comparing the PAL to standard assessment exceeded historical data. For the item “Nurses concern for comfort”, the response of 100% was higher compared to historical data (m = 93.3%). For the item “Degree pain was controlled”, the mean response of 97.3% was higher compared to historical data (m = 93%). Clinical practice standards are advanced by findings that patients’ undergoing a variety of pediatric surgical procedures effectively used the PAL post-operatively to identify location of pain and parent satisfaction with the PAL increased compared to standard pain location assessment.
Challenges to Coordinating Clinical Outreach to Improve Inter-Professional Practice Initiatives

Global outreach missions are an opportunity for disciplines within Academic Health Centers to advance inter-professional practice (IPP) initiatives. These collaborative practice experiences provide faculty and students an opportunity to deliver care as a clinical team. Although highly impactful, challenges exist in coordinating meaningful experiences with predictable outcomes.

In 2017, the University at Buffalo Schools of Nursing and Dental Medicine recruited faculty and students to participate in an interdisciplinary mission serving refugees on Lesvos, Greece. As the planning process evolved, the faculty managed several barriers before the project plans could be finalized. Coordination of clinical and support team members, clinic site logistics, government regulations, translation services and active engagement with Non-Government Organizations (NGO) on location were major factors affecting the team’s ability to provide quality care. Plan, Do, Study, Act (PDSA) cycles were used as a ‘Model for Improvement’ during both planning and implementation of this experience.

It is important for volunteers to recognize the impact of culture on delivering patient centered care and understand how to engage vulnerable populations, build trust and communicate effectively with team members. In addition to clinical teaching, the faculty introduced study topics related to global health, PDSA cycles, and an instrument to evaluate student knowledge of the host community pre and post participation, which proved to enhance the impact of this multidisciplinary team.

Team resiliency, resulting from implementing PDSA cycles, will assist educators in expanding global health curriculums and in reducing the impact of challenges in planning future collaborative practice experiences.
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Rachael Vernon  
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&  
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Leading for System Wide Safety and Quality through the SA Health Nursing and Midwifery Professional Practice Framework

Regulation of nurses and midwives is designed to protect the public by establishing standards for nursing and midwifery practice and education. In Australia nurses and midwives are regulated nationally under the National Registration and Accreditation Scheme (NRAS), through the Nursing and Midwifery Board of Australia (NMBA). The NMBA functions include development of standards, codes and guidelines to regulate the nursing and midwifery professions.

The Caring with Kindness Nursing and Midwifery Professional Practice Framework was developed by the Office of the Chief Nurse and Midwifery Officer in South Australia to promote safety and quality in nursing and midwifery practice and articulate the values and behaviours to support a person centred culture for nurses and midwives working in the public health sector. The Framework aligns with the NMBA regulatory requirements for professional practice, the code of conduct for nurses and midwives in Australia and the National Safety and Quality Health Service Standards. The framework is underpinned by five key principles; patient centred care, fundamentals of nursing care, integrated care, system efficiency and effectiveness, and managing risk and promoting safety.

This presentation outlines the process of developing, implementing and evaluating the framework. You will learn about the framework and tools that you could adapt for your context and hear our experiences of the successes and lessons learned in implementing the framework system wide in South Australia. We will also discuss preliminary findings from our current study to evaluate the impact of the framework on the safety and quality of patient care.
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&  
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Antibacterial Soaps with Essential Oils Content

Introduction: Soaps used in our day have a history of use about 6000 years ago. Soaps, the products of basic saponification reactions have been used among people since its discovery by the ancient Babylonians as a cleansing substance. Medical soaps are a variation of standard soaps where bioactive synthetic or natural ingredients are added to the soap base to provide a wide variety of biological activities to the final product.

In recent years, natural plant-based products have become an attractive option to enhance the important biological characteristics of medical soaps.

The purpose of this study is the pharmaceutical formulation of liquid and solid soaps with antibacterial activity using the essential oils of some herbal drugs with proven antimicrobial properties.

Methods: Several types of antibacterial soaps were prepared by using cold and warm method using essential oils of Salvia Officinalis, Saturea Montana and Rosemary herbs in the amount of 3%. Soaps were also prepared using some types of fatty acids such as olive oil, palm oil and coconut oil. The soap obtained was poured into moulds and allowed to solidify for 12 hours, then the solid soaps were taken out from the moulds and left to dry for seven days. The difference of solid and liquid soap is that NaOH is used as the base in solid soap preparation, whereas KOH is used in the preparation of liquid soaps. The obtained soaps were determined weight loss and were compared with prepared soap without essential oils.

Results and Conclusions: Prepared soaps exhibit good consistency and superiority with control products. Their antibacterial superiority is acknowledged by the previous evaluation of power and antimicrobial spectrum of these essential oils.

Discussions: These soaps remain to be tested in the future for seborrhea skin type with acne structure development.
Ancient oil Pulling Therapy in Patient Management with Oral and Dental Symptoms of Diabetes Mellitus

Oil pulling or oil swishing, in an alternative medicine is a procedure that involves swishing of oil in the mouth for oral and systemic health benefits. Oil pulling has been used extensively as a tradition Indian folk remedy for many years to prevent decay, oral malodor, bleeding gums, dryness of throat and cracked lips for strengthening teeth, gums and jaws.

With this background, we intend to do Oil Pulling which is a therapy involving swishing of natural oil (derived from sesame) to achieve pharmaceutical related health benefits.

The present study extensively researched the efficacy of Oil pulling technique using sesame oil in patient management with various signs and symptoms present in controlled and uncontrolled group of diabetes mellitus patients.

Moreover, the study reviewed the efficacy of Oil pulling technique on oral symptoms like burning mouth syndrome, numbness, altered taste, tingling sensation of oral mucosa and xerostomia in patients with diabetes mellitus.

Moreover, the efficacy of Oil pulling technique on stomatopyrosis and its effectiveness in management of oral signs like inflammation of gingiva, periodontal inflammation a clinical sign present in diabetic patients has also been studied.

Descriptive statistics were compiled for the variables 2x2 table used to calculate the sensitivity and specificity and their correlation.

The Pearson Chi square test was used to test significance the association between variables like subjective improvement of symptoms by this technique of oil pulling. All the statistical analysis was done on Statistical Software SPSS version 16.0 and using paired t test.

To conclude, Oral manifestation of diabetes can be managed, abated or at least curtailed by early detection and prompt treatment, comprehended by patient education, motivation and supervised oral care, delivered with the help of competent health team including oral physician. Oil pulling therapy help in minimizing the severity of oral manifestations necessitates regular surveillance and counselling in order to reassure the patient and improve the overall health of the patient.
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Preparing Nursing Students for Nursing Homes

Bachelor of Nursing students (BN) placed in nursing homes for clinical practice encounter residents who exhibit challenging behaviours (also known as responsive behaviours) that are often associated with dementia and cognitive impairment. Students are often inadequately prepared to manage these behaviours and this is a source of distress for students. This study explored whether enhancing and restructuring theoretical and clinical courses resulted in student nurses feeling better prepared to manage residents’ responsive behaviours and experiencing reduced levels of distress. This study was conducted in two phases with 116 BN students (first phase) and 87 students (second phase) where the “care of the older adult” course was restructured. In phase one, the theory course and clinical placement ran concurrently, and in phase two, the theory course was condensed and scheduled before starting the clinical placement. In addition, an online learning module focused on the causes and management of responsive behaviours was introduced. The findings of this study revealed that students who felt less prepared experienced greater distress by residents’ behaviours than those who felt better prepared. Scheduling a theoretical course on the care of older adults prior to the clinical course placement, as well as offering an online learning module focused on responsive behaviours, significantly increased students’ feelings of preparedness to manage residents’ complex behaviours.
Prevalence and Origin of Urinary Tract Infections of Children in Bejaia, Algeria

Background and aims: The study was to study the prevalence and cause of urinary tract infections in children under 12 years in the Bejaia region (Algeria). A study of the resistance of Enterobacteriaceae strains isolated to antibiotics was carried out.

Methods: Urine collection is done in mid-stream or "on the fly". After careful washing and removing the first jet of urine, 10 ml of urine is collected in a sterile tube, taking care not to touch the top edge of the tube. Seal the tube and bring the laboratory immediately. 417 urine samples taken from children under 12 years. Two important biological tests to help establish a urinary tract infection diagnosis was made: bacterial counts and counting of leukocytes in urine (Riegel, 2003). The isolated bacteria were identified through biochemical galleries AP20E. Antibiotic susceptibility of strains identified was determined by the method of standard susceptibility testing by agar diffusion Mueller-Hinton, as recommended by the French Committee of the susceptibility of the French Society for Microbiology (CFA MFC-2007).

Results: Of the 417 urine samples taken from children under 12 years only 53 (12.70%) cases were positive (presence of a urinary tract infection). 13 cases of bacteriuria without pyuria (LSB), and 33 cases of erythema and control ((P / C) absence of leukocytes with a positive bacterial culture). According to the results, we find that the demand in the ECBU male is high 53% (221 cases) relative to the female (47% / 196 cases). However, the rate of urinary tract infections is higher among females, or 56.60%. Pyuria without bacteriuria is almost the same number in females and males from 6 to 7 cases, respectively. The polymorphic case and control is number 20 in males and 13 in females.

The identification of the isolated strains showed a predominance of *E. coli* with a rate of 83.01% followed by Proteus mirabilis with a rate of 7.54% (4 cases / 53). The following species *Enterobacter cloacae*, *Enterococcus fecalis*, *Klebsiella pneumoniae*, *Streptococcus agalactia* and *Staphylococcus aureus* are present with a rate of 1.88% for each. The study of the resistance of Enterobacteriaceae strains (isolated from urinary tract infections) antibiotic showed that 20% of them were resistant to β-lactam antibiotics. Indeed,

Conclusions: The β-lactams are the main family used in community and hospital-acquired urinary tract infections. Prevention remains the most effective way to fight against urinary infections and therefore limit the emergence of multiresistant strains to antibiotics.
Serum Levels of Cooper, Zinc and Selenium in Patients with Cardiovascular Disease

Background: Cardiovascular diseases (CVD) and coronary artery diseases (CAD) are leading cause of morbidity and mortality in developed countries and is emerging as an epidemic in developing countries. Traditional risk factors such as serum cholesterol, blood pressure account for not more than 50% of CAD/CVD mortality. There is strong evidence that oxidative free radicals have a role in the development of degenerative diseases including CAD. Oxidative free radicals increase the peroxidation of low density lipoprotein (LDL) thereby increasing its uptake by macrophages with increased foam cell formation and atherosclerosis, though other mechanisms may exist. Studies on the roles of trace elements in health and disease over the past 50 years have led to a good understanding of their mode of action and why they are essential to life. Microelements play an important role in the structure of proteins, enzymes and complex carbohydrates to participate in biochemical reactions.

Trace elements determinations in blood serum have become important to investigate their vital role in human metabolism, as well as to obtain information regarding the health status of individuals. The higher or lower levels may be both a cause and effect of atherosclerosis or the result of another unknown parameter.

High serum copper is associated with increase of cardiovascular mortality. Selenium, an essential microelement, is part of the enzyme glutathione peroxidase, which is involved in removal of hydrogen peroxide and lipid peroxides, thereby protecting cell membranes from oxidative damage.

The aim of this survey is to put in evidence possible alterations of copper, zinc and selenium status in patients suffering by oxidative stress caused by cardiovascular disease (CVD).

Material and methods: We investigated serum levels of copper, zinc, and selenium in 108 patients with CVDs, and in 70 healthy persons. Serum copper and zinc measurements were carried out using flame atomic absorption spectrometry and serum selenium measurements were carried out using atomic absorption spectrometry hydride method.
processing of the data was carried out using Statistical Package for Social Science (SPSS 20).

**Results and discussion:** The results of this survey have shown that levels of copper were increased in patients, compared to control group (961.85 ± 11.55 μg/l vs 821.55±16.18 μg/l), while the levels of zinc, and selenium were decreased in patients, compared to control group, respectively from (776±28.21 μg/l to 1004.04±20.85μg/l) and 44.65±3.82 μg/l vs 69.92 ±2.37 μg/l). Significantly differences were found in patients suffering by oxidative stress caused by CVDs compared to the group of healthy persons for serum zinc (p < 0.001) and serum selenium (p < 0.001), whereas significant difference between the groups included in our survey was also found for serum copper (p < 0.01).

**Conclusion:** The results of this survey indicate that there are alterations in serum concentrations of trace elements in cardiovascular patients, suggesting that they may play a role in the pathophysiology of these diseases by virtue of their role in oxidative stress.
Opinions of the Students Nonfunctional Beliefs and Practise

Aim: This study aims to assess the opinions about the traditional beliefs and practices in university students from different disciplines who will hold the community education in future as a part of their job and who are at the last year of their education.

Method: The universe of the research, which was a study on a descriptive type, Students who were at the last year of the faculty of Education, Health Sciences (Nursing and Midwifery) and Medicine were included to the study between 15 March and 15 June 2016. The sample of the research was 242 students who were at the last year of the faculty, who were 18 years of age and older, who had no communication difficulty, and who agreed to participate in the study after being informed about the study. In this study, a questionnaire was prepared by researches and “Non-functional belief and practice” scale which was prepared by Yalçın and Koçak were used in this study.

Results: It was detected that the incidence of health center visits of the Education, Health Science and Medicine Faculty students when they had health problems were 38.1%, 42.9% and 66.7% respectively and there was statistically significant difference between three groups (p=0.002). 54.4% of the Education Faculty students used the traditional beliefs to relieve the pain and there was statistically significant difference between three groups (p<0.001). When the scores of the subscales were calculated, it was detected that there were statistically significant differences at the subscales and total scores between three faculty students (p<0.001).

Conclusion: The acceptance rate of the traditional beliefs and practices were decreased with the increase of the health educational level.

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**What are Registered Mental Health Nurses’ Experiences of non-Medical Prescribing in Adult Acute Hospital’s Mental Health Liaison Teams?**

The role of MHNs has become more diverse, embracing new roles within innovative services (Ellis and Alexander 2016). Jackson and O’Brien (2014) advocate mental health nurses utilise holistic approaches to care, with the aim being centralisation of the therapeutic nurse patient relationship. Within this diverse MHN role, NMP has become more prevalent utilising MHNs in more specialist services of early intervention, crisis teams and memory clinics and service redesign (Gumber, Khoosal and Gajebasia 2012).

To practice as an NMP the MHN has to be registered with the appropriate prescribing qualification (NMC 2017). For the purposes of this research proposal the NMP independent prescriber will be the focus. NMP are tasked with holistic patient assessments, accountable for decisions including differential diagnosis leading to treatment plans and prescribing medication from the British National Formulary (NICE 2017, Joint Formulary Committee 2017).

MHNs working within specialist mental health teams generally work in isolation from other health services, however the MHLN based within the adult general hospital environment liaise with other health professional groups in multifaceted ways with an emphasis on face to face discussion within MDT (Carter, Garside and Black 2003). The NMP MHLN makes prescribing decisions and provides prescribing advice in the context of complex and medical and psychiatric assessments (Gumber, Khoosal and Gajebasia 2012).

The pressures on MHLN to assess patients in the adult hospital is hard to quantify, combining this pressure with prescribing and prescribing advice it is possible MHLN experiences are experiencing different pressures to colleagues working in mental health focused services. The statistics for patients attending adult acute hospitals with a primary mental health problems show increasing numbers (NHS Digital 2014). Such evidence supports the growing pressure on hospital services and MHLN NMP to deliver a mental health service to ever larger numbers without further resources. NHS Digital (2017) identified a 13.3% drop in registered MHNs from 40,602 to 35,196 in the years 2009-2017. The NMC have recorded a drop in registered MHN NMP, lowering the percentage from 9.95% in 2014 to 9.7% in 2017 a trend, which if continues, will require monitoring (NMC 2017). These figures make it vital to ensure MHN have the skills to deliver holistic services that include NMP.
The experiences of NMP is an intriguing area of research, does NMP effect the MHLN personally and clinically, does the MDT have different expectations of the NMP MHLN and does this increase the pressure on the MHLN. The evidence for MHN NMP will be discussed in the literature review; any evidence of research into the MHLN will be explored to identifying main themes.
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Evaluation of *in vitro* Antitumor Activities of some  
Pyrrolo[2,3-\(d\)] Pyrimidine Derivatives against Human Lung  
and Prostata Cancer Cell Lines

Apoptosis, programmed cell death, plays essential role in the cellular development and differentiation (homeostasis).\(^1\) Dysregulation of apoptosis lead to a variety of human diseases, such as cancer, autoimmune disease and neurodegenerative disorders.\(^2\) Two types apoptotic pathways have been extensively described, including the extrinsic and intrinsic pathway. These two process are highly regulated by Bcl-2 family of proteins which are structurally and functionally classified as either anti-apoptotic (e.g. Bcl-2, Bcl-xL, Bcl-w, Mcl-1) and pro-apoptotic (e.g. Bak, Bax, Bok) or BH-3 only pro-apoptotic Bcl-2 proteins (Bad, Bim, Bmf, Bik, Hrk, Bid, Puma, Noxa).\(^3\) Overexpression of anti-apoptotic proteins or the downregulation of pro-apoptotic proteins is associated with apoptotic resistance to tumor cells and cancer cell survival. Developing small molecules that activate and induce apoptosis is promising strategy for the treatment of cancer.\(^4\) A number of promising new compounds with pyrrolo[2,3-\(d\)]pyrimidine scaffold have been reported to posses anticancer activity. So, pyrrolo[2,3-\(d\)]pyrimidine-based compounds have become one of the most extensively studied classes of heterocycles in cancer drug discovery and development compounds.

In this work, we reported that the antitumor evaluation of a series of pyrrolo[2,3-\(d\)]pyrimidine derivatives against lung (A549) and prostat (PC3) cancer cell lines. Among the tested compounds 6b, 8a and 9a exhibited the remarkably cytotoxic activity against A549 with IC\(_{50}\) value of 0.35, 1.48 and 1.56 µM, respectively. To investigate the cell death mechanism of these compounds, Annexin V-FITC assay were performed. Flow cytometry analysis revealed that A549 cells treated with compounds 6b, 8a and 9a showed significant increase in the percentage of late apoptotic cells by 2.8-, 2.7- and 2.5-folds compared to control, respectively. In addition, western blot analysis regarding the expression levels of apoptotic and proapoptotic markers has also revealed the apoptotic efficiency of the compounds. These results clearly demonstrated that the compounds 6b, 8a and 9a had strong cytotoxic activity against A549 cell line via induction of apoptosis.
This work was supported by grant from The Scientific and Technological Research Council of Turkey (TUBITAK, 214S573).
Factors Affecting Professional Behavior and Attitude in Intensive Care Nurses

**Aim:** This study was conducted as a descriptive study aiming to determine the factors affecting the professional behavior and attitude of intensive care nurses.

**Material and Method:** The research was carried out between 21.09.2017 and 08.10.2017 with the participation of 147 nurses who were working in the intensive care unit of a university hospital and who agreed to participate in the research. The data were collected using a 23-item questionnaire form prepared in line with the literature by the researchers for determining the sociodemographic and working life characteristics of nurses and Professional Attitude at Occupation Inventory. Professional Attitude at Occupation Inventory is a unidimensional inventory which was developed by Erbil and Bakur (2006), which is composed of the questions for determining the attitudes of the nurses towards vocational education and development, interpersonal relations and approach to problems. The lowest score that can be obtained from this scale is 32 while the highest score is 160. As the score obtained from the inventory gets higher, the professionalism level is considered to get higher as well. Percentage estimation, the Mann Whitney U test and Kruskall Wallis test were used for the assessment of the data.

**Findings:** It was determined that, of the participating nurses, 89.1% were female, 10.9% were male nurses, 64.6% were married, 77.6% had undergraduate degree, 93.2% had nuclear family, 68.7% had equal income to their expense, 93.2% worked as a clinic nurse, 65.3 had the working experience of 1-10 years, 63.9% worked as staffed, 57.1% loved their profession and 51% were partially satisfied with the clinic in which s/he was working. In this study, the mean of the Professional Attitude at Occupation Inventory total score of the nurses was determined to be 134.7 ± 15.7. A statistically significant association was found between the Professional Attitude at Occupation Inventory total score of the nurses and some occupational characteristics (p <0.001). Professionalism level was determined to be higher in the intensive unit nurses who had training on ethics after graduation and whose working life period was between 21 and 30 years.
Conclusion: In line with the findings obtained from this study, the intensive care nurses' professionalism levels associated with vocational education and development, interpersonal relationships and approach to problems were identified to be quite high.
Factors Affecting the Care Dependency in Elderly Individuals

**Aim:** This study was planned as a descriptive study to determine the factors affecting care dependency in elderly individuals.

**Material and Method:** This study was conducted with 315 elderly individuals who were receiving inpatient treatment between March 5 and May 12 in the internal and surgical units of a university hospital. Data were collected using a 15-question questionnaire and the Care Dependency Scale that determined the sociodemographic and clinical characteristics of the elderly individuals. The Care Dependency Scale was developed by Dijkstra in 1998 based on Virginia Henderson's human needs and was designed to assess the care dependency status of patients. The Turkish validity reliability study of the Care Dependency Scale was conducted by Yönt et al. The lowest score to get from this scale consisting of 17 items and five point likert type is 17 and the highest score is 85. The high score on the scale indicates that the patient is independent while meeting his/her care needs, whereas a low score indicates that the patient is dependent on others to meet his/her care needs. Data were analyzed by Mann Whitney U test, and Kruskall Wallis Test.

**Findings:** In this study, 50.8% of elderly individuals were male, 49.2% were female, 80.6% of them were married, 19.4% of them were single, 53.7% of them had equal income and expense status, 48.3% were living with their spouse, 38.7% of them lived in cities for the longest period of time, 41.9% of them perceived their health as moderate, 69.8% of them had chronic diseases. In this study, it was determined that the median value of care dependency of the elderly was 71 (17-85).
Conclusion: In this study, it was found that the score of Care Dependency Scale did not differ according to gender, educational status, marital status and social security status (p > 0.005).
Chronic Disulfiram Treatment Increases Analgesia and Reduces Tolerance Induced by Morphine but with Increased Toxic Effects

Disulfiram (Antabuse, DSF) is a well-known anti-alcohol drug used as a deterrent to drinking. Its activity is due to the ability to irreversibly inhibit the aldehyde dehydrogenase enzyme (ALDH) thus, causing the disulfiram-ethanol reaction, which takes place follow the consumption of Et-OH.

Apart from its usefulness in staying sober and “clean” from alcohol, DSF was recently reported helpful in treating cocaine addicts, both in animal as well as human studies. Indeed, administration of disulfiram (100 mg/kg, i.p) resulted in reduced cocaine withdrawal and abuse. However, opposite effects were noted for DSF follow cannabis smoke.

With regards to above, it might be thought that DSF can also play a significant role in patients abused from opioids, particularly morphine. In order to give a tentative answer to this assumption, herein we provide both negative as well as positive actions of a simultaneous application of morphine and disulfiram drugs in experimental animals.

As observed, DSF dose-dependently altered morphine-mediated analgesia. Furthermore, morphine-induced tolerance occurred to be inhibited
by the addition of DSF. Additionally, rats given with DSF and morphine were found to be less aggressive to each other in comparison either to morphine- or DSF-treated animals. At the biochemical level, we found significant hepatotoxicity following combination of DSF and morphine in comparison to DSF-treated group.

Our findings clearly indicate that DSF should be used with an extreme caution with morphine treatment as several possible side effects induced by its simultaneous application with other psychoactive substances/drugs may take place.

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Conflicts and their Prevention at Home Care in Finland

In Finnish society, home care is a part of the Primary Health Care. It is for the elderly, the sick, the disabled and the families with children. In practice, home care means home, support and hospitality services that helps and supports people of all ages. Depending on needs, home care can be regular, temporary or occasional. Home care staff consists of registered nurses and practical nurses who are mainly women.

The purpose of the study was to find what kind of conflicts are there at home care and how to prevent them. The results are part of the nationwide project called "Human and Knowledge Management" (2016). An online questionnaire was sent to a randomized set of home care supervisors (N = 363) in the spring 2016, with 104 respondents (29%) responding to the questionnaire. The data were analyzed by SPSS.

According to the results, conflicts arising from work methods, division of tasks and changes in the workplace are most common at home care. In addition to this, there are conflicts between different staff and professional groups and between supervisors and subordinates. There are also some conflicts that derive from power and responsibilities. There are only few conflicts caused by sexual harassment, racism or age and gender inequality.

Conflicts related to power and responsibilities had strong correlation with conflicts related to work methods and division of tasks. When conflicts that derive from working methods and division of tasks increase, conflicts caused by the changes in the workplace, conflicts between the various personnel and professional groups, as well as the superior and the subordinates, will increase. Conflicts that are related to working methods and division of tasks can be reduced with up-to-date orientation program, regular work on common issues, personnel education program, clarifying the mission, clarity of own roles and the right and necessary knowledge of employees.
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Role of TRPV1 Channel in Bronchial Hypersensitivity Associated with Airway Inflammatory Diseases

Bronchial hypersensitivity is a common pathophysiological feature in various airway inflammatory diseases. Increasing evidence suggests that activation of the transient receptor potential vanilloid type 1 receptor (TRPV1) plays an important part in the manifestation of various symptoms of bronchial hypersensitivity. TRPV1 is a nonselective cation channel and a polymodal transducer. In the respiratory tract, it is expressed predominantly in non-myelinated (C-fiber) sensory nerves. Stimulation of these TRPV1-expressing sensory endings is known to elicit reflex responses such as cough and reflex bronchoconstriction. Recent studies in our laboratory have shown that allergen sensitization-induced airway inflammation markedly enhanced the expression of TRPV1 and the sensitivity of pulmonary C-fiber afferents in an animal model of asthma. Furthermore, a considerably lower temperature threshold for activating TRPV1 expressed in pulmonary sensory nerves. Increasing temperature to ~39°C significantly elevated the baseline activity and sensitivity of isolated rat vagal pulmonary sensory neurons, and an involvement of TRPV1 was primarily responsible. In addition, in patients with mild and stable asthma a brief isocapnic hyperventilation (at ~40% of maximum voluntary ventilation) of humidified warm air triggered an immediate increase in airway resistance ($R_{aw}$) and coughs. In sharp contrast, the same challenge failed to evoke any significant change in $R_{aw}$ or cough in healthy individuals. Pretreatment with ipratropium bromide completely prevented the bronchoconstriction in the asthmatic patients, but did not abolish the cough response, indicating an involvement of airway sensory nerves and cholinergic reflex. Hyperventilation of humidified air at room temperature did not cause bronchoconstriction or cough in the same patients. In conclusion, increasing airway temperature stimulated airway sensory nerves, presumably via an activation of TRPV1, and elicited both cough and cholinergic reflex bronchoconstriction in patients with mild asthma. These results further suggest that the sensitivity of TRPV1-expressing sensory nerves is upregulated in asthmatic airways.
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Divergent Cannabinoid System Activity in High (HA) and Low (LA) Opioid Sensitivity Mouse Lines – Evidence for a Common Pathway

Mice bidirectionally selected for high (HA) and low (LA) swim stress-induced analgesia (SSIA) differ substantially in opioid system activity. The direct cause underlying this phenomenon has not yet been identified despite extensive research. Numerous reports support the existence of functional interactions between the opioid and cannabinoid systems on pharmacological and molecular levels. Thus, we aimed to investigate whether opioid and cannabinoid sensitivity shares a common pathway that differentiates pain sensitivity in HA and LA mice. For this purpose, mice were treated with a non-selective cannabinoid agonist, (+)-WIN 55212-2 and their behavior was evaluated according to the tetrad paradigm. Moreover, the involvement of CB1 receptors in SSIA was tested in a 3-min., cold water swim challenge. The study showed that intraperitoneal (+)-WIN 55212-2 was more potent in producing analgesia and catalepsy in HA mice than in LA mice. The analgesic effect involved CB1 - dependent signaling as pretreatment with rimonabant abolished the response to (+)-WIN 55212-2. Surprisingly, LA mice were more sensitive to the hypothermic effect of (+)-WIN 55212-2. Moreover, only a high dose (10 mg/kg) of (+)-WIN 55212-2 partly reversed SSIA in LA mice, but was without effect in the HA line. In conclusion, selective breeding of HA and LA mice for opioid sensitivity affected baseline and SSIA-induced cannabinoid system activation. Thus, both receptor systems possibly share molecular mechanisms involved in nociceptive processing in this model.
Reliability and Validity of the Kinyarwanda Version of the St. Louis University Mental Status Exam for Assessment of Dementia in Rwanda

**Introduction:** Dementia is an emerging problem in Rwanda because life expectancy is increasing. There is no reliable and validated tool to assess dementia in Rwanda. The St. Louis University Mental Status Exam (SLUMs), has been translated into Kinyarwanda and in the English version has been validated with different cut-off scores based on educational level. This study completed reliability and validity testing of the SLUMs in Rwanda.

**Methods:** Convenience sampling of 122 patients age 65 or over in the Kibogora catchment area was done. Interviews were conducted by a Rwandan interpreter fluent in English and Kinyarwanda. The following information/questionnaires were obtained from the patient: Functional assessment (ADL and IADL), Geriatric Depression Score and SLUMs Questionnaire. The family interview included the Revised memory and behavior problem checklist (RMPBC).

**Results:** Of the 122 subjects 30% were male and 62% female. The age range was 65-98 years with an average of 74.8 years. Eight percent had an education level of 6 years, 30% had 1-5 years and 62% had no education. Only 8.1% of the subjects were able to draw a clock with hour and second hands. We had to reword one question from “draw and ‘x’ on the triangle” to “point to the triangle”, because many subjects did not know how to draw an “x”. There was no correlation between depression (GDS) and dementia (SLUMs score). Simple linear regression was calculated to predict the subject’s SLUMs score based on the RMPBC score. A significant regression equation was found ($F(1,61)= 259.8, p< 0.0001$) with an $R^2$ 0.809.

**Conclusion:** The SLUMS-Kinyarwanda is a reliable and valid tool for assessing dementia. There was strong correlation between the Revised Memory Problem and Behavior Checklist and the SLUMS-Kinyarwanda with an $r$ value of -0.809.

Clock drawing is not a good test of visuospatial ability as even subjects with near normal SLUMs score were not able to do this. Animal naming in one minute is not a good test of verbal fluency. You would expect to have subjects with no dementia name 15 animals in one minute, but the average was 10. Future research should include randomized assessment in each of the
five districts of Rwanda of persons over 65 years and determine a cutoff score for dementia for those educated for less than 6 years or more than 6 years.
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**At the Heart of the Problem: A Transformative Learning Approach in a Group of Early Career Graduates in Interventional Cardiology, before, during and after a Large Meeting**

**Background:** The educative content of post graduate courses (PGC) in medicine is usually built by Course Directors and Faculty. To the authors’ knowledge, there is scant reported experience on the alternative educative methods of transformative learning (TL) in the framework of large PGC in Interventional Cardiology (IC).

**Main Objective:** Encourage early career medical doctors (MD) graduated in IC to design a learning trajectory tailored to their needs and to share findings based on their own critical reflection on information.

**Methods:** With 18 early career MDs in IC, we followed a three-step approach at EuroPCR 2016:

1. **EuroPCR:** three rounds of individual exchanges between one facilitator and participants aiming to:  
   a. share participants’ questioning,  
   b. enroll participants across four IC topics  
   c. submit participants’ self-evaluated specific needs  
2. **During EuroPCR:** physical meeting with facilitators aiming to self-develop among each group a collective learning content by applying a common method of critical analysis to the extant literature and EuroPCR sessions  
3. **At the end of EuroPCR:** participants delivered a presentation of their findings to an audience

We evaluated participants’ satisfaction throughout the learning trajectory with logbooks and participant observation. Additionally, the TL impact on
professional performance is being assessed with a follow-up questionnaire 20 months after the educational intervention.

**Results:** 17/18 participants expressed the collective learning content as clear and satisfying their needs. 1/18 participant considered that topics selected were remote from his learning needs. All participants reported being able to share their critical viewpoints effectively. 12/18 participants recognized acquiring new knowledge or updating their knowledge through TL; while 4/18 participants considered that TL provided answers to improve their daily performance. These findings are discussed in light of an evaluation of TL’s impact on participants’ knowledge and performance conducted 20 months after the educational intervention.

**Conclusion:** Experimenting TL suggests that self-development of educational content answers participants’ needs and consolidates participants’ knowledge and competences. Future research should examine if and how “transformative learning” initiates ‘communities of learners’ beyond educational interventions.
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&

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Development of a Virtual Learning Object to Nursing Students

Nowadays the profile of nursing students is much more selective and demanding than few years ago. Students select the material to support their learning process by prioritizing the one, which uses image, and audio that allows them to maximize the profitability of their time spent studying.

ESEP as a Portuguese school of excellence in nursing education seeks to create learning teaching methodologies to ensure greater success with the minimum of effort. The creation of a virtual learning object was developed to help students perform nursing procedures.

The nursing procedures integrate a set of activities that concretizes an action. Much of the work of nurses is based on nursing procedures that guarantee the quality and standardization of care. The traditional method involved the provision of paper-based procedures that students used for consultation and study after attending demonstration classes.

This material, written with technical language, was (sometimes) unattractive and difficult to perceive.

Through an action research study we developed an electronic platform making available some of the nursing procedures. The new format of the nursing procedures contained more than text, pictures and small demonstration videos. Students accepted the new platform and evaluated it as an asset in their learning process.

The study involved the development of a set of steps from the auscultation of the difficulties to the revision and standardization of the language used in each procedure, through the creation of a group of experts who evaluated the new procedures.
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**Academic Literacy:**  
**Relationship to Future Professional Clinical Practice**

**Background:** This conference paper presents the findings from a systematic review designed to assess the importance of academic literacy for undergraduate nursing students and its relationship to their future professional clinical practice. It aimed to explore the link between academic literacy and writing in an undergraduate nursing degree and the development of critical thinking skills for their future professional clinical practice.

Three major themes were evident they were:

1. Students need assistance to develop tertiary level academic literacy skills when they commence their undergraduate degree  
2. Teaching practices need to be consistent in both designing assessments and in giving feedback to students, in order to assist improvement of academic literacy skills  
3. Academic literacy can facilitate critical thinking when students are assessed using discipline specific genres that relate to their future practice.

**Method:** The following databases were searched: ERIC, PubMed, CINAHL, MEDLINE and Scopus with 981 articles identified. Inclusion and exclusion criteria were used to screen titles, and/or abstracts, 48 articles remained. The research team read and reread these articles to determine eligibility in the study. Following this 21 articles and one thesis were included in the systematic review.

Quality appraisal was then conducted of the 22 publications using the CASP (Critical Appraisal Skills Programme) tool; a checklist used to assess the methodological quality of qualitative studies. 21 articles were then reread to confirm their eligibility and data were extracted using a predesigned data collection form. The common themes were identified.

**Results:** The significant outcomes from this review are the importance of critical thinking in clinical practice and its strong relationship with academic writing skills.

**Conclusion:** Nursing increasingly has a diverse educational and cultural mix and academic literacy should not be assumed. The significance of this study is the identification that critical thinking is discipline specific and students need to be taught discipline specific academic literacy genres.
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Factors Associated with Self-Reported Sexually Transmitted Infections among Postsecondary Students in Canada

**Introduction:** Despite major public health efforts in addressing the burden of disease caused by Sexually Transmitted Infections (STIs) the rates among young adults continue to rise in Canada.

**Objectives:** To examine the prevalence and factors associated with acquiring STIs among postsecondary students in Canada.

**Methods:** A secondary analysis of the American College Health Association-National College Health Assessment II-C Spring 2016 survey data (N=43,780) was conducted. Sexually active participants (N=28,831) were examined for their demographics, sexual behaviour, alcohol and marijuana use, testing for HIV and HPV vaccination history. These factors were analyzed to help identify their possible association with acquiring an STI using logistic regression and multivariate modeling.

**Results:** We found that 3.88% of the study participants had an STI, with the highest rates observed among females and individuals aged 21-24 years old. Multivariate logistic analysis showed that participants who engaged in anal intercourse within the past 30 days (OR=1.634; 95% CI, 1.343 to 1.988), had four or more sexual partners in the last 12 months (OR=4.223; 95% CI, 3.595 to 4.962), used marijuana within the past 30 days (OR=1.641; 95% CI, 1.387 to 1.941), and had ever been tested for HIV (OR=3.008; 95% CI, 2.607 to 3.471) had greater odds of acquiring an STI.

**Conclusions:** The findings of this study emphasize that certain high-risk behaviours are strongly associated with acquiring an STI among postsecondary students. Thus, efforts to design and deliver relevant educational programming and health promotion initiatives for this particular population are of utmost importance.
Exploring Knowledge and Attitudes of Nurses toward Herbal Medicine Use during Pregnancy and Breastfeeding

**Background:** CAM is widely used in many countries although its safety and effectiveness are still uncertain. Herbal medicine is one of the popular CAM therapies used by women. The attitude of health care providers toward CAM use and their education on require careful attention, especially because previous studies detected variable responses regarding its safety and efficacy.

**Objective:** To explore knowledge and attitudes of nurses toward herbal medicine use during pregnancy and breastfeeding.

**Methods:** A descriptive correlational design was used to collect data from all nurses working at antenatal ward, postnatal ward, labor and delivery unit and maternal and fetal medicine unit, King Khalid Hospital, National Guard, Jeddah, and met the inclusion criteria. An English structured questionnaire was designed by the researchers and completed by the participants. It encompasses three sections; socio-demographic background; Knowledge and attitudes toward herbal medicine use during pregnancy and breastfeeding.

**Results:** The mean age of the nurses was 38.07±9.48 years and (55.8%) of them had bachelor degree. Majority of the participants have heard about herbal medicine (93%) and Know about women use during pregnancy and breastfeeding (71.4%). Although, 60% of them are not aware with its benefits or harms. Half of them are familiar to and aware of the effects of cinnamon (50%), ginger and garlic (47.6%). However, most of them are unfamiliar to fenugreek (71.4%), myrrh (73.8%) and fennel (73.8%). Participants had fair and good attitude toward herbal medicine use during pregnancy and breastfeeding (45% &55% respectively). A statistically significant negative correlation was found between attitude toward herbal medicine and nurses age (r = 0.32).

**Conclusion:** Although nurses Know about herbal medicine use by women during pregnancy and breastfeeding, they are not aware with its benefits or harms. Additionally, they had positive attitude toward it.
Emotional Control and Affecting Factors in Nursing Students

Aim: This descriptive study aims to determine emotional control and affecting factors in nursing students.

Material and Method: The research was carried out with the participation of 281 students who were currently studying in the nursing department of the Faculty of Health Sciences of a university and agreed to participate in the study between 13 February and 28 February 2017. Data were collected by the researchers via the Courtauld Emotional Control Scale as well as a 17-question questionnaire form, which was determinant of socio-demographic characteristics of students and prepared based on the relevant literature. The Courtauld Emotional Control Scale is a Likert-type scale developed by Watson and Greer, adapted into the Turkish language by Okyayuz, and aimed at measuring the extent to which an individual consciously controls emotions such as anger, anxiety, and unhappiness. This scale consists of three sub-dimensions of Anger, Anxiety and Unhappiness, each of which contains 7 items. It is accepted that the higher the score on the scale, the more the students consciously suppress their emotions and abstain to express their emotions. In the data assessment percentile calculation, One Way ANOVA, Tukey test, Mann Whitney U test, and Kruskall Wallis Test were used.

Findings: Of the students, 71.9% were female, 28.1% were male; 49.5% had a primary school graduate mother whilst 33.8% had a primary school graduate father; 43.1% lived in the provincial center; 56.9% had a protective family structure; and 52.3% defined inter-family communication and 58% defined status of social relations as "good." In this study, the median score of the Courtauld Emotional Control Scale and the median subscale scores of anger, anxiety and unhappiness were detected as 47 (31-81), 15 (7-45), 16 (9-28), and 15 (9-28), respectively. A statistically significant relationship was found between the score of Courtauld Emotional Control Scale of students and their socio-demographic and occupational characteristics (p<0.05).
Conclusion: It was determined that students consciously suppressed their emotions like anger, anxiety, and unhappiness and abstained to express their feelings. The students, who were female, in the 17-19 age group, preferred this profession due to the employment opportunities, defined their social relations as good had more tendency to suppress their feelings and abstain to express them.
Fluoride Varnish Application: Sustainable and Cost Effective Prevention for Refugees

Oral health disparities, including dental caries have a major impact on both short and long-term health and quality of life for many refugees. Implications include acute pain, infection, malnutrition and increased risk for systemic health problems. Oral hygiene is limited due to lack of knowledge, fluoridated water or supplements and access to supplies in many refugee camps. Insufficient access to preventative and restorative dental care also affects refugees’ oral health. Quarterly application of fluoride varnish (FV) as a primary and secondary dental carie prevention treatment is cost effective, sustainable and has no contraindications.

Early childhood caries (ECC) present as decay on primary teeth of children under 6 years and represent a chronic infectious disease. ECC is a major risk factor for adult caries and impacts future oral-systemic health. The application of FV is an evidence-based treatment to reduce demineralization of enamel, inhibit bacteria metabolism, inhibit acid production and promote enamel remineralization. FV is also effective in treating dental sensitivity.

The application of FV is inexpensive and time efficient. Supplies cost approximately one dollar per treatment. The procedure takes approximately 10 minutes to complete. Group education and training of volunteers in FV application can be accomplished in approximately 1 hour, making this intervention cost effective and sustainable.

The University at Buffalo interdisciplinary team from the School of Nursing and School of Dental Medicine applied fluoride varnish to over 100 refugee adults and children during a recent humanitarian mission to Greece. Additionally, volunteers were trained and supplies were donated to allow quarterly FV treatments for refugees, thus promoting improved oral health and decrease disease burden in this population, for years to come.
Intervention Programs for the Caregivers Family

The family assumes a preponderant role in assisting its members, accounting for 80% of all necessary care. The training of the family caregiver implies the use of teaching strategies that meet their expectations, needs and understanding, so the intervention programs directed to family caregivers are the tool of choice. The Porto Nursing School assumes itself as an institution of excellence in the research and training of nurses, in the different teaching cycles. Therefore, this work was the basis of the structuring of a book chapter on "Dependent Person & Family Caregiver", carried out within the scope of the activities of the Research Unit of the Porto Nursing School. We review the literature in order to understand the types of intervention programs and their value in relation to the needs of family caregivers. The research was conducted in the databases EBSCO, Webscience and Scopus. We also use the gray literature, in particular from the open repositories of Universities. We emphasize that intervention programs aimed at family caregivers are designed to enable them to exercise their role, promote the support of the family and other informal networks, improve articulation with the formal network, combat and / or prevent overload promoting their well-being. We identified a variety of support programs and interventions for family caregiver such as formal support, educational programs, psychotherapeutic interventions and counseling.
Mapping Clinical Simulation Scenarios to Fulfil the Needs of a Collaborative Nursing Curriculum: Enhancing Patient Care

Immersive learning environments, also referred to as simulation, are utilised within many areas of nursing, medicine and allied health professionals. Traditionally this has concerned ‘running’ clinical scenarios or has focussed upon high fidelity simulation with the use of manikins and audio-visual recording and feedback. Within the current delivery of the nursing programme at Coventry University there are four fields of nursing each receiving specialist core modules and collaborative modules; Adult Nursing (AN), Mental Health Nursing (MH), Learning Disability Nursing (LD) and Children and Young people’s Nursing (CYP). There is a fundamental requirement for these different fields of nursing to not only collaborate, but to educate one another in relation to the exploration of health and social care paradigms and concepts.

The collaborative curriculum is designed to bridge the gap between core and specialist skills and knowledge within an eclectic programme, simulation mirrors these developmental objectives (Ziv, Wolpe, Small & Glick 2003). This is achieved through carefully crafted and peer reviewed scenarios that focus upon issues that require dissemination, deeper understanding and are appraised by every field of nursing within individual sessions. An evaluation of the scenarios (n=13) delivered to the students through the three year nursing programme was made and mapping of nursing field representation within those scenarios was then undertaken. The mapping process was then in turn correlated to the session evaluations made by individual students when free text comments were analysed that pertained to current and future practice modification and adoption of non-field specific concepts. Following these results this informed modification of the scenario itself, facilitated discussion and seminal themes and in turn ensures a reactive pedagogy.

Results demonstrated that the mapping process revealed that scenarios represented fields equitably (in relation to numbers of students from each field), but also identified cross fertilisation of concepts. Further study must be made in relation to new nursing registrants and the way in which simulation may have modified care delivery, enhanced understanding of individual patient groups and improve the patient experience of individuals who negotiate the National Health Service (NHS) within the United Kingdom (UK). What is known that teaching and indeed learning in isolation does not
provide practical solutions to patient and service needs and a greater understanding of the impact of diverse professional practice.
Xylan-5-ASA Prodrug for Colon Targeting

Utilization of xylan from pineapple stem waste as pharmaceutical excipient can be as a solution to minimize environmental problems caused by organic waste. Xylan, is promising as a material for colon targeting of drug due to good properties such as water-insoluble, acidic resistant, and degraded only by xylanase enzyme present in colon. 5-aminosalicylic acid (5-ASA), a golden standard drug for inflammatory bowel diseases (IBD) therapy, is rapidly absorbed from the proximal part of gastrointestinal tract (GIT) when given orally leading to failure in IBD therapy. To prevent proximal part of GIT absorption, 5-ASA was conjugated with xylan to form inactive form (prodrug). The prodrug formation consisted of 2 steps: 5-formylaminosalicylic acid formation and xylan 5-ASA conjugation using 1,1'-carbonyldiimidazole in dimethylsulfoxide and triethylamine as catalyst. Prodrug was characterized by infrared and UV/Vis spectrophotometer. The in vivo profil of 5-ASA from the prodrug and the free forms was studied in Wistar rat after oral administration. Further, the activity study of xylan-5-ASA prodrug was done in colitis rat model induced by TNBS through rectal route.

Five groups were applied in the activity study: negative control, positive control, 5-ASA (180 mg/kg bw/day), xylan (192.96 mg/kg bw/day), and xylan-5-ASA ester conjugates (372.96 mg/kg bw/day). Observation was conducted for 14 days and disease activity index (DAI) was evaluated during that period. After 14 consecutive days, rats were sacrificed and rat’s colon was taken for analysis including colon length, weight, histology, macroscopic injury, and inflammatory mediator observation using PCR. Based on FTIR and UV/Vis characterizations, xylan-5-ASA prodrug was successfully synthesized. Based on DAI, only group treated with xylan-5-ASA prodrug showed significant reduction compared to control group (p<0.05).

This result was confirmed by histology, colon macroscopic and inflammatory mediators observation result. The successful colon targeting of the prodrug was confirmed by in vivo data after oral administration of both free 5-ASA and xylan-5-ASA prodrug. Xylan-5-ASA shows low systemic
absorption as compared to free 5-ASA hence really promising form of 5-ASA for colon targeting, for chronic colon inflammation.
An Evaluation of Maternal and Child Health (MCH) Leadership Education at Tulane University

The health of women, children, and families in the United States relies on a well-trained and competent MCH workforce. As part of its investment in the health and wellbeing of these populations, the US government provides funding for MCH workforce training. This study is an evaluation of the MCH leadership education program of the Tulane University Center of Excellence in Maternal and Child Health (CEMCH), with a particular focus on newly added components.

The CEMCH provides complementary MCH leadership skills-building opportunities for MPH students who opt to receive extracurricular training, including leadership coursework, shadowing rotations and volunteering with community organizations, presentations, mentoring meetings, and additional assignments. This evaluation was undertaken to assess the impact and acceptability of CEMCH activities for these Scholars and community partners, and to examine the value of this training for future MCH leaders. Using a mixed-methods approach, information was collected from stakeholders via semi-structured interviews and quantitative surveys. Using a grounded theory approach, investigators identified thematic categories within and across groups.

Current Scholars identified CEMCH activities as beneficial to their studies and future career, with close cohort cohesion, responsive mentorship, and practical MCH professional exposure providing a sense of confidence in their ability to serve as MCH leaders. Former scholars reported that program leadership, strong cohort identity, and MCH skills-building and professional development contributed to their professional growth and ability to serve in the field. Suggestions for program improvements included: more structure and support for extracurricular activities, additional mentors with varied expertise, and opening the program to all MCH students.

This evaluation provides essential feedback that can strengthen the Tulane CEMCH and provide a model curriculum for other MCH programs. A competent MCH workforce is essential to protecting and improving the
health of the MCH population, and education and training provides the foundation of that workforce.
Hypnotic Analgesia Can Be Obtained Via a Transceiver

The means to transmit the information in inducing and managing hypnosis are still debated. Aim of the pilot study presented herein is to induce and maintain hypnotic trance keeping the hypnotist and the participant in different rooms. In other words, we wanted to clarify, using measurable outcomes, if the hypnotic message could be conveyed through an electronic device. We therefore studied six young healthy highly-hypnotizable volunteers.

After a preliminary session aimed at creating the rapport, each participant underwent an experimental session consisting in a cold pressor test in non-hypnotic basal condition, during hypnotic focused analgesia in the presence of the hypnotist (HYP) and during hypnotic focused analgesia suggested through a transceiver (TRC). Cardiovascular monitoring was performed non-invasively throughout the session. Subjective perceived pain intensity and hemodynamic parameters during the cold pressor test in the three phases of the experimental session (baseline, 1st minute, and end of the test) were statistically compared. During both HYP and TRC, perceived pain was zero in a 0-to-10 subjective scale. Permanence in icy water (objective tolerance) significantly increased in comparison to non-hypnotic condition by 369% in HYP and by 394% in TRC (non-significant difference). Double product increased during pain in non-hypnotic conditions (+28%, p<0.01, at the 1st minute; +35%, p=0.01, at the end) but not during HYP (-1% and -0.2%, NS) or TRC (+7% and -1.6%, NS).
In conclusion, hypnosis induced and maintained via a transceiver was equivalent to that in the presence of a hypnotist. Hypnotic information is therefore more important than the means chosen to transmit it.
How useful is the Empowerment Approach for Helping Patients to Control their Diabetes?

There are several educational programs designed to help people to manage their chronic illness and they are mostly prescriptive and based on the transmission of information about the disease, symptoms, treatment and consequences. Anderson and Funnel's model of behavioral change is more focused on empowerment and places the patient at the center of care; while the health professional’s role is to help the patient to identify his concerns, feelings and beliefs about the disease; to reflect on his objectives; to plan strategies to achieve them; and to evaluate the efficacy of this plan. According to this model, it has been created a comparative longitudinal study using quantitative and qualitative methodologies, where a group of nurses delineated and implemented a program called "Living in Harmony with Diabetes" in 85 patients with type 2 diabetes mellitus. The main goal of this study is to analyze the efficacy of the program in contributing to improve the patient's ability to manage his diabetes. In the end, the data obtained through questionnaires showed an improvement in the psychosocial variables (knowledge, beliefs and perception of self-efficacy), self-care behaviors and clinical parameters (Glycated Hemoglobin, Blood Pressure, Weight, Abdominal Perimeter). We also interviewed 21 of these patients. They reported having a greater awareness of diabetes, a greater perception of self-efficacy and more control over the disease. They also reported that they learned to find strategies appropriate to their situation and that they felt more prepared to deal with the disease.

We concluded that the program not only had a positive impact on the control of diabetes, but also promoted patient involvement and autonomy in health management, in the search for and implementation of adaptive strategies, decision making and problem solving.
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A Method that Tries to Increase the Professional Motivation of Nursing Students

Aim: The aim of this study was to determine the effect of participating in a professional scientific activity on the professional motivations of the students.

Method: This cross-sectional descriptive study included 29 student nurses. The data survey form, Motivation Sources and Problems Scale, data descriptive statistics, Pearson correlation analysis, student t test, and Mann-Whitney U test were used for the analyses.

Result: According to the results of the Mann Whitney-U Test, there was no significant difference between the scores of the students who participated in the congress and those who did not participate in the ‘Internal Motivation Sources’ subscale and participation at the Nursing Student Congress (U = 101.000, P > 0.05)

Conclusion: Vocational motivation plays an important role in ensuring the professional awareness of nursing students. For this reason, the trainers applied different methods. It has been suggested that nursing students plan to work in order to increase positive motivation sources.
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Bringing Informal Caregivers and Recipients to the Digital Age Project

Advancing informal caregivers’ health and functional capacity and enabling living at home are significant objectives in Finnish society. Caring for the wellbeing of informal caregivers contributes to making the social and health service system more cost-effective and productive, as their work allows patients to live at home rather than in expensive nursing homes or sheltered housing. The purpose of this project is to create a model for supporting the welfare services of informal caregivers, based on digital methods.

The goal is to develop digital services to meet the needs of informal caregivers and recipients. The services will allow informal caregivers to connect easily with public social and health care service providers.

Three digital communication and leisure services for informal caregivers (N=20) and recipients (N=20) will be tested in the project, followed by an assessment of the suitability of the services for improving their quality of life. Two of the services are designed to enable communication with healthcare professionals and loved ones and to allow participation in activities such as group singing. A memory game that aims to entertain and activate the recipient will also be tested. The game can be used to maintain and advance the recipient’s cognitive functions, avoid a feeling of alienation and give experiences of success. The pilot phase will take place from January 1 through July 31, 2018.

The initial interviews with the participants were conducted at their homes before the pilot phase in late 2017. The informal caregivers and patients filled the 15D quality of life measurement with added questions from the World Health Organization’s quality of life measurement. The interviews were also used to map their wishes and expectations for the project. The data are currently being analyzed and will be presented at the conference.
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Identification of Intrinsic Risk Factors Associated with Skin Changes as Life’s End (SCALE): An Initial Review (Results)

This is a retrospective study of 381 patients who were treated in a hospital for pressure ulcers between 2011 and 2014 in one acute care VA Hospital. Current literature places patient mortality as high as 60% for patients over 65 who developed a pressure ulcer and die within one year of hospitalization. The aim of this study was to gain more understanding of how pressure ulcers when combined with certain comorbidities may increase the prognosis of death. If pressure ulcers, in the presence of certain intrinsic risk factors may be a prognosticator of death within one year from the time the PU is identified, these injuries may represent Skin Changes at Life’s End (SCALE).

Design: The study reviewed 26 independent variables, including demographics as age, social demographics, systemic comorbidities as heart disease, diabetes, lung, kidney, liver failure and community acquired pressure ulcers compared to hospital acquired ulcers. All pressure ulcers in this study were staged by one of two advanced practice nurses who have received special training in staging pressure ulcers and nationally certified. The dependent variable was those patients who died compared to patients who survived 365 days after being treated in a hospital for pressure ulcers.

Results: The average age of all patients reviewed was 79.31 =/ 11.59, and the proportion of males was 98.69%. Of the 381 patients who met inclusion criteria, 250 died and 74.5% of those patients died within 90 days. In this study, a multivariate analysis of mortality (patients who died within 365 days) for survival time was utilized by a backward stepwise method to choose the significant variables under the Cox proportional hazards model. Of the 21 variables reviewed, 13 variables were selected and of the 13 variables selected, 10 variables were statistically significant for mortality in one year.
Synthesis, Docking Studies and Anticancer Activity of Novel Tetrazolyl - and (triazolyl) Thiazole Glycosides and Acyclic Analogs

Breast cancer represents one of the main causes of cancer related deaths and diseases in the world being the leading cause of cancer mortality in women in spite of having available comparatively good prognosis, surgery, chemo and radiotherapy. Targeted therapeutics are utilized in cancer chemotherapy, where specific inhibitors could selectively recognize targeting sites and are not related with the earnest toxicities like conventional cytotoxic drugs. Heterocycles represent a main essence of several pharmacophores, groups of which are benzothiazoles and triazoles which are used for the treatment of types of cancers. Tetrazoles and carbohydrate coupled with tetrazole or triazole moiety may occupy a vital position in medicinal chemistry. In addition to their broad spectrum of pharmacological activities a number of tetrazoles have been reported as promising candidates for anticancer activity. Losartan possessing tetrazolyl moiety is being investigated for use in the treatment of breast cancer tumors positive for AGTR1. The tetrazolyl moiety represents a non-classical isostere of carboxylic acids and lipophilic spacers in pharmaceuticals and thus has been a good substitution in drug design. In the present study, novel glycosides of benzothiazol-tetrazole and benzothiazole-tetrazole conjugates as well as their acyclic analog were synthesized. The target tetrazole glycosides were synthesized by construction of ring system by cycloaddition process of benzothiazole-linked nitrile group and sodium azide followed by glycosylation reaction and deprotection. The triazole glycosides were resulted by applying click approach involving dipolar cycloaddition of benzothiazole possessing alkyne functionality and different glycosyl azides. The products incorporating acyclic analogs of sugar moieties were synthesized through alkylation using acyclic oxygenated halides. The anticancer activity was studied against human breast adenocarcinoma cells (MCF-7) and human normal Retina pigmented epithelium cells (RPE-1). Promising activities were revealed by
three compounds with IC50 values 11.9-16.5 µM compared to doxorubicin (18.6 µM) in addition to other four derivatives with good inhibition activities. Enzyme docking studies were carried out into cyclin-dependent kinase 2 (CDK2); a potential target for anti-cancer medication. SAR results were correlated and compounds with highest anticancer activity exhibited good fitting inside the binding site of the protein molecular surface and have minimum binding energy.
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Knowledge, Attitude and Practice of Pharmacists towards Pharmacovigilance and Reporting of Adverse Drug Reaction

Introduction: Spontaneous adverse drug reaction (ADR) reporting is the cornerstone of pharmacovigilance. Spontaneous reporting system has remained the most significant method for safeguarding patients’ lives. ADRs are always underreported. Underreporting of adverse drug reactions by healthcare professionals is a major problem in many countries especially in developing countries, where sistem of pharmacovigilance is not consolidated.

Methods: A cross-sectional survey is conducted on community pharmacists in Tirana from December 2016 to June 2017 aimed to estimating the knowledge, attitude and practice of pharmacovigilance and reporting adverse drug reaction. A questionnaire which was suitable for assessing the basic Knowledge, Attitude and the Practice (KAP) of pharmacovigilance was designed and distributed among the pharmacists and filled up forms collected back and analyzed by using software SPSS 20.

Results: 200 forms were received back out of 250 distributed forms, reflecting a response rate of 80%. Results of this survey have shown that 63% of interviewed didn’t know about the term of pharmacovigilance and 48% didn’t know the aim of pharmacovigilance. 31 % of interviewed were not aware of the existence of National Pharmacovigilance Center. The declaration of adverse drug reaction were made to the medical representatives and to the physicians issued the prescription in 98% of cases and only 2% to the National Pharmacovigilance Centre. Seventy nine percent of the respondents considered the reporting of ADRs to be an integral part of their professional duties and all respondents acknowledged the importance of reporting. Several barriers identified, that prevent pharmacists from reporting ADR include, reporting form not available 50%, do not know how to report 13% and uncertainty concerning filling the reporting form 25%

Conclusion: Pharmacovigilance is a public health problem in Albania, with due to lack of good knowledge and practice of pharmacists and other medical staff. There was a great need to create awareness among pharmacists and other medical staff to improve the knowledge about
pharmacovigilence and the reporting of ADRs through continuous education.
Potential Anti-Hyperglycemic and Insulinomimetic Effect of the Nutraceutical Theobromine

Introduction: Theobromine is a potential nutraceutical that affect lipids and glucose homeostasis. However, its mechanism of action is unknown.

Objectives: To study the effect of acute treatment of theobromine on glucose tolerance and on glucose uptake in rat soleus muscle, as well as its action on insulin-resistant rats.

Methods: Wistar fasted rats were induced to hyperglycemic by overloading with glucose (4g/kg) (CEUA PP00398 and 749). Serum glucose, hepatic and muscle glycogen and serum LDH activity were measured from rats treated with/without theobromine. Rat soleus muscles were isolated and treated with theobromine (50 μM) with/without specific insulin signaling inhibitors. 14C-Deoxy-glucose uptake by skeletal muscle was measured and the mechanism of action of theobromine studied. Western Blot and real time PCR evaluated the GLUT4 expression. To study insulin sensitivity, dexamethasone (0.1 mg/Kg) and theobromine (50 mg/Kg) were administered daily, subcutaneous, for 5 days, whereas controls received saline.

Results: Theobromine presented an anti-hyperglycemic effect by improving glucose tolerance, increase glycogen content and stimulates glucose uptake in soleum muscle. The effect of theobromine on glucose uptake was completely inhibited by pretreatment with wortmannin, colchicine, N-Ethylmaleimide, PD98059, SB239063 and cycloheximide, but not by actinomycin D. These data point that theobromine is involved in the classical insulin signaling, which is dependent of de novo synthesis of GLUT4 and its translocation to plasma membrane. Furthermore, theobromine
effectively improves the insulin sensitivity and ameliorates the lipid profile in insulin resistant rats. Additionally, serum LDH activity did not change within the treatment.

**Conclusion:** These data support the role of theobromine on glucose tolerance, its action on peripheral insulin sensitivity and lipid profile in insulin resistant rats and exhibits evidence for the insulin-mimetic effect for the glucose balance.

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An Evaluation of the Virtual Dementia Training Programme among Health Professionals and Carers

Dementia is one of the major causes of disability and dependency among older people worldwide. Virtual Reality programmes offer a new and innovative sensory distortion programme designed to provide participants with a greater understanding of people living with dementia. To date, limited research has been undertaken on the impact of such programmes.

A qualitative research design was used to investigate the impact of a Virtual Dementia training Programme on participants. A purposive sample (n=52) of participants who completed the programme were invited to take part in semi-structured interviews. A 35% response rate (n=18) was achieved, representing a spread across health professionals and informal carers. Interviews examined views and perceptions, and impact of the programme on empathy and compassionate care. Interviews were analysed using inductive thematic analysis. Ethical approval was gained from the regional ethics committee.

The findings demonstrated a clear need for new and innovative training in dementia care; the programme provided a unique learning experience, to walk in the shoes of a person with dementia and formulate a sense of empathy among participants. Empathy translated into increased confidence, compassion and person-centred practice among participants. There is a need to examine the potential role of virtual reality as a training tool in national strategies of dementia training.

The virtual reality experience is an effective, well received training programme providing a unique opportunity to experience dementia. All training must be embedded in an overarching programme of facilitation and practice development in order to maximise potential for translating its impact into practice.
Effect and Mechanism of Action of Sulfonylthiourea Derivative on Glycaemia Homeostasis

Introduction: Sulfonylureas are used worldwide as insulin secretagogues in the treatment of diabetes. In this sense, glibenclamide, a 2nd generation sulfonylurea, was chemically modified with the purpose to investigate its effect on glucose homeostasis. Aim: To assess the glycaemia, insulin and GLP-1 levels of a glibenclamide derivative sulfonylthiourea 7 (Sulp7) in the glucose tolerance test (TTG). Next, the calcium influx and the mechanism of action of Sulp7 on static insulin secretion were investigated in pancreatic islets. Also, the role of Sulp7 on intestinal disaccharidases and incretion secretion was studied.

Methods: Male Wistar rats (50 days old) were divided into three experimental groups: Group I, Hyperglycemic rats (4g/kg glucose, via oral (v.o.)), Group II, Hyperglycemic rats plus Glibenclamide (10 mg/kg, v.o., 30 min before glucose overload), and Group III, Hyperglycemic rats plus Sulp7 (10 mg/kg, v.o., 30 min before glucose overload). Sitagliptin (10 mg/kg, v.o., 1 h before glucose overload) was administered to analyze GLP-1 levels. Blood samples were collected prior to glucose overload (time 0); and 15, 30, 60 and 180 min after, to quantify glucose, insulin and GLP-1 levels. At 180 min the animals were euthanized and gut samples were taken to analyze the activity of the disaccharidases. Pancreatic islets were isolated to study calcium influx and to quantify insulin. Results expressed as Mean ± Standard Error Mean and level of significance of 95% (p <0.05), (CEUA/UFSC: PP00749).

Results: Sulp7 reduced blood glucose and increased static insulin by a mechanism triggered by calcium. Furthermore, Sulp7 increased significantly serum GLP-1. Sulp7 decreased the activities of intestinal disaccharidases.
Conclusions: Sup7 regulates glucose homeostasis by a mechanism involving insulin and incretin secretion and also points the intestine as an alternative target since reduced the activities of disaccharidases.
Thyroid Nodule Ultrasound Image Analysis and Feature Extraction

This talk discusses how deep learning and machine learning can be used in biomedical imaging to help radiologists improve cancer diagnosis. It proposes a new framework for extracting useful information for thyroid ultrasound images. The methodology combines deep learning, computer vision and feature engineering together to extract medical image features. Next, multiple machine learning classifiers are used to build effective thyroid tumor diagnosis model. Experimental results show that the final model outperforms human experts on the test set and can effectively reduce the number of unnecessary biopsy and the number of missing malignancy.
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Trauma to the Oral Mucosa from 3rd Molar Tooth as Contributory Factor towards Development of Oral Cancer

Impacted 3rd molar or malposed 3rd molar is seen frequently in general population. As people continue to take refined and processed food, the incidence of 3rd molar impaction or malposition is getting higher. A number of studies have been done in the past which were focused on histopathological changes occurring in dental follicle of 3rd molar tooth. However the effect of malposed 3rd molar tooth or impacted tooth on buccal mucosa is missing from such studies. Studies have pointed out that, chronic trauma to oral mucosa from sharp tooth cusps or from ill-fitting denture can cause oral cancer in predisposed individuals. It has been observed that in 60 to 70% of patients who complain of frequent cheek bite/tongue bite or ulcers on buccal mucosa, malposed 3rd molar or impacted tooth is always present which is source of continuous trauma to retromolar oral mucosa. In this study 140 patients were selected randomly who had impacted or malposed 3rd molar and having chief complaint of frequent cheek bite or ulceration of retromolar mucosa. Extraction of impacted and malposed 3rd molar was performed and part of retromolar mucosa was excised and sent for histopathological study. The results were classified into 3 categories these were; Anaplasia, Metaplasia and Dysplasia.
Stressed Out? How to Improve Health and Increase Productivity: The Science of Work Breaks

Overworked. Stressed out. Burnt out. Modern workers are at a breaking point. Statistics suggest that work is interfering more and more with people's personal time, and that stress and burnout are at near-epidemic levels. The cost to organizations and governments is in the billions, and the cost to workers comes not only in the form of lower job effectiveness, but also in their mental and physical well-being. Job demands, technology, and organizational norms and culture tie people to their work in a manner that is unprecedented in modern times, but the question is: Are we really working as smart as we can? In spite of recent advances in some countries, the answer seems to be no. In this presentation, I review current and ongoing research examining ways in which people can work smarter, be more productive, and live a healthier life, while actually working less.
Competence versus Insight in Nursing and Midwifery Practice

It is argued that a well-developed competence framework provides assurance to the regulator and the public that the nurse or midwife is continuing to be competent to practise. However, if the framework and associated competence indicators were a guarantee of continuing competence, then arguably no-one would present as a performance competence notification, this is not the case.

This paper presents the findings of a mixed-methods descriptive study that investigated the relationship between performance competence and a nurse or midwife’s ‘insight’ about their individual competence and practice. The study was conducted in 2015-2016 and was completed in three concurrent phases. The research was underpinned by a comprehensive review of literature and the compilation of publically available statistical data relating to registration and notification/performance complaint data of nurses and midwives from Australia and New Zealand over a five year period, 2011 – 2016.

A convenience sample of 712 nursing and midwifery performance notifications, made over a five-year period in New South Wales, Australia (2011-2016) were analysed. Individual interviews (n=22) were conducted with a purposive sample of regulatory experts, competence assessors and notification and adjudication panel members from Australia and New Zealand. These data were triangulated with qualitative thematic findings from a subgroup (N=142) of performance notification cases that specifically identified the item ‘insight’ as a factor in the notification and/or adjudication process.

Performance awareness or insight was identified as critical factor with regard to the initial performance competence notification; the process of investigation; and ultimately the outcome. Key elements of insight were identified as: ownership of and taking responsibility for the incident; taking action through reflection and analysis of the incident; recognition of own failures or mistakes and/or recognising own mental and/or physical state; analysis of the context in which the incident occurred; expressions of remorse, sorrow or regret; making an effort to improve oneself through targeted education; thinking about and describing what the practitioner would do differently next time; and seeking out counselling or mentorship.
Conversely a nurse or midwife who lacks insight was less likely to: recognise or act upon (own) performance deficits or areas for improvement; participate in professional development opportunities; acknowledge or take responsibility for errors; may be more likely to work outside of scope of practice and boundaries; take short cuts; deflect accountability and attribute blame; and become isolated or seek positions where their practice is less visible.
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A Global Health Humanitarian Team Addressing Healthcare Needs of Refugee Population

Introduction: Following the closing of International borders to refugees in 2015, the flow of persons from various war torn countries halted, resulting in prolonged stays in refugee camps on the Greek Islands. The closing of borders worldwide has resulted in further proliferation of health disparities for millions of individuals from Middle Eastern and African countries. Non-government Organizations (NGOs) and other volunteer humanitarian groups have united to provide much needed medical and dental care for these individuals.

Purpose: The University at Buffalo (NY, USA) Schools of Nursing and Dental Medicine’s Interprofessional Educational Team (IET) addressed these disparities by organizing and executing a mission team in conjunction with a psychiatric team from George Washington School of Medicine. The team traveled to the Greek Islands to provide urgently needed medical, dental and psychiatric care to refugees.

Process: The IET conceptualized and planned their global mission over a six-month span. During this timeframe, the political environment in Greece continued to transform. Our mission plans remained fluid with the team maintaining focus on the ultimate goal of providing high quality medical and dental care to refugees through an interprofessional global healthcare educational experience. Access to supplies, medications, multicultural barriers, lack of medical records and language barriers were just a few of the challenges overcome by this high functioning team. The impact of trauma and stress was evident during the mission.

Future Implications: The IET matured because of this mission, gaining an increased awareness of the plight of refugees, recognizing the importance of a global plan for resettlement and the need to spread awareness of the issues encountered on this mission to both professional and private groups. Future endeavors include improving communication...
and understanding with NGOs as well as developing successful means of translation that will ultimately result in improved quality of care.
Identifying Specific Concepts and Controversies of Informed Consent

**Background:** Informed Consent is a basic tenant of respect for persons. Internationally, the concept of informed consent was affirmed during the Nuremberg Trials after World War II. To be considered to be informed, a potential patient/research subject must have the capacity to understand what they are being asked to consent/agree to. This concept is basic to both clinical care and human subject research. Many well-intentioned individuals and groups attribute the inability to consent to specific diagnosis, in particular diagnoses in the mental health arena. This approach is based upon stereotypes which result in bias and discriminatory actions against these individuals; while at the same time create a lack of consideration for those needing more information but are assumed to understand.

**Discussion:** This presentation will identify specific concepts and controversies specific to capacity to consent. Situations in both research and clinical will be presented.

**Outcomes:** Different paradigms of thought will be presented. Additional situations where the capacity to consent may be compromised, but not identified, thus preventing patients/subjects the support and information they may require. Participants in the presentation will have preconceptions challenged and perhaps consider capacity to consent from a new perspective.
Can Students who choose to Participate in Acts of Academic Dishonesty have the Ethical Compass Necessary for their Future Nursing Careers?

Academic misconduct continues to be an extant issue among post-secondary institutions including nursing education. Although educators expound to students the ramifications of academic dishonesty, it still remains rampant among students due to the pursuit of academic excellence, family pressures, cultural aspects, competition for scholarships, and the lack of faculty enforcement (Hendricks, Young-Jones & Foutch, 2011; Srikanth & Asmatulu, 2014). Students enter into postsecondary institutions often with a lack of knowledge around what academic misconduct really means. Are the concepts and rational surrounding academic integrity being clearly identified within institutions as well as the future impact? Academic dishonesty can include, but is not limited to: cheating on tests or exams, plagiarism, cyber cheating, ghost writing, and other unethical behavior (Srikanth & Asmatulu, 2014). However, current research identifies that there is a lack of understanding by students as to what constitutes academic dishonesty and a lack of enforcement by educators for a multitude of reasons. Nursing has long been considered a profession of high moral and ethical values. Laduke (2013) identifies that students who engage in academic dishonesty in post-secondary education are more likely and will have a higher incidence of repeating these types of behaviors as a professional in the workforce. With this information, it is reasonable to ask: Can students who choose to participate in acts of academic dishonesty have the ethical compass necessary for their future nursing careers? As nursing educators, we must clearly identify academic integrity standards for students and hold them to those standards to ensure future moral and ethical nursing practices.
Radiostability of the Imipenem and Cilastatin in the Solid State

Imipenem is a β-lactam antibiotic administered with cilastatin – an inhibitor of dehydropeptidase-I. This combination is indicated for the treatment of complicated intra-abdominal infections, severe pneumonia, intra- and post-partum infections, complicated urinary tract infections or complicated skin and soft tissue infections. Imipenem with cilastatin is parenterally administered only so its formulations require specific procedure of preparation in order to obtain aseptic forms. Radiation sterilization is one of the methods recommended by pharmacopoeia, especially for obtaining of sterile forms of thermolabile drugs. The significant thermal instability of imipenem has been reported therefore radiation sterilization may prove valuable as a procedure of obtaining its sterile forms, which was the aim of these studies.

The impact of ionizing radiation generated by a beam of electrons at 25 kGy dose rate on the stability of imipenem/cilastatin combination (500 mg + 500 mg) with the presence of excipient (sodium hydrogen carbonate, 37.5 mg sodium per vial) was studied.

Based on EPR spectroscopy results, it was established that unstable free radicals were presented in samples after irradiation and their mean lifetime was 142±64 h. Radiation-induced structural changes were analyzed by FT-IR and XRPD methods in regards to presence of hydrogen bonds and crystalline properties. A chromatographic method (HPLC-MS/MS) was applied to assess changes in the contents of the imipenem and cilastatin. Decrease of assay was around 5%. Analysis of HPLC-MS/MS chromatograms showed formation of one degradation product originated from imipenem degradation. It was structural isomer of imipenem with the same measured
mass and fragmentation ions. Apart from physicochemical changes of irradiated samples of imipenem and cilastatin, their microbiological activity studies were conducted. The changes of bactericidal activity of irradiated samples of imipenem was observed for 4 (Klebsiella pneumonia and Escherichia coli - both clinical isolates and reference strains) from 22 analyzed stains.

Results of the conducted studies permit to draw conclusion that imipenem and cilastatin in solid state are not resistant to ionizing radiation (in a standard sterilization dose - 25 kGy) and this method cannot be safely used for sterilization and decontamination of this antibiotic formulation.

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**Autism Spectrum Disorder in Libya – Revisited**

There are indeed many other terrible problems in Libya, but ASD is such a severe disability that every professional in the field of pediatrics must positively contribute to it, at least through advocacy, so as to highlight the problem. Despite the high prevalence of autism spectrum disorder; most Libyan are largely unaware of autism. Many children with autism across Libya stay out of sight for many reasons: Few clinicians have the skills or experience to identify the condition, if they are even aware that it exists.

Consistent with our expectations, we found a very high rate of use of TV among children with ASD. Our findings conclusively demonstrate that early exposure to TV can account directly or indirectly for the rise in prevalence of ASD in Libya over the last few years. Our study is the first to examine the prevalence and correlates of TV use among a large nationally representative sample of children with ASD in Libya, and probably in Africa. While TV does hold children’s attention, it does not always engage their minds in active learning and social interaction. There was a significant association of AD diagnosis with mean maternal age (p=0.004), and paternal age (p=0.003). Children of mothers in the oldest maternal age group (>30 years at child’s birth), were 1.83 times more likely to develop AD (95% Confidence Interval [CI]: 1.02-3.28) in comparison with the reference group (mothers aged ≤30 years at child birth) in both cases and control. Children of fathers in the paternal age group (>30 years at child birth) were 2.08 times more likely to develop ASD (95% CI: 1.15-3.7) in comparison with the reference group.