MEDICAL STUDENTS’ RESEARCH FOR COMMUNITY HEALTH SUSTAINABLE DEVELOPMENT

Faculty
Professor Nabil Sulaiman
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Department of Family and Community Medicine & Behavioral Sciences

2010 - 2014
DEPARTMENT OF FAMILY AND COMMUNITY MEDICINE & BEHAVIORAL SCIENCES

Medical Students’ Community-Based Research Incorporating Sustainable Development

Faculty:

Prof. Nabil Sulaiman, Department Chairman & Professor

Dr. Nahed Abdelkhalek, DrPH Associate Professor

Mrs. Amal Hussein, M.P.H. Lecturer
Preface

I am proud to introduce the four-years (2010-2014) compiled research work of the medical students of University of Sharjah who are still in their first two years of the five year medical program. The researches in this book are reflection of the quality of the students and their faculty. Students learn research by doing research. While working as a team, they acquire competencies of communication, ethics, empathy and professionalism. The Community-Based Research program (CBR) is one of the strategic approaches to inculcate a research culture all through the Problem-Based Learning (PBL) curriculum.

Focusing on the community health problems increases the relevance and value of the students' researches and support preventive and behavioral modification as important determinants of health. This program is unique in incorporating the concept of community sustainable development, balancing economic, environmental, social and cultural sustainability.

The results of the 73 researches in this book are derived and in alignment with the strategic plan of the Ministry of Health, United Arab Emirates and can be considered as pilot studies providing important information in support to its preventive and health promotion programs.

I would like to thank Dr. Nabil Sulaiman, Chairman of the Department of Family and Community Medicine & Behavioral Sciences, Dr. Nahed Abdelkhaled and Mrs. Amal Hussein and the faculty who supervised the students for developing the program, guiding and supervising the students through all the phases of their researches.

Prof Hossam Hamdy
Vice Chancellor for Medical & Health Sciences Colleges
Sharjah, June 2014
Preface

I am proud of the achievements of our students at many levels. I am particularly proud of their achievement in research. In spite of their heavy learning load to update their basic and clinical knowledge, they were very active in performing research both in the laboratories and in the clinical field.

Medicine can only be advanced by improving our understanding of the disease process, improve methods of early diagnosis, designing new therapeutic approaches and test new therapies. To achieve that, we need to encourage our students to ask the difficult questions and attempt to answer them. This is what our University has been doing in the last few years and is providing unlimited support to the medical students to be involved in research at early stages of their learning. We see them as the future innovative physicians and scientists. Our University is also providing substantial support for the students to present their finding at national and international meetings. The University’s future vision is to strengthen critical thinking and provide suitable atmosphere for both students and faculty to do competitive research. Our vision is to make the Medical School of the University of Sharjah the best academic medical center in the Gulf and Middle East. I am sure with achievements like the projects presented in this research book, completed by our student in the last few years and with the involvement of our faculty and the support of the University administration, we will achieve our objective.

I would like to thank His Highness Sheikh Dr. Sultan Bin Mohammed Al Qasimi, Member of the Supreme Council, Ruler of the Emirate of Sharjah and President of the University for his support to the research programs. We are also very grateful to Prof. Hamid Al Naimiy, Chancellor and Prof. Maamar Bettayeb, Vice Chancellor for Research and Graduate Studies.
I would like to thank our faculty for supervising the research project, particularly Prof. Nabil Sulaiman, Head of Family & Community Medicine & Behavioral Sciences, Dr Nahed Abdel Khalek and Ms Amal Hussein for leading the initiative of publishing this book. Special thanks go for the organizations who provide research funds and for the patients who agreed to be part of the studies. Thank you our students, we are proud of you.

Prof Qutayba Hamid, MD, PhD, FRCP, FRS
Dean, College of Medicine
December 2015
Preface

It gives me a pleasure to write this introduction regarding the community based research program at the Department of Family and Community Medicine and Behavioral Sciences.

The program was designed in 2007/2008 to address one of the four major themes of the medical curriculum in Sharjah i.e. Population Health, to equip undergraduate students with critical thinking, reasoning and research skills. Year 2 students learn about health promotion and prevention by conducting community based research projects. One hundred and thirty one research studies have been completed since 2007, 58 of which were conducted from year 2007 to 2010 and were published in a previous book. The current book includes 73 researches that were conducted from 2010 to 2014. Small groups of students meet to identify a research area relevant to the community need. They formulate specific objectives, develop a suitable research design and data collection tool, collect data, analyze it and present their findings as posters. Through this process students develop multiple skills including research problem identification, teamwork, literature search using information technology, organizational skills as well as presentation skills.

Our medical students are commended for their high quality output demonstrated by their excellent posters. Several groups have won prizes from local, national and international conferences. I hope that our department’s contribution to future doctors will be noticeable by the community at large as well as the health professional community.

We, at the department of family and community medicine, are adamant to make a difference to community health in Sharjah and UAE by building research capacity in tomorrow’s doctors. This year our university has taken a leap in research development,
organizational change as well as funding to have prominence in research, therefore we are proud to contribute actively to the research development in the University to achieve this major goal. The Department’s faculty greatly appreciate the efforts and time spent by all supervisors throughout the projects.

Prof. Nabil Sulaiman, MD, DCH, MPH, FFPHM, FRCP, PhD

Chairman
Department of Family and Community Medicine and Behavioral Sciences
January 2015
Table of Contents

A. Health Promotion and Behavioural Modification

A-1 Healthy Lifestyle

✓ Maternal knowledge about child growth & developmental milestones during the first two years of life
  (Al Husain R., Al Shaali A., Nassif N., Sarheed A., Taryam M.)
  2010 – 2011
  2 – 3

✓ Parental awareness of their children’s weight status in UAE
  (Abood H., AlAmri A., AlJafout M., AlJasmi S., AlZarouni F.)
  2010 – 2011
  4 – 5

✓ Parental perceptions and management of childhood fever
  (Abbas M., El-Sawy F., Hamad E., Mahmoudzadeh N., Marwan M.)
  2011 – 2012
  6 – 7

✓ Menstrual Hygiene: Knowledge and practices among preparatory school students in Sharjah
  2011 – 2012
  8 – 9

✓ Second-hand smoking: knowledge, self-reported exposure and avoidance behavior among preparatory school students in UAE
  (Hasswan A., Al-Saleh F., Yaqoub M., Akbary P., Tarabichi U., Samir Y.)
  2011 – 2012
  10 – 11

✓ Knowledge and Perceptions of Acne Among Adolescents in UAE
  2011 – 2012
  12 – 13

✓ Knowledge and Attitudes Towards Puberty Among Primary School Students in Sharjah, UAE
  (Ahmed H., Agamy Y., Jaddou N., Buti F.)
  2011 – 2012
  14 – 15
✓ Domestic Hygiene Measures Practiced By Females in UAE (Dehelia A., Hendau M., Jakouch H., Lootah A.) 2011 – 2012

✓ Personal Hygiene among Primary School Students in Sharjah (Abdullah B., Albarazi R., Al Saheli Z., Issa H., Ghanim M.) 2012 – 2013


### A-2 Nutrition

- **Maternal caffeine consumption during pregnancy & awareness about potential effects on mother and child**
  
  *(Al Jishi R., Ali M., Karrar S., Nussair N., Saffarini L.)*
  
  2010 – 2011

- **The Perception about diet centers among Sharjah residents**
  
  *(Awad H., Alkilani H., Al Ashkar R. Harazeen A., Mahmoud H., Kanaa M.W.)*
  
  2012 – 2013

- **Supplements use Among Athletes in Sharjah: Knowledge, Attitudes and Practices**
  
  *(Alhashimi F., Alshaikh M., Elamin Z., Elhossary S., Khodeir A.)*
  
  2012 – 2013

- **Breakfast Consumption: perceived benefits & barriers among adults in the community**
  
  *(Abdi S., Alashqar M., Kamal A., Ghadban A., Vammeghestahbanati M)*
  
  2013 – 2014

- **Nutritional Supplements Intake among Adults in Sharjah**
  
  *(Al-Ani M., Dweik N., Hamadeh A., Mohammed N., Soudan M.)*
  
  2013 – 2014

- **Daily Water Intake among Sharjah Citizens**
  
  
  2013 – 2014
B. Prevention and Risk Reduction

- Sun Protection Behaviours and Awareness among Adults in UAE
  (AL Dhuhaibat M., Al Hajri H., Awni W., Bakki A., Kasem M., Muheisen M.)
  2010 – 2011

- Travel Health knowledge and Practices among Travellers in UAE
  (Abu Khater N., Al Neaimi A., Al Takmachi A., Hussain M., Khalil M.)
  2010 – 2011

- UAE Women’s attitudes and knowledge about menopause
  (Abu Awwad Y., Ali N., Fayez H., Ibrahim W., Tighilt A.)
  2010 – 2011

- Andropause: Knowledge and Perceptions among the middle-aged adult male population in UAE
  (Darwich A., Patel M., Bin Hussain S., Al-Shaikh M.)
  2011 – 2012

- Home accidents among preschoolers: causes and preventive measures perceived by parents in UAE
  (Al-Ali N., Al Ayyat D., Habbal H., Hazin F., Sayed Hussein A.)
  2011 – 2012

- Knowledge and awareness of breast cancer among younger adult females in Sharjah
  (Al- Rubaye D., Haddad H., Hesham A., Hijazi M., Younis M.)
  2012 – 2013

- Knowledge about risk factors of cardiovascular diseases among adults in the United Arab Emirates
  (Abbara O., AlZarooni H., Ghafel B., Kullab M., Rishmawy Y.)
  2012 – 2013

- Anemia among newly admitted medical, dental, and pharmacy students at University of Sharjah: Case-control study
  (Al-Ghufli A., Al Homssi A., Amira S., Essam R., Kulhasan H.)
  2012 – 2013

- Vitamin D Deficiency: Knowledge and Practices among adult population in Sharjah
  (Debal B., Ibrahim H., Salamah A., Salmanpour V., Yahya A.)
  2012 – 2013
<table>
<thead>
<tr>
<th>Topic</th>
<th>Authors</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes Knowledge and preventative measures in Sharjah community</td>
<td>(Alghafli M., Alkhalidi M., Almarashda F., Alyammahi M., Hallak O.)</td>
<td>60 – 61</td>
</tr>
<tr>
<td></td>
<td>2012 – 2013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2012 – 2013</td>
<td></td>
</tr>
<tr>
<td>Gestational diabetes awareness in women of childbearing age in Sharjah</td>
<td>(AbuHalimeh B., Abukhater R., Bakro A., Elmekresh A., Nahab S.)</td>
<td>64 – 65</td>
</tr>
<tr>
<td></td>
<td>2012 – 2013</td>
<td></td>
</tr>
<tr>
<td>Osteoporosis: knowledge and preventive measures among premenopausal women in Sharjah</td>
<td>(Abu Hamdeh K., Al-Shareefi S., Boush N., Jabbar H., Mahmud A.)</td>
<td>66 – 67</td>
</tr>
<tr>
<td></td>
<td>2013 – 2014</td>
<td></td>
</tr>
<tr>
<td>Periodic health examination: prevalence and attitudes among adults in Sharjah</td>
<td>(Aljafari A., Aldashti N., Jadallah H., Karmstaji A., Koutaich R., Mahdi T.)</td>
<td>68 – 69</td>
</tr>
<tr>
<td></td>
<td>2013 – 2014</td>
<td></td>
</tr>
<tr>
<td>Awareness About Prostate Cancer Screening in Sharjah, UAE</td>
<td>(Baroud S., Hallak A., Hisham A., Khaled S., Jayoushe M.)</td>
<td>70 – 71</td>
</tr>
<tr>
<td></td>
<td>2013 – 2014</td>
<td></td>
</tr>
</tbody>
</table>
C. Environment and Safety

✓ Living Conditions of Labour Workers in Sharjah  
  (Abu Mosameh, M., Al Ajmani, D., Al Ali, M., Al Tunaiji, M., 
  Fateherahman, A.)  
  2010 – 2011  
  74 – 75

✓ Energy-saving: Knowledge, attitudes and practices in UAE  
  (Abbas H, Aliyan F, Bloushi N, Chilet F, Zourob D)  
  2010 – 2011  
  76 – 77

✓ Home Injuries first-aid awareness among adults in the UAE  
  (AlShami M., Adibi S., Khan I., Jamal J., Turki O.)  
  2010 – 2011  
  78 – 79
D. Behavioral Culture and Psychosocial Factors Influencing Health

- Practices of Reading Information related to health conditions prior to seeking medical care among Sharjah adults
  (Alobad H., Dodin A., Rehman H., Shukoor R., Abd Alsalam H.)
  2010 – 2011

- Patterns of antibiotics use among UAE Adults
  (Al Abdouli L., Al Hassani A., Al Munlla A., Bader S., Murshed M.)
  2010 – 2011

- Medication practices reported by medical and pharmacy students at University of Sharjah
  (Al-Akchar M., Hafiz H., Mohammed L., Al-Jundi. L, Mustafa H.)
  2010 – 2011

- Reading and understanding drug label instructions in UAE
  (AlDhaheri R., AlHosani M., Alshammaa A., Obaidalla N., Shubbar A.)
  2010 – 2011

- Secondary school students’ knowledge and attitudes towards consanguineous marriages
  (Ahmed T., Al-Ali L., Alzwaylif D., Arnaout R., Bitar B.)
  2010 – 2011

- Coping strategies practiced by freshmen university students
  (Abdulhadi, S., AlKitbe, A., AlSubbah, H., Findakli, F., Robari, N.)
  2010 – 2011

- Driving behaviours among adults in the United Arab Emirates
  (Al Zaidy, A, Sheibani, A., Mohammed, A., Ali, M., Omran, N.)
  2010 – 2011

- Factors influencing academic motivation of medical students
  (Al Ali A., Ko H., Abdelli I., Sawalha K., El Shawish S.)
  2010 – 2011

- Mobile phone dependence and health-related behaviours among adults in UAE
  (Abdulwahid N., Al Wali F., Naz S., Raja M., Sayed A.)
  2010 – 2011
<table>
<thead>
<tr>
<th>Topic</th>
<th>Authors</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic</td>
<td>Pages</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Knowledge and attitudes towards sustainable development among young adults in UAE</td>
<td>116 – 117</td>
<td></td>
</tr>
<tr>
<td>Impact of the smoking ban policy on students in the University of Sharjah</td>
<td>118 – 119</td>
<td></td>
</tr>
<tr>
<td>(AlSuwaiji M., Emara A., Ghassemi E., Mohseni A., Majid N.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy levels among undergraduate medical students in UOS</td>
<td>120 – 121</td>
<td></td>
</tr>
<tr>
<td>(Al Shehhi B., Ghabra M., Al Jaber M., Chalati M., Tarban S., Bin Fadil W.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence and perception of risks associated with mobile phone use while driving in UAE</td>
<td>122 – 123</td>
<td></td>
</tr>
<tr>
<td>(Alhourani N., AlBudoor F. Ahmed M., Elkhaled W., Samha T.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Seeking Behavior among Medical Students in the University of Sharjah</td>
<td>124 – 125</td>
<td></td>
</tr>
<tr>
<td>(Sawalha A., Elawad Salih E., Aldhuor N., Aboukalam N., Bakié R.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smart Devices Use in education: Sharjah University students’ perceptions and practices</td>
<td>126 – 127</td>
<td></td>
</tr>
<tr>
<td>(Al-Qatami, H., Amar, N., Beyummi, E., Malas, A., Saleh, M.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The impact of medical TV Dramas on the Communication skills and ethics among University of Sharjah medical students</td>
<td>128 – 129</td>
<td></td>
</tr>
<tr>
<td>(Aliyan A, Khaldoon S, Khatir A, Omar H, Salah M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The practices and knowledge of women in the UAE about wearing high heels</td>
<td>130 – 131</td>
<td></td>
</tr>
<tr>
<td>(Shamaa T., Aldajani N., Chokeir H., Alqamzi M., Abdoh M.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Students’ perception about small group learning at UOS</td>
<td>132 – 133</td>
<td></td>
</tr>
<tr>
<td>(AbdulQadir M., Al-Lami Z., Al-Abdullah S., AbuGhoush M.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>Pages</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td>The Prevalence of using Painkillers in Sharjah Emirate</td>
<td>134 – 135</td>
<td></td>
</tr>
<tr>
<td>(Abu Alreesh S., Al Janabi R., Al Rajaby H., Salmanpour S., Satea B.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012 – 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence of consanguinity and knowledge about its social and</td>
<td>136 – 137</td>
<td></td>
</tr>
<tr>
<td>biological impacts in Sharjah</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Alharbi I., Almandalawi N., Alqudaïhi Z., Alsamaraay H., Alsarhi W.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012 – 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence of stress and coping strategies adopted by students</td>
<td>138 – 139</td>
<td></td>
</tr>
<tr>
<td>at the medical campus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Alali M., Alawwa G., Alhabahbeh D., Albahar O., Shakil S.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013 – 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults’ Awareness about physical Impact of Computer Use</td>
<td>140 – 141</td>
<td></td>
</tr>
<tr>
<td>(Abdisalam Z., AlKhatib O., Musharbek S., Taji S. Tareq Z.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013 – 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The patterns of usage and perceived impact of social networking</td>
<td>142 – 143</td>
<td></td>
</tr>
<tr>
<td>sites on medical students’ education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013 – 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Characteristics of Trusted Doctors: patients Point of view</td>
<td>144 – 145</td>
<td></td>
</tr>
<tr>
<td>(Abdulqader S., Al Zaiwary T., El Ghawanmeh R., Chamoun A.,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harazeen A., Qahtani M.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013 – 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge and Attitudes towards thalassemia among adult</td>
<td>146 – 147</td>
<td></td>
</tr>
<tr>
<td>population in Sharjah, UAE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Aldaour M., Al-Hassani A., Kareem M., Lootah M.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013 – 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perception and Utilization of Self-directed learning amongst the</td>
<td>148 – 149</td>
<td></td>
</tr>
<tr>
<td>medical students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Al Hajji M., Dejan E., Dibo A., Khalil A., Zaki S.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013 – 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body image perception and self-esteem among UAE residents</td>
<td>150 – 151</td>
<td></td>
</tr>
<tr>
<td>(Al-Assaf O., Al-Shomari S., Bakrou F., Kharsa A., Mohammed M.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013 – 2014</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Knowledge of Body Mechanics among Adults in Sharjah
(Abosada N., Alsanad Y., Khatib T., Zaiwary H., Salman S.)
2013 – 2014

Knowledge about Autism among Adults in Sharjah Community
(Al Kayyali L., Al Moukdad M., Al Shaikh H., Galadari A., Ghazal A.)
2013 – 2014

E. Students’ Testimonials
A. Health Promotion and Behavioral Modification

A-1 Healthy Lifestyle
RESEARCH ABSTRACT

Maternal Knowledge About Child Growth And Developmental Milestones During The First Two Years of Life

Al Husain R. , Al Shaali A. , Nassif N., Sarheed A., Taryam M.
College of Medicine , University of Sharjah

Research Supervisors : Dr. Nahed Abdelkhalek & Mrs. Amal Hussein

Background: It is essential that a mother knows the developmental milestones that occur during the first two years of her child’s life, as this will reflect her child’s health, growth and mother-child relationship as well.

Aim: To estimate the level of mothers’ knowledge about child development and growth during the first two years of a child does life, as well as their attitude towards knowing more about it.

Methods: A cross-sectional study was conducted in the UAE over a three weeks period. A total of 332 mothers were selected by convenience sampling method. A self-administered questionnaire consisting of 47 items which were divided into three sections: Demographics(9 questions), Awareness and Knowledge section(35 questions) and Mothers’ Sources of Knowledge Section(3 questions). The number of correct answers in the awareness section was adjusted to a score out of 100%.

Results: The mean knowledge scores of mothers who answered the awareness section correctly were as the following: in all categories $\bar{x}$=13.2%, physical $\bar{x}$=48.7%, cognitive $\bar{x}$=31.1%, motor $\bar{x}$=40.9% and psychosocial $\bar{x}$=35.3%. Regarding the score out of 100%, 21.4% scored above 50%. Mothers who have more than one child, and those between 25 and 40 years of age, were significantly associated with scoring above 50%, (p=0.051, p=0.052, respectively). Concerning mothers’ sources of information about child growth and development, mothers were found to rely on relatives (43.8%), physicians (41.3%) and experience with previous children (32.5%). 68.6% (n=227) of the participating mothers considered themselves lacking information about developmental milestones, and 90.3% (n=297) said that they were interested in knowing more about growth and developmental milestones. Moreover, mothers were interested in knowing more about the psychosocial aspect of child’s development.

Conclusion: Majority of mothers who participated in this study showed insufficiency of information about child’s growth and development, but fortunately most mothers were interested in knowing more and improving their knowledge. We recommend that mothers be more concerned about psychosocial and cognitive aspects and this should be the responsibility of mothers as well as healthcare providers.
Parental Awareness of Their Children’s Weight Status in The UAE

Abood H., AlAmri A., AIJafout M., AIJasmi S., AIZarouni F.
College of Medicine, University of Sharjah

Research Supervisors: Mrs. Amal Hussein & Dr. Nahed AbelKhalek

Background: Pediatric weight abnormality is a problem that predisposes to many complications in many regions of the world (Craig and Huang 2009). Parents are important to prevent childhood weight abnormalities. Thus, Parental awareness of their child's weight status is necessary to prevent abnormal children's weight status.

Aim: To describe parental awareness of their children's weight status in the UAE.

Methods. In Public places in the UAE a sample of 450 parents was selected using non probability convenience sampling method to conduct a cross-sectional study. A total of 450 questionnaires were completed with the parents then measurements of the real weight and height of their children were taken using a scale and a meter. BMI-for-age charts were used to evaluate the real weight status of the children involved. SPSS19 was used to enter and analyze the data. Frequencies percentages, means, and standard deviations were used to describe the data. Chi-square test was used to examine associations between categorical variables.

Results. The results of the study showed that 48% of the parents were unaware about the weight status of their children who were measured. The majority of them (83%) underestimated their children’s weight status. We have found a positive correlation between the parents’ awareness and their age (P=0.050), number of children they have (P=0.010) and the age of the children P=0.003. Also, it was found that parents were more aware about their female children (P=0.008). There was no statistical significant correlation between the parents’ awareness and their gender, educational level or monthly income (P>0.05).

Conclusion: The study found that almost half of the parents who participated in the study were aware about their children weight status. We recommend that more awareness program should be organized in schools, clinics and media targeting parents to increase the awareness in the community.
Parental Perceptions and Management of Childhood Fever

Abbas M., El-Sawy F., Hamad E., Mahmoudzadeh N., Marwan M.
College of Medicine, University of Sharjah

Research Supervisors: Dr. Nahed Abdelkhalek & Mrs. Amal Hussein

Background: Fever is one of the most common signs of childhood diseases. It is basically a rise in the temperature of the body; frequently as a symptom of infection.

Aim: To assess the parental understanding and perception of childhood fever and describe how they manage it.

Methods: In Sharjah, United Arab Emirates (2011), a cross-sectional study was conducted. An interview-based questionnaire containing 20 questions was given to minimum of 420 parents with children below the age of six in public places.

Results: A total of 420 parents participated in this research; 68% of them were mothers and 32% were fathers. As for the definition of fever, 66% didn’t define it correctly. 52% of parents gave their child medication immediately after recognizing their fever. 49% thought that exposure to AC after bath was one of the major causes of fever. In addition, 27% thought that fever can be prevented with the use of vaccines. When it came to managing the child’s fever, 43% of parents used ice-water compressors to lower their child’s temperature back to what they believed to be normal. 57% used Panadol (Cold and Flu), 25% antibiotics, 21% Profen, 12% aspirin, 9% Advil and 19% used other medicines to treat their children. 27% of parents didn’t consult the doctor before giving their children medication.

Conclusion: We expected that there will be a significant percentage of parents that are not aware of the correct methods of fever management. After conducting this study, we found that there is a huge gap in the parental knowledge regarding childhood fever. We recommend educational campaigns, posters, publications and media programs to enhance social knowledge about fever and improve its management techniques. Furthermore, the Ministry of Health and other health facilities need to establish certain approaches regarding the management of fever that would be easily delivered to parents (taking into account their educational background).
Menstrual Hygiene: Knowledge and Practices among Preparatory School Students in Sharjah

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Background: Many young females are uncomfortable discussing menstrual hygiene in public, considering it a social taboo subject, leading to ignorance of proper hygienic health practices, false beliefs, and many gynaecological problems which were preventable if early detected.

Aim: To assess the knowledge and practices related to menstruation and menstrual hygiene among preparatory school students in Sharjah.

Methods: A cross-sectional study was conducted among preparatory students in Sharjah in September 2011. Students were selected by Cluster random sampling method. The questionnaire contained 25 questions, 14 of which were to study the practices, 4 to assess the knowledge and 5 for the demographics. A Knowledge score was calculated out of four based on answering knowledge related questions correctly. Student t-test and ANOVA were used to correlate continuous variables to categorical.

Results: Among 443 students, 92% knew normal age of menarche, 54% acknowledged hormones as the cause of menstruation, 32% identified the normal period of single menstruation, and 26% recognized the normal interval between two menstruations. 33% of students who had their menarche changed the used material every two hours; 39% didn't change at school; 51% avoided exercise during menstruation and 58% avoided certain types of food and drinks during menstruation. The main source of student’s knowledge was mothers and 57% were interested to know more about menstrual hygiene.

Conclusion: Preparatory school female students were found to have poor knowledge about the cause of menstruation, the interval of a single period and between two menses in addition to some malpractices related to avoiding exercise and certain types of food and drinks during menstruation. We recommend establishing school courses for students from age 11 where they can be educated about menstruation and its related practices. Schools should provide the needed facilities for students to change at school.
Second-hand Smoking: Knowledge, Self-reported Exposure, and Avoidance Behavior among Preparatory School students in UAE

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Background: Second hand smoking (SHS) is a major hazard to public health and particularly to children. SHS has been associated with certain diseases, such as respiratory and middle ear infections, asthma, decreased lung function, and behavioral problems.

Aim: By conducting this study we aim to assess the knowledge, self-reported exposure, and avoidance behavior of preparatory school children in the UAE that are aged between 12 to 15 years.

Methods: A Cross-sectional study was conducted among preparatory schoolchildren in the UAE. In the period between September 2011 through October 2011, we selected a total of 509 children (males 35.9% and females 64.1%) based on a cluster sampling method. The questionnaires were distributed at the schools and were self-administered by the students. The analysis was done by the SPSS program v19.

Results: Of 509 school children 37% knew the right definition of SHS, 30% of those who showed avoidance behaviors knew the correct definition. Moreover, 55% of children had at least one smoker family member; this showed a doubled risk of exposure to SHS for this portion of the sample.

Conclusion: The majority of Preparatory school students showed low level of knowledge regarding SHS, although their level of exposure to smoking was high as compared to other countries. The avoidance behaviors reported by the students was relatively high. Therefore, we recommend initiating campaigns in schools to raise awareness among children in this age group about SHS. Also, we recommend targeting the parents to raise their awareness about the bad effects of SHS on their children.
Knowledge and Perceptions of Acne Among Adolescents in UAE

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Background: Acne is a skin condition affecting adolescents of both genders. This work is an attempt in a similar area, trying to measure the knowledge and beliefs of adolescents on Acne in the UAE, as few studies have studied this topic in the Middle East.

Aim: To assess the knowledge of adolescents about Acne and to determine if there is a need of awareness programs to improve the understanding, and change misconception.

Methods: Cross-sectional study was conducted among governmental schools in Sharjah. An equal number of boys and girls were selected at random using Stratified Random Sampling. A 33 item self-administered questionnaire was developed to assess knowledge.

Results: A total of 400 students participated in this study; 90% of whom were locals. 35% were grades 7, 8, 9 and 65% were in grades 10, 11, 12. 47% reported suffering from Acne, of those 33% sought help. 81% of students used products for their acne, and 56% reported that acne did affect their life. The mean of the knowledge score is 22.8 and it is 51% if adjusted to a 100%. Students identified the main cause behind acne to be infection (41%), and stresses (45%) to be the main aggravating factor, the major treatment option as being frequent washing (37%) and it is the most desired field of knowledge to be sought with (71%), and (37%) reported that embarrassment is the main psychological consequence.

Conclusions: Students showed lack of knowledge about acne and had misconceptions and wrong beliefs regarding acne specifically the causes, Seminars and awareness campaigns should be held at schools to raise their level of knowledge about acne and how to deal with it.
Knowledge and Attitudes Towards Puberty Among Primary School Students in Sharjah, UAE

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**Background:** In the UAE curriculum, puberty is first introduced in the 8th grade (average, 13 years old). However, by this age, most students have already begun to experience puberty. It is important to assess the level of awareness among preadolescents in our area, so that suitable interventions can be taken to avoid emotional stress, anxiety and confusion as a consequence.

**Aim:** The aim of this research was to assess the level of knowledge and attitudes regarding puberty among primary school students in Sharjah.

**Methods:** A cross-sectional descriptive study was conducted among government primary school children in grades 5 and 6. Schools selection was stratified based on grade and gender. Data collection was done through group interview with 418 students (214 female, 206 male).

**Results:** The overall awareness level amongst students was lacking, regardless of their sources of information. Few students were able to choose the correct definition of puberty (17% girls, 17% boys). Only 35% of female students accurately chose the description of menstruation. 51% of girls and 32% of boys indicated that they were too embarrassed to ask questions regarding puberty. Prior experience with pubertal changes did not improve the level of students’ knowledge about puberty. 75% of all students expressed a need for more information about puberty, of whom 58% of students preferred being given classes incorporated in the school curriculum.

**Conclusion:** The level of knowledge about all aspects related to puberty among preadolescent students was insufficient; yet, a majority of students are interested in learning more about it. We recommend that the Ministry of Education begin to implement pubertal education in the primary school curriculum.
Domestic Hygiene Measures Practiced By Females In UAE

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Background: Hygienic practices at home are preventative measures that reduce the incidence and spreading of diseases.

Aim: To identify the common practices of household hygiene attempted by females in UAE.

Methods: In this cross sectional study, a self-administered questionnaire that includes 45 questions divided into 5 sections that include demographic characteristics and sections that cover main domestic hygienic practices was used as a method to collect data. A sample of 400 females was chosen by a convenience sampling method from malls, parks, governmental institutions and schools. Data was analyzed using SPSS 19, means and percentages were used to conduct data analysis and pie and bar charts were used to present the results.

Results: A total of 402 females participated in this study; the mean age was 32 years. 69.3% reported the use of separate sponges for cleaning different items in the kitchen; 83.5% reported the use of separate chopping boards. As for the laundry and dishes, the majority reported the use of antimicrobial products (57.3% & 58% respectively). 66.6% reported wastes disposal in plastic bags of a frequency of more than once daily (83%); 81.3% reported the means of waste management was covered storage in the bathroom. Practices were compared to a standard guide for household hygiene and the results were initially similar.

Conclusion: Females in this study showed good hygiene practices in alignment with the standard domestic hygienic guidelines set by the IFH. Therefore, we recommend further studies to be done using observational methods rather than self reporting methods in order to get more accurate results.
Personal Hygiene among Primary School Children in Sharjah

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Background: School children are vulnerable to neglect personal hygiene, which plays a major role in the high incidence of communicable diseases and therefore has negative consequences on a child’s overall development.

Aim: To assess the knowledge and practices related to personal hygiene among primary school students in Sharjah.

Methods: A cross-sectional study was conducted among school children in Sharjah in the period between February 2013 and May 2013. A total of 428 children (224 boys and 204 girls) were selected using stratified random sampling. A questionnaire containing 35 questions was used to collect data about knowledge and practices related to personal hygiene. In addition to that subjective observation was performed.

Results: Out of the 428 students, 155 were from grade 1 (27%), 164 were from grade 3 (38%) and 149 were from grade 5 (35%). The mean age for students was 8.61 years (SD=1.91). The ability to define personal hygiene was significantly higher among girls (95%) as compared to boys (82%). Upon asking to define personal hygiene 68 % mentioned showering, 26% mentioned clean teeth and 25% mentioned clean hands. 27% mentioned that personal hygiene is important to “fight diseases” while 35% didn’t know why it is important (95% CI=30.3-39.3). Based on a quiz out of five, the average knowledge related to basic personal hygiene recorded among girls (4.45) was significantly higher than that in boys (3.83) (p<0.005). Among the factors that contributed to lack of hand hygiene, forgetfulness (56%) was the most striking one.

Conclusion: The study concluded that personal hygiene knowledge and practices are satisfactory among the school children in Sharjah. Personal hygiene is not an isolated behaviour; instead it varies from person to person according to different factors.
Lifestyle Changes among Freshmen University Students

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Research Supervisor: Lina Almarestani

Background: The transition faced by freshmen students can be one of the most exciting or terrifying life events, depending on an individual’s reaction.

Aim: To determine the lifestyle changes in relation to academic, social, psychological and physical adjustments among a population of freshmen students of the Medical, Dental, Pharmacy and Health Sciences Colleges at the University of Sharjah.

Methodology: In this cross-sectional study conducted during the academic year 2013-2014, self-administered questionnaires were given to 400 freshmen students. Random cluster sampling was used for students who attended fall semester 2013, excluding any repeating or transfer students.

Results: The prevalence of academic, social and physical challenges were found to be 49%, 20% and 12%, respectively. Firstly, pertaining to academic lifestyle changes, difficulty in study load (54%), time management (49%) and study skills (29%) were noted. Secondly, physical lifestyle changes found were changes in weight (29% loss, 25% gain), change in exercise (43% decrease, 17% increase) and change in meal intake (46% decrease, 16% increase). Furthermore, notable changes in types of food consumed were found in the following; homemade food (64% high school, 7% college), fruits (44% high school, 12% college), vegetables (40% high school, 14% college), and fast food which was greatly increased in college (6% high school, 72% college). Thirdly, in relation to social lifestyle changes only 29% of students noted sufficient family time during college compared to high school. Lastly, psychological lifestyle changes were as follows; both stress and homesickness showed the same result (73% increase, 27% decrease) and self-esteem changes (52% increase and 11% decrease).

Conclusion: In conclusion, the most prevalent lifestyle changes in relation to academic, social, psychological and physical adjustment were identified and adequate measures should be taken to bring out the students’ best potential and enrich the university experience.
Prevalence of Energy Drinks Consumption Among Secondary School Students

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Background: Energy drinks have continued to gain popularity among young adolescents in the past few years. Although energy drink consumption is known for its physiological and psychological impact, little attention has been devoted to the consumption patterns of energy drinks among adolescents in the United Arab Emirates.

Aim: To describe the prevalence of consumption, pattern of use and knowledge about energy drinks among governmental secondary school students.

Methods: A cross-sectional survey that included 495 male and female students selected from governmental secondary schools in Sharjah was conducted using multi-stage sampling. Questionnaires were distributed among the students. Data was entered and analyzed via SPSS 22. Frequencies, percentages and arithmetic means were calculated, and the chi-square test was used for bivariate analysis. P-values <0.05 were considered significant.

Results: Among the participants, 71% (n=495) reported consuming energy drinks. The two main energy drinks consumed were Redbull (55.6%) and Powerhorse (44%). The most reported reasons for consumption were the pleasant taste (54.3%) and alertness (31%). On average, students consumed 2 cans of energy drinks per week. The most reported activity for which students consumed energy drinks was hangouts (25%). There was no correlation between the number of cans consumed and the most desired time of the day for consumption. The level of awareness of the adverse effects of energy drinks ingredients correlated with the consumers’ willingness to quit. The two main adverse effects of energy drinks as reported by participants were those on heart rate (61%) and blood sugar levels (28%).

Conclusion: This study concludes that energy drink consumption was high among secondary school students in the UAE although students were aware of its adverse effects. We recommend that further research studies on the patterns of energy drink consumption should be conducted in the UAE.
Eating Habits Among University Students, A Comparative Study Between Those Living In Dorms And Those At Home

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Research Supervisor : Dr. Nermin Nossier

Background: Eating habits affect students in ways that can either be beneficial or harmful. The study is shedding light to eating habits among students living at home and dormitories and the differences between those two categories.

Aim: The aim of this research was to compare eating habits of students living at home and students living at the dorm.

Methods: A cross-sectional study was conducted among a sample of students enrolled in the University of Sharjah. Students were asked to fill out a questionnaire of 29 questions that inquires about their eating habits & demographics. SPSS 22 was used to analyze the data.

Results: A total of 400 students were enrolled in this study, of whom 71% were females. Of the total sample, 47% reported eating 3 meals per day and 6% ate 1 meal per day. 49% of those living at home were eating their breakfast every day in comparison with those living in dormitories (38%), (p<0.05), while 7% of students living at home never ate breakfast compared to 9% living at the dorms. 68% of students living at home never skipped lunch compared with 67% of students living at dorms. For students living at home, 75% reported having homemade food for lunch compared to 43% of dorm students. 41% of those who lived in dorm ate fast-food for lunch compared to 15% among students who lived at home (p<0.05). 41% of students living at home had their dinner every day as compared to 35% of those who lived in dorm. While 15% for dorm students never had dinner compared to 11% for dorm students. In both categories the number & types of snacks were approximately the same.

Conclusion: This study indicated favorable eating habits for those living at homes in comparison to those living in dorms. Thus, healthy eating habits should be promoted at the beginning of university life especially among students living at dorms.
A. Health Promotion and Behavioral Modification

A-2 Nutrition
Maternal Caffeine Consumption During Pregnancy

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Background: Caffeine has important clinical implications in the context of pregnant women’s emotional and physical health on pregnancy outcomes. The evidence for the harmful effects of caffeine consumption during pregnancy indicates an association with both spontaneous abortion and low birth weight.

Aim: The purpose of this study is to describe caffeine consumption in pregnant women and assess their awareness about its effects on pregnancy outcomes in the U.A.E., to see whether they need to be more aware about its effects or not.

Methods: In a cross-Sectional study, 292 pregnant women in Sharjah & Dubai of age group 18-45 were targeted during their visits to MCH centers using the convenience sampling method. The questionnaire included three sections; demographics, the awareness of the participants about caffeine consumption’s effects on pregnancy outcomes and consumption of caffeine before and during pregnancy, using tables of products which contain caffeine.

Results: Out of the 292 women, 65% think that caffeine has harmful effects on them, high blood pressure and heart rate being the most potent effect (37%). 60% think that caffeine has harmful effects on the baby, death being the most potent. Media was the main contributing factor (50%) to this knowledge, only 10% of their knowledge comes from antenatal care visits. 62% of women decreased their caffeine intake, while 38% have increased their caffeine intake during pregnancy.

Conclusion: Approximately, two thirds of pregnant women in the U.A.E claimed that they are aware about caffeine effects on pregnancy outcomes. Their lack of awareness was proved by measuring their caffeine consumption before and after pregnancy. A recommendation would be that MCH centers should be more considerate in increasing awareness among pregnant women about caffeine’s effects on pregnancy outcomes.
The Perception about Diet Centers Among Sharjah Residents

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Background: Overweight and obesity are two serious health threats among UAE citizens. Recently, the increase in health awareness has encouraged the emergence of diet centers (DC) in UAE. DC is a specialized unit that offers professional services of dietitian that tailors to the individual’s needs to improve health.

Aim: Our aim is to assess population’s perception regarding DC and to survey lifestyle changes.

Methods: The study design was Quantitative Cross-sectional. 400 participants above 16 years old were chosen among Sharjah residents, who were available in public places at the time of data collection. We excluded mentally disabled and ill-fluent in Arabic or English people. The participants were selected based on convenience sampling. An interview questionnaire was distributed to collect data, which was analyzed by SPSS 21 program.

Results: Out of 400 participants, (70%) were females and (30%) were males. Of participants, 60% heard about DC from media (P=0.03). 72% of participants believe that DC helps in maintaining weight (P=0.005). 35% of the surveyed population utilized DC. Out of which, 78% were females (P=0.012). Out of the users, 53% were able to comply (P=0.05), 84% lost weight (P=0.03), and 47% maintained their weight (P=0.07). 74% of the users and 57% of non-users considered DC an effective method for losing weight (P=0.03). 80% of users and 62% of non-users consider it safe for losing weight(P=0.001). However, the reported side effects were: stomach pain(27%), fatigue(46%), constipation(27%), diarrhea(10%), thirst(20%) (P < 0.05).

Conclusion: We concluded that the population perception about DC is to achieve an ideal weight by developing a healthy lifestyle. Moreover, High percentage of the population considers attending DC is an effective and safe mean to aid weight reduction. On this aspect, we recommend conducting further researches since there is a deficiency in that area among Sharjah residents.
Supplements use Among Athletes in Sharjah: Knowledge, Attitudes and Practices

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Background: The use of supplements is becoming more popular among young athletes and gym users worldwide. These individuals look for physical or appearance benefits without considering negative health consequences, or having a clear reliable guideline to know whether benefit outweigh the risks and side effects. Studies are still needed to evaluate this issue in the UAE.

Aim: To describe the prevalence, practice and knowledge of the use of supplements among gym users in Sharjah.

Methodology: An observational cross-sectional study was conducted using self-administered questionnaires that were distributed conveniently to a random sample of 360 participants (180 males, 180 females) in Sharjah, with age ranging from 18-39 years who exercise regularly (between 3 to 6 session a week, at least 30 minutes per session). Users who were not found to exercise regularly or whose consumption was due to health issues were excluded from the study. The questionnaire had 24 questions, 4 of which were used to measure knowledge where each correct answer was given a point. All data obtained was analyzed through "SPSS 21" and recorded.

Results: Of all participants, 31.7% were consumers of supplements with a higher percentage (67.5%) in males, (p < 0.005,). The most commonly used supplements were protein (84.4%) among males, and vitamins (54.1%) among females. The reasons for using supplements among males were improving strength and power, and increasing muscle mass (44.2%), whereas in females, the reason was to increase energy levels (45.9%). According to the knowledge scale used, 28.6% of the participants scored 0, 28.3% got 1, 25.0% got 2, 14.7% got 3 and 3.3% got 4. The degree of knowledge was not affected by age, gender or level of education.

Conclusion: The prevalence of supplement use in Sharjah seems to be of some concern due to the increase in consumption without clear knowledge about their benefits or risks. Therefore, measures should be taken in order to raise awareness about pros and cons of supplement use.
Breakfast Consumption: Perceived Benefits & Barriers Among Adults In The Community

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**Background:** Skipping breakfast is a common observation and its prevalence has increased recently.

**Aim:** To identify perceived benefits & barriers of breakfast consumption to assess whether there is a need to raise awareness.

**Methods:** A cross-sectional study was conducted in public places in Sharjah, UAE among adults more than 18 years of age in the period between (Feb 7-Feb 28, 2014). Convenient sampling method was used for selection of samples. A self-administered questionnaire containing 25 questions was used to collect data and SPSS 21 for data analysis.

**Results:** A total of 450 participants were included in this research; 59% of whom were non GCC Arabs, 11% were GCC Arabs, while 29% were non –Arabs. Female participants predominate at 64%. The age distributions is as follows: 51% were between 18-20 years of age, 25% were between 23-33 years of age while 24% were above 34 years of age. Our data revealed 66% of our participants believed that taking breakfast is very important. However, only 60 % of the participants consumed breakfast daily. 53% of the subjects who consumed breakfast daily considered their breakfast healthy. 84% believed Breakfast is a good source of vitamins. 82% believed it increases concentration.70% believed it is not a waste of time or money. “Not having time” was the most common perceived barrier to breakfast consumption.

**Conclusion:** Perception about the benefits of breakfast consumption was high. However, its prevalence was acceptable, yet not ideal. Among the barriers of breakfast consumption, not enough time and not being hungry were the most common. Future research should correlate breakfast consumption & different common diseases that affect quality of life.
Nutritional Supplements Intake Among Adults in Sharjah

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Background: The use of nutritional supplements is a common practice of people worldwide as an alternative to medicine. Moreover, the incidence of classic vitamin and mineral deficiencies in developed countries has been dramatically decreased because of the degree of knowledge spread.

Aim: To determine knowledge, awareness and usage of nutritional supplements among the adults in the age group of 20-50 years old.

Methods: A cross sectional study using a self-administered questionnaire was conducted among 392 participants enrolled through convenience sampling method from public areas in Sharjah, UAE.

Results: The sample included a total of 392 adults. The majority were females (64%) and singles (67%). Eighty-two percent of the subjects knew about nutritional supplements. Perceived advantages of nutritional supplements were improving general health (72%), preventing vitamin or mineral deficiencies (56%), boost immunity and prevent disease (54%), replenish energy (45%), recovery from disease (35%), and losing weight (30%). Fifty percent of the subject used nutritional supplements. Reasons for using supplements included improving general health (55%), preventing vitamin or mineral deficiencies (46%), boost immunity and prevent disease (37%), replenish energy (26%), recovery from disease (16%), and losing weight (4%). Adults who knew about the disadvantages of supplements were 2.17 times more likely to use them as compared to those who did not know (p < 0.0005). Regarding the source of knowledge, family was reported by 45%, doctor by 43%, media by 25% and friends by 13%. No significant correlation was found between the level of education and both knowledge and intake of supplements (p=0.564 for knowledge; p=0.912 for usage).

Conclusion: In the end we conclude that the vast majority of the population knew about the supplements and almost half of them used it. It was also found that family is the main source of knowledge. We recommend that more awareness programs be made available to the population to know about the supplements.
Daily Water Intake Among Sharjah Citizens

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Background: Water is one resource essential in preserving life on earth. Regular consumption of water is crucial for body homeostasis. So, adhering to the recommended daily water intake (RDWI) of 2L or more limits many health hazards.

Aim: The purpose of the study is to determine the level of awareness and practices of water intake among Sharjah citizens in UAE.

Methods: A cross sectional study was conducted among Sharjah citizens in the period between February and March 2014. A total of 360 participants (150 males and 210 females) above 18 years old were selected randomly in public places using nonprobability convenience sampling method to participate in an interview-administered questionnaire. SPSS version 22 was used to enter and analyze the data.

Results: Of the total 360 participants, 29% consumed the RDWI of 2L or more. Further, 36% of males and 23% of females met the RDWI. The mean daily water intake in the sample was 1.5 liters. 38% of participants with chronic diseases were adhering to the RDWI, which was significantly higher than healthy participants (p-value=0.009). About 77% of the total participants were aware that 2L is the RDWI. 37% of people who reported carrying their own water bottle were drinking adequate amount of water compared to 21% of those who didn't carry water bottles (p-value=0.001), which is statistically significant.

Conclusion: The majority of the participants tend to ignore their RDWI of at least 2L/day despite being well aware of the amount and importance of adequate water intake. We therefore recommend initiatives at the individual as well as institutional levels to promote practices related to adequate water consumption.
B. Prevention and Risk Reduction

Women’s Health and Men’s Health Promotion
Sun Protection Behaviors and Awareness among Adults in UAE

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Background: Awareness of sun protection practices and benefits is very essential, particularly among UAE citizens, who are exposed to sunny weather all year round. The health hazards include: skin cancer, skin damage and eye injury.

Aim: The purpose of this study is to measure knowledge and awareness related to prolonged sun exposure effects, perceived protection methods and applied preventive practices.

Methods: Cross sectional study was conducted among adults in UAE society. A total of 450 adults (234 males, 216 females) were selected randomly using non probability convenience sampling method. The first part of the questionnaire measured knowledge/perceptions about sun exposure risks and protection methods, the second part measured practices such as wearing UV protected sunglasses and sunscreens.

Results: A knowledge score revealed a mean of 16.4 out of 25 with no significant association with age, gender, nationality or educational level. 84% of participants believe there are risks associated with unprotected sun exposure such as sun burns (80%) and skin cancer (77%). Perceived protective methods are wearing sunscreens (72%) and UV protected sunglasses (55%). Females reported wearing covering clothes (68%), umbrellas (9%) and sunscreens (48%) more than males, while males reported wearing hats (30%) more than females. Analysis of sun protection practices revealed that 29% use sunscreen, 59% of them use an SPF \( \geq 30 \), 49% use it whenever they go out, 32% apply it at least 30 minutes before sun exposure and only 6.3% apply it every 3 hours. 55% use sunscreen to protect their skin from cancer, while 53% use it to avoid sunburns. 56% wear sunglasses with UV protection, 66% of them use it to avoid eye pain.

Conclusion: Our study concluded that the high level of knowledge among participants did not reflect on their daily practice. More studies are recommended to identify factors increasing sun protection behavior.
Travel Health Knowledge and Practices among Travelers in U.A.E

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Background: Travelers are exposed to various health risks such as infections & DVT due to significant changes in altitude, climate and environment.

Aim: To assess the knowledge and practices among travelers aged 18 and above travelling from Sharjah International Airport to any destination.

Methods: A cross-sectional study was conducted among adult travelers in Sharjah from the period between February 2011 to March 2011. A total of 300 adults (175 Females and 125 Males) were selected at random using non-probability convenience sampling method. The questionnaire was completed using a face to face interview conducted by the group researchers and travelers at Sharjah International Airport. Traveler's Awareness was assessed based on traveler's personal knowledge and precautions and measures taken pre and during travel.

Results: Of the total 300 adults 47% only had international healthcare coverage. 28% of our sample reported seeking any kind of medical advice prior to travel. In addition, only 45% of our sample reported seeking health-related advice from a healthcare provider. Also, 17% of our sample reported having chronic diseases. 23% of the sample reported having some kind of health preparation prior to travel. 81% of our sample admitted that seeking vaccinations prior to travel are of importance; on the other hand, only 17% of the subjects traveling to high risk areas actually took any kind of vaccine prior to their flight.

Conclusion: Although the majority of the respondents were frequent travelers, with history of previous travelling, the overall knowledge and practices concerning preventive travel health measures were low and this area needs to be worked on and developed by healthcare professionals.
UAE Women’s Attitudes And Knowledge About Menopause

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Background: Women are one of the most important aspects of family and society, and community health is dependent on provision of the needs of this group, with menopause being a critical stage of their life.

Aim: This study aims to describe the perceptions and attitudes towards menopause among a sample of women in UAE.

Methods: Descriptive cross-sectional study, 327 women aged (30-60) years old were approached to participate in our study. We chose participants by a non-probabilistic convenience method.

Results: 33% of women stated that menopause has to stop for one year before a woman can be called menopausal, and 78% stated that menopause occurs to women aged 45-55 years old, 83% of non-menopausal wanted to know more about menopause. 20% wanted to know more about physiological changes, 23% about psychological changes and 10% about age of onset, 73% of menopausal women who said that they were prepared agreed that they adapted well with menopause while 24% who weren’t did not adapt (P=0.158). According to knowledge scale those who chose HCP as a source of their knowledge had a mean of 5.16, (P=0.535) compared to a mean of 5.1 for those who chose friends. (P=0.975) According to knowledge scale those who chose newspaper as their source scored a mean of 5.22. (p=0.506) while those who chose internet scored 5.08. (p=0.883).

Conclusion According to our study, experience was the sole variable found to be significantly related to menopausal knowledge. The need to implant awareness programs in the UAE for menopausal women became alarmingly apparent. Although our research found an insignificant relationship between menopausal knowledge and an easier menopausal experience. We still strongly believe that women who are knowledgeable on the subject will cope with the transition better. Moreover, health care professionals in the UAE are evidently playing a minor role in increasing awareness among these women and therefore should be trained through seminars to start contributing in providing information to women in the UAE on this subject. We also believe in the importance of empowering media effect on education the women.
**Andropause: Knowledge And Perceptions Among Middle-aged Males in UAE**

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**Background:** Andropause, also known as male menopause or MANopause, describes an emotional and physical change that many men experience as they age. The hormonal changes in the aging male individual may cause significant changes in the person’s well-being such as, loss of energy, drive, libido and impaired erectile function, depression, memory loss and increased irritability. The awareness of Andropause is important in the UAE, due to the fact that no previous study has dealt with the issue, and prior knowledge about psychological and hormonal changes associated with Andropause helps men to be better prepared to deal with it.

**Aim:** To measure the level of participants' awareness living in UAE related to Andropause to assess the necessity for any intervention programs.

**Methods:** In this Cross-sectional study, convenient sample of 400 men living in UAE aged 40 and above were invited to participate. Data was collected through an interview based questionnaire that asked about their demographic data and knowledge about Andropause. There were 17 knowledge questions, the right answers were added up and converted to a score of 100%.

**Results:** The mean score of the sample was 46.1%, However, as educational level increases the knowledge scores increase (P<0.005). 43% of the participants agreed that male undergo a stage similar to female menopause, 20% said it was treatable, 10% were aware of the correct age of onset, and 80% admitted Andropause does in fact affect health.

**Conclusions:** Participants' knowledge about Andropause was low. On this basis we recommend to increase awareness towards Andropause by conducting workshops, media programs and campaigns targeting males above 40 years.
Home Accidents among Preschoolers: Causes and Preventive Measures Perceived by Parents in UAE

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Background: Home accidents are the leading cause of death, disability and hospitalization among preschoolers. Most home accidents can be prevented through measures that can be taken by parents at home.

Aim: To identify the main home accidents among preschoolers in UAE, their causes and preventive measures practiced by parents.

Methods: In this cross sectional study a sample of parents were recruited by convenient from malls and parks in UAE. A face-to-face interview based questionnaire of 19 items covering demographics, home accidents, their causes and preventive measures, was used to collect data. Data was analyzed using SPSS 19 and associations were tested using the Chi square.

Results: A total of 480 parents participated in this study; 73% were females (n=351) and 27% were males (n=128) with a mean age of 33 years old. The prevalence of home accidents was 51% (n= 245). The most common home accidents were found to be falls 84% (n= 206) mostly due to slippery floor 53%, cuts 81% (n= 199) because of falls 46%, and burns 61% (n=149) because of hot objects 83%. It was found that the kitchen (49%) and the bathroom (39%) are the most common two places where home accidents occurred. The most implemented preventive measures for falls was addressing slippery surface 88%, for cuts was keeping sharp tools out of children reach 93%, and for burns was keeping hot objects out of children’s reach 93%. Common difficulties faced by parents in implementing preventive measures were children’s influence on each other was 53% and interior design of house 43%.

Conclusion: Awareness programs are needed to decrease the incidence of home accidents and improve parents’ application of the preventive measures. We recommend parents to attend awareness programs to educate themselves about home accidents. Future researches need to pay attention to the specificity of the form of the questions to get the most accurate results.
Knowledge And Awareness Of Breast Cancer Among Young Adult Females In Sharjah

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Background: Breast cancer, the most common cancer in the UAE, is a progressive disease with poor prognosis if detected late. Patients usually present at late stages due to lack of awareness about various aspects of breast cancer.

Aim: To gain insight on the level of knowledge about breast cancer among younger adult females in Sharjah.

Methods: A cross-sectional study was conducted among young-adult females (between ages 25 and 45) in Sharjah. A total of 492 females were selected based on a non-probability convenience sampling method. Data were collected through interview-based questionnaires then analysed using SPSS20. The total knowledge was calculated by averaging the total score (correct answers/total questions (66)) of each participant.

Results: The mean age of the participants was 33.5. 26.8% finished high school, the rest went through university. The average total knowledge of our population was 51%. The Majority (89%) knew that breast cancer is common and 45% knew it affects ages above forty. The total knowledge about signs and symptoms was 53%, and more than half (57.8%) knew that the most common presenting sign is a breast/armpit lump. The total knowledge about risk factors was 43%. 94.3% knew that cancer can be detected, and 93% knew that early diagnosis improves outcome. The total knowledge about diagnosis aspects and early detection methods was 67 %. The most common reason for reluctance in performing BSE or other screening methods was decreased perception of risk. Finally, media was the most common source of knowledge.

Conclusion: The study revealed that respondents’ knowledge about general aspects of breast cancer is less than expected. Also, health authorities and physicians’ contribution to the population’s knowledge was insufficient. The increased burden of the disease should be accompanied by powerful means of spreading awareness, which is exactly the aim of the study, to encourage implementation of methods that cover knowledge deficits as well as to emphasize on prevention and guidelines.
Knowledge about Risk Factors of Cardiovascular Diseases Among Adults in the United Arab Emirates

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**Background:** Cardiovascular disease (CVD) is a large health burden in the UAE. The major risk factors for CVD include hypertension, smoking, hyperlipidemia, diabetes, obesity, sedentary lifestyle, age, family history and race. Awareness of those risk factors increases health-seeking behavior and promotes primary and secondary prevention of this group of diseases.

**Aim:** The aim of the study is to measure the knowledge about the risk factor for cardiovascular disease among adults in the UAE.

**Methods:** Data was collected via an interview-based questionnaire from adults ranging from 20 to 50 years old. Data included demographic information and general knowledge about the risk factors of cardiovascular diseases, and a simple scoring system was applied to the latter. The scores were correlated with their demographic information (age, gender, nationality & level of education) and other variables: personal history of CVD or other chronic illnesses, family history of CVD or other chronic illnesses, and the belief of being at risk of developing a CVD.

**Results:** We included 510 participants, 298 (57%) of which were males. The mean age was 32.57. Non-national Arabs, non-Arabs, and nationals comprised 64%, 20% and 16% respectively. Subjects who graduated or had a higher level of education comprised 64%, and the rest were undergraduates or below. The mean score was 23.02 (range 3 to 33, SD = 4.237, 95% CI 22.65-23.39). The majority of 66.1% scored within the range of fair, 19.2% within good, and 14.7% within poor. Variables contributing to people’s knowledge were age (P<0.0005), education (P=0.004), history of CVD (P=0.022), and the belief of being at risk of developing a CVD (P<0.0005). All other variables showed no significance.

**Conclusion:** Knowledge about the risk factors for CVD among adults of the UAE is fair but insufficient. More studies of larger scale need to be conducted to affirm these results.
Anemia Among Newly Admitted Medical, Dental and Pharmacy Students at University of Sharjah: Case-Control Study

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Background: World Health Organization (WHO) defined anemia as hemoglobin levels <13.0g/dL (men) and <12.0g/dL (women). Anemia is an important health problem world-wide and considered a public health challenge where adolescents are a major risk group. WHO estimated that anemia affected >2 billion people worldwide. A study done in UoS estimated the prevalence was 26.7% among female students.

Aim: To identify the prevalence of anemia and factors related to anemia when comparing between cases and controls.

Methodology: Prevalence was estimated based on hemoglobin levels that were accessible from the students’ medical records available in the admission department. Following permission from students through email, 461 records were obtained. The WHO criteria were used to consider the student anemic. A case-control study was conducted on 62 cases and 100 controls. After granting an informed consent, questionnaires were used to compare: the history of chronic diseases, family history of anemia, common symptoms of anemia, and vitamins or iron supplementation between the two groups.

Results: Both groups were matched according to colleges (mostly medicine), gender (>90% females), age (mean 18), and mostly were from Gulf and Asian Mediterranean regions. The prevalence was 16.27% ±3.37 (CI of 95%). Females were 20.63% and males were 2.68% anemic. Awareness of being anemic among cases was 37.7% of which 73.1% pursued medical care. 20% were compliant with treatment and only 13% were following-up. Cases compared to controls had: chronic diseases (16.1%;P=0.008), history of anemia (32.3%;P=0.003), family history of anemia (33.9%;P=0.002) of which 72.2% were first degree relatives, subjectively complained of pallor (38.7%;P=0.002), and taken iron, folic acid or vitamin B12 supplements (61.9 %;P<0.0005).

Conclusion: Anemia is prevalent among female students and associated significantly with chronic diseases, pallor, and family history of anemia. We recommend that anemic students be informed about their condition.
Background: Vitamin D is vital for the growth and development of the body throughout the life span. Its deficiency is significantly associated with bone diseases (osteoporosis, osteomalacia), cardiovascular diseases, diabetes mellitus, chronic fatigue, muscle cramps and back pain among others.

Aim: To investigate the knowledge and the practices related to vitamin D deficiency among adult population in Sharjah.

Methods: A cross-sectional study was conducted among adults aged 20-40 years in Sharjah during February 2013. Participants were selected from public places using convenience sampling method. They were subjected to a self-administered questionnaire. Data was analyzed using SPSS-20 software. All knowledge-related questions were summed up, where a correct answer was given 1 point and incorrect one a zero, yielding a score out of 43. Subjects’ scores were then transformed to a percentage.

Results: A total of 503 adults were studied. They had a mean age of 30 years (+/- 5.47) with a relatively homogenous sex distribution (51% females). The mean score for overall knowledge about vitamin D deficiency was 16.7 out of 43 (39%). Only 63% of adults heard about vitamin D deficiency before. Less than half of the respondents (43%) knew that sunlight is the main source of vitamin D. The mean score for participants' practice was 2.34 out of 6 (39%). 77% of them reported that they tried to avoid sun exposure. 97% did not test vitamin D level in their blood before, and 99% never took vitamin D supplements for preventive purposes.

Conclusion: The majority of the adults had significant lack of knowledge and poor practice towards vitamin D deficiency. Therefore, attempts to increase the awareness about this issue is required through establishing educational campaigns targeting the general public of Sharjah, UAE.
Diabetes knowledge and Preventative Measures in Sharjah Community

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Background: Diabetes is a major contributor to morbidity and mortality and generates large direct and indirect costs. The prevalence of diabetic patients worldwide reached 285 million amongst a population aged 20-70, furthermore diabetic patients are expected to increase and reach 439 million by 2030.

Aim: To measure the knowledge levels of diabetes and its preventative measures among Sharjah community and to assess the need for educational programs to raise awareness.

Methods: A cross sectional research design. We used self-administered questionnaires that included questions related to demography, general knowledge of diabetes, knowledge about the signs and symptoms, complications, and preventive measures, were distributed to 377 individuals during the month of February 2013. The information was then analyzed using SPSS 21 software.

Results: Analysis showed that participants were unlikely to identify main risk factors (smoking 15.6% correct, ethnicity 2.9% correct) and complications (stroke 21.8% correct, heart attack 31.6% correct). When we compared between the age groups (18-25 vs 35-50) and their knowledge scores (p<0.05) proving that the older age group have more knowledge, but no significant difference with the middle age group, the same applies for preventative measures. Comparing education and knowledge revealed a significant difference (p=0.057), there was also a significant difference for preventative measures (p=0.014). When comparing family history with knowledge scores (p=0.023) and a p value of 0.021 when comparing family history with preventive measures score, meaning it has a great impact. The median knowledge and preventive scores were 46.8% and 42.8% respectively.

Conclusions: There is some awareness regarding diabetes and its prevention, but it remains below 50%. We recommend that some sort of educational campaign be implemented in schools for younger children so the next generation be more educated and live healthier lives to prevent this disease.
Prevalence of Hypertension Among Sharjah Population

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Introduction: Hypertension (HTN) is considered to be one of the growing diseases in the world. It’s estimated that 29.2% of population worldwide will suffer from hypertension by 2025. As HTN is an important and modifiable risk factor for cardiovascular disease and mortality, detection and controlling high blood pressure are critically important for reducing percentage of deaths annually by complications associated with HTN like: myocardial infarction and strokes.

Aim: To measure the prevalence of hypertension among Sharjah city/ UAE community sample randomly enrolled.

Methods: A cross-sectional study was conducted during February 2013 in Sharjah/UAE including 501 participants age between (25-70) years available in the public places completed a self-administered questionnaire to measure physical activity, nutrition, and medical history. Height and weight were measured. Twice BP measurements were obtained at 60-second intervals after resting for 5 minutes. In the study, we divided the population into 3 groups according to their (BP) measurement based on national scale (JNC7). Hypertension was defined as a mean systolic BP of 140 mm Hg or higher, or a diastolic BP 90 mm Hg or higher.

Results: Overall, 34.5% of participants were hypertensive and 32.7% were pre-hypertensive. Among hypertensive participants, 81.5% were diagnosed and 77.30% were taking antihypertensive medication. Among those taking medications, only 59.57% had controlled BP. The prevalence of HTN was higher in men than in women (39.4% and 29.6%, respectively; significant) and noted to be higher in age group (56 – 70 years old, 76.2% from hypertensive participants). HTN rate was higher among obese people compared to non-obese.

Conclusion: HTN and pre-HTN are highly prevalent in Sharjah city/ UAE which show inadequate controlling rate and poor life style which emphasize the urgent need to develop public health strategies to improve the population knowledge about risk factors and awareness of this chronic silent disease.
Gestational Diabetes Awareness in Women in Childbearing Age in Sharjah

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Background: Gestational diabetes mellitus (GDM) is a current health problem that affects a large number of females in our population and has deleterious effects on both the mother and the child.

Aim: To assess the awareness level of GDM among females in the childbearing age in Sharjah community.

Methods: The study was conducted on a sample of females between the ages of 18-45 years. A pretested questionnaire consisted of details regarding the demographic data and questions' focusing on the general awareness and level of knowledge of GDM was answered by these females. Each question was given a score of 1 out of a total of 39. Data collected was analyzed by the test of proportion and statistical appraisal via independent T- test.

Results: 450 women participated in the study with a mean age of 30 years. 31.4 % are of a high educational level, 42.4 % have been pregnant before and 10.2 % were diagnosed with GDM. 20.5% are aware of the correct symptoms, 37.9% are aware of the etiology and 55.0% are aware of the correct complications. Overall, 73.5% of these women were aware of the disease. Age, nationality, educational status, employment had no statistical impact on the awareness. However, married females and those who have children or history of diabetes mellitus were more aware than the others. Although the physicians and healthcare providers were the source of information about GDM in only 19.4% of the sample, they are still the most preferable method to get knowledge about the disease.

Conclusion: Although the awareness of GDM in Sharjah community is moderate-high, yet more efforts are necessary to implement a health care educational program to improve the knowledge about GDM, as a higher level of awareness will improve pregnancy outcome.
Osteoporosis: Knowledge and Preventive Measures among Women
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Background: Osteoporosis is a skeletal disorder characterized by compromised bone strength, predisposing an individual to an increased risk of fractures. The lifetime risk that a 50-year-old woman will suffer osteoporotic hip fracture exceeds the total cumulative risk of suffering from breast, ovarian and endometrial cancers.

Aim: To determine the level of osteoporosis-related knowledge and preventive health practices among premenopausal women in Sharjah.

Methods: A cross-sectional study was conducted in the Emirate of Sharjah in 2014. Self-administered questionnaires were distributed among females between the ages of 40 to 50 years. The questions were related to knowledge of osteoporosis and its preventive measures and were given a score using OKT (osteoporosis knowledge test) developed by Kim, Horan, & Gendler. The OKT is a twenty-four item tool consisting of two subscales addressing exercise and calcium intake. Some questions related to secondary preventive health practices were added to the questionnaire.

Results: The sample included 396 women. The mean score of their knowledge was 11 out of 22. 55.1% of the participants scored below the mean. 75.5% of the total sample had never taken calcium supplements. One tenth of the total sample took part in adequate amounts of exercise from 20-30 min 3-4 times per week. Three quarters of the sample thought that osteoporosis can be prevented. Moreover, three quarters never checked if they had osteoporosis.

Conclusion: This study showed lack in osteoporosis knowledge and inadequacy in the preventive measures taken by premenopausal women in Sharjah. It’s recommended that the health authorities work on raising awareness on osteoporosis and focus more on the education of premenopausal women about the disease. More research needs to be done to look at the prevalence of osteoporosis among premenopausal women in Sharjah.
Periodic Health Examination: Prevalence and Attitudes Among Adults in Sharjah

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Research Supervisor: Dr. Atef Demian

Background: Periodic health examination (PHE) is part of health promotion crucial in public health policy. It may detect some abnormalities that have no obvious clinical symptoms of disease and therefore decline the mortality of specific diseases in the society.

Aim: The purpose of this study is to find out the prevalence of PHE among adults in Sharjah and their attitude towards it.

Methods: A cross-sectional study was conducted among adults in Sharjah aged 25 years and above. 357 adults were chosen using non-probability convenience sampling method and answered a questionnaire through a face-to-face interview. SPSS 22 was used to analyze the data.

Results: Out of the 357 participants; 49% (n=175) were males. 74.5% (n=266) of the sample have heard of periodic health examination and there was a significant correlation between level of education and being aware about PHE (p=0.001). 36.5% (n=97) out of the participants who have heard about PHE had undergone PHE and 97.9% (n=95) of the sample who underwent PHE found it beneficial. The main sources of knowledge about PHE were family 26% (n=68), media 23% (n=62) and friends 21% (n=56). There was a significant correlation between pursuing PHE and having one or more chronic diseases (p=0.007), having a relative with one or more chronic diseases (p=0.021), having a health insurance that covers PHE (p < 0.0005), having a diploma degree or above (p=0.017), increase in age (p=0.008) and family encouragement (p=0.001). The main tests done in PHE were glucose 93%, cholesterol 84% and urinalysis 66%.

Conclusion: This study showed that the majority of our participants have heard about PHE, however, only a minority have pursued PHE. Efforts are needed to clarify the long term benefits of receiving multiple preventive services in the context of PHE. Future studies assessing PHE should incorporate diverse populations and comprehensively assess outcomes, harms and costs.
RESEARCH ABSTRACT

Awareness About Prostate Cancer Screening in Sharjah, UAE

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Research Supervisor: Dr. Riyad Bendardf

Background: As of 2012, prostate cancer was the second most frequently diagnosed cancer representing 15% of all male cancers, and the sixth leading cause of cancer death in males worldwide. Prostate cancer screening can reduce prostate cancer mortality considerably.

Aim: This cross-sectional study aims to examine the level of knowledge, practices, and attitudes towards prostate cancer screening in a population of middle-aged men, in Sharjah, UAE.

Methods: A structured self-administered questionnaire including 37 items was distributed among males 40 years and above. Subjects with medical backgrounds were excluded from the study. A non-probability convenience sampling method was used to enroll subjects.

Results: The study included 333 males, of whom 41% went for prostate screening, 73% understood that prostate cancer is a deadly disease, 95% perceived the benefit in screening, 49% of men knew which specialist to see for screening and 57% said they knew how the screening procedure is done. 71% of the study subjects said they would undergo screening if ordered by their physicians. 63% of men with a family history of prostate cancer went for screening compared to 35% of those who had no family history. (p=0.007). 60% of men who knew someone with prostate cancer went for screening compared to 27% of those who didn’t (p<0.0005).

Conclusion: In a population of adult males in Sharjah, UAE the majority of the population had adequate knowledge of PSA screening, and their attitudes towards it varied greatly from reluctance to great willingness to go for PSA screening according to their current level of knowledge. Thus in conclusion, male attitudes showed greater willingness to go for screening when their level of knowledge and awareness was higher as compared to those that lacked the sufficient information to be willing to undergo the PSA screening.
C. Environment and Safety
Living Conditions of Labor Workers in Sharjah

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Background: Inadequate housing conditions have been associated with many health issues and they are also essential indicators of the health status of individuals.

Aim: To describe the living conditions of labor workers in Sharjah, including demographics, details related to different housing conditions, the labor workers’ perception of their health and levels of satisfaction regarding their living circumstances.

Methods A cross-sectional observational study was conducted using convenient sampling of 400 adult workers of all nationalities living in Industrial Areas 6, 19, & 21 in Sharjah. A personal interview questionnaire of 35 items was used to collect data in the presence of an interpreter to facilitate communication between interviewers and labor workers. The interviewers manually measured the size of the apartment using a measuring tape.

Results The mean age of our sample is 30 years (SD: 7.021). 94% of our sample are from South Asia. 64% of labor workers are satisfied with their general living conditions; among those, 14.3% of workers obtaining a salary of 700 AED were satisfied compared to 100% satisfaction of workers obtaining a salary of 1700 AED and above. The most frequent complaints in order were: unreliable electricity (19%), poor sanitation and presence of pests in building (12%), and overcrowding (10%). The average number of people per room was 8 persons in an average area of 23m².

Conclusion The living conditions of the labor workers were found to be poor. This is mainly reflected by the overcrowding, poor sanitation and electrical problems. The concerned authorities should provide more strict supervision on the labor camps to ensure that the national standards are met and maintained, in order to provide better living conditions.
Energy-Saving: Knowledge, Attitudes, and Practices in the UAE

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Background: A study showed that the UAE has experienced a 10% annual increase in energy consumption; which is four times the world average (UAEU, 2001). Energy consumption has impacted the environment significantly through the emission of greenhouse gases, and subsequently global warming. Holistically speaking; the environment is a major contributor to our well being.

Aim: To describe the energy conserving practices among households, this research will help improve these energy-saving perceptions, attitudes and practices in the UAE.

Methods: Cross-sectional descriptive design. 400 people from the general population were addressed from public places. The subjects were required to complete a 49 item questionnaire.

Results: Of the 400 participants, 90% had a generally positive attitude towards electricity conservation, 9% had neutral attitudes while 1% were indifferent. 55% were aware of the UAE electricity crisis; of those, 88% were willing to help. 74% would help by minimizing electricity use. According to the practicing score, the following groups were compared: (1) Nationality: Non-Arabs (mean: 7.93) in comparison to Arabs (mean: 7.24); (2) Occupational Status: Working (mean: 7.67) in comparison to Non-Working (mean: 7.12); (3) Education: University level or higher (mean: 7.73) in comparison to Secondary School or lower (mean: 6.95). As age increases, the number of reported energy conserving actions increases.

Conclusion: We conclude that the respondents’ attitudes were generally positive toward energy conservation, while practices were considered good, and with regard to their knowledge, they were well-informed about environmental effects but they were lacking knowledge about the health effects of increased electricity use. There was consistency between respondents’ attitudes and their practices. Up to 90% of the respondents were willing to conserve electricity because of its negative effect on health.
Home Injuries First-Aid Awareness Among Adults in the UAE

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Background: Home injuries are a major worldwide public health problem. And due to the lack of first aid awareness, they are frequently managed incorrectly, culminating in many deleterious, easily avoidable, complications.

Aim: To estimate the awareness of adults, in the 4 major emirates of the UAE, in carrying out correct first aid procedures in cases of burns, cuts and fractures sustained at home and to assess whether there is a need to increase knowledge in the community.

Methods: A cross sectional study was conducted among people randomly conveniently selected in malls of the 4 most populous emirates. A quota was set for each emirate according to its relative population: Dubai (156 individuals), Ajman (32), Sharjah (76), Abu Dhabi (136). The study was conducted during a 3-week period in the month of February 2011 by employing interview-based questionnaires consisting of questions about first aid procedures in cases of the injuries and further divided into subgroups, and others about demographic data.

Results: Of the 450 subjects interviewed, 56% did not know the correct procedure for any of the subgroups of cuts, burns or fractures. The study also showed that with more serious burns, the subjects relied less on their knowledge of first aid and more on clinicians (a rise from 15% to 90% in burns). It was found that subjects over the age of 30, females, those who have taken first aid courses before and those who had children had better awareness of proper first aid procedures. Also the subjects had better awareness of proper first aid for specific subcategories of injuries such as small cuts, closed fractures and dislocations but had very little awareness concerning burns and large or deep cuts.

Conclusion: The first aid awareness in the population was dangerously low. Proper intervention is recommended such as making first-aid courses mandatory at the high school level.
D. Behavioral Culture and Psychosocial Factors Influencing Health
Practices Of Reading Information Related To Health Conditions Prior To Seeking Medical Care Among Sharjah Adult Population

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Background: The practice of reading medical information prior to seeking medical care is rising and has various impacts on the doctor-patient relationship, medical decision making process and compliance.

Objectives: To identify the prevalence & practices of reading medical information prior to medical consultation in the UAE society in order to trace the current trend and check if there is a necessity to monitor its influence on health outcomes.

Methods: A cross-sectional study was conducted among Adults of age 18 and above in shopping malls of Sharjah, with mean age of 32. A total of 391 subjects (220 males and 171 females) were selected at random using non-probability convenient sampling method. Data was collected using structured-interview based questionnaire including 21 questions, which were divided into 3 sections: 7 demographics, 4 general health, 10 attitude and practices.

Results: Of the total 391 subjects, 59.6% seek information prior to medical consultation (32.2% of males and 27.4% of females) and 40.4% doesn't (24.0% of males and 16.4% of females). Factors which affect the tendency of people to read are their high educational level (p = 0.000), advancing age (p= 0.033), presence of a disease condition (p= 0.029) and their occupational status (0.002). People mostly seek medical information to improve their medical knowledge (62%) & options of treatment (59%). The causes and management of a condition were the information commonly looked up for with the most used and trusted resources being the medical professionals (91%) and internet (92%). On the other hand, the majority of those who don't engage in this practice expected the doctors to provide necessary information (74%).

Conclusions: In UAE, according to this study, 59.6% were engaging in seeking medical information with only 0.9% locals. Thus in light of the high prevalence of this practice, we recommend that the authorities should strive to provide reliable resources of medical information for the public.
Patterns Of Antibiotic Usage Among UAE Adults

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Background: The continuing emergence of antimicrobial resistance is a worldwide public health problem. The main reason is the excessive and unjustified use of antibiotics.

Aim: To describe knowledge and practices related to antibiotics use among UAE adults.

Methods: In this cross sectional study, a non-probability quota sampling method was used to distribute 450 questionnaires among adults aged 20-55. A convenient sample was chosen from different shopping centres in Abu Dhabi, Dubai, Sharjah, Ajman and Umm Al Quwain proportional to the population size in each emirate. Data was collected by face-to-face interview questionnaire including 33 items divided into four sections (demographics, knowledge, awareness and practices). A knowledge score was calculated from 17 items. Each correct answer was given a score of 1.

Results: A total sample of 450 adults participated in this study, the mean age of subjects was 33 (sd=9.7), 49.3% were males, 48.7% were married, and 66.8% were university graduates. 67% of participants considered themselves aware of the proper use of antibiotics, and 62% of their indications. Gender and educational level were strongly associated to knowledge score (females=9.6, male=8.5, p<0.001), (university=9.4, non university=8.4, p=0.001). Many subjects used antibiotics for non primarily indicated reasons like viral infections 63%, fever 28%, and pain 19%. 61% of participants used antibiotics without prescription. The reasons included non serious conditions 47% and previous prescription 37%. Participants used antibiotics improperly in different patterns, such as improper dose timing 63% and incorrect action in case of missed dose 58%.

Conclusion: The results showed that the community had limited knowledge about antibiotics use also they were using it improperly, especially in dose timing and actions in case of missed dose. We recommend educational efforts on a national basis, such as public information campaigns and improved communication about antibiotic appropriateness between health professionals and patients.
Medication Practices Reported by Medical and Pharmacy Students at University of Sharjah

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Background: Medical and Pharmacy students tend to give medical advice and practice self-medication. Yet, this can frequently have adverse effects, generate additional burden on the economy and increase resistance of pathogens.

Objective: To describe the medication practices among medical and pharmacy students in University of Sharjah.

Methods: In this quota design study a sample of 300 students were stratified equally by a convenient method into medical and pharmacy students from years 1 to 5. Data was analyzed using SPSS 19 and associations were tested using the Chi square test. A face-to-face interview based questionnaire of 27 items covering demographics, self-medication and medication advice practices, was used to conduct this research.

Results: A total of 300 medical and pharmacy students (equal numbers) participated in this study; 41% were males (n=122) and 59% were females (n=178); equally divided among years 1 to 5 (20% from each). The prevalence of self-medication is 85% (n=255), the frequency of being asked to provide medical advice and actually giving it is 69% (n=203) compared with 13% (n=39) of students providing medication advice voluntarily. 88% (n=228) reported practicing self-medication due to the mildness of the illness and previous experience with the same disease. The most common reasons for providing medication advice when asked include knowledge from curriculum 82% (n=175) followed by previous experience with similar condition 56% (n=120). 75% of medical college students have been asked to provide medication advice to others, while only 62% of pharmacy students were asked to provide medication (p=0.023). 86% (n=223) of students reported using the drug information leaflet as their source of knowledge for their medication practices and 70% (n=181) used medical website.

Conclusion: A high prevalence of self-medication was noted among students and so we recommend addressing this issue through awareness programs and media. Also, further research might be useful if done in institutions other than UOS to get a better idea of the prevalence of these practices in UAE.
Reading and Understanding Drug Label Instructions in UAE

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Background: With the increasing number of outpatients and medications usage, practices of reading and understanding drug labels have become essential. Misunderstanding health information is linked to higher rates of hospitalization. In GCC countries no similar researches were conducted before.

Aim: To describe our community’s practices and understanding of drug labels, which will be of great benefit to our health sector.

Methods: A descriptive cross-sectional study was conducted among adults of the age of 18 and above in the UAE in 2010-2011; 244 were females; 146 were between 18 and 24 years of age, 254 were above 25; 242 were carriers of university degrees. Non-probability Convenience sampling method was used to recruit 400 study subjects. A questionnaire of 31 items, it was answered through a face-to-face interview. A sample drug leaflet was used to assess the understanding of the subjects related to the different items including dosage, indication, contraindication and side effects. A score of understanding the drug label was calculated by counting the number of correctly answered questions out of the six items.

Results: Of the total 400 subjects, (33%) always read drug labels. Frequency of reading expiry date is (81%), only (50%) read before each use and (90%) of them find it clear. Dosage was the most part read in the drug label (56%), and it was the clearest (86%) after the expiry date. For the score of understanding, (90%) of subjects scored correctly in “Indication” part while only (77%) scored correctly in “Dosage” part, which was the least. Females, older age groups, educated subjects, and parents were found to read more. The level of understanding drug labels increases with increasing level of education.

Conclusions: Through this research, it was found that the majority of subjects do read and understand drug labels, while some others do not, and they shouldn’t be ignored.
Secondary School Students’ Knowledge And Attitudes Towards Consanguineous Marriage In Sharjah

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**Background:** Consanguineous marriages are widely practiced among UAE locals, and are associated with an increased incidence of health related problems.

**Aims:** To evaluate the level of knowledge among secondary school students in Sharjah about health related problems associated with consanguinity and to describe their attitudes towards consanguinity.

**Methods:** We carried out a survey among 500 students aged 14–22 years within the Sharjah secondary governmental schools. Variables considered were gender, age, location of residence, parents’ level of education, whether their parents’ or siblings' marriage was consanguineous, whether any family members had congenital diseases, their attitudes towards consanguinity and factors affecting it. Association among those variables and the level of knowledge that were statistically significant by univariate analysis were also assessed in a multivariate model.

**Results:** 20% of students had correct knowledge about definition about consanguinity. 48% of students think that consanguinity will have an effect on the children’s future health. Students with high knowledge scores had negative attitudes towards consanguinity. 28% of students were with consanguinity, and 39% of them considered marrying a relative. The variables significantly associated with a low level of knowledge were gender, consanguinity between the students’ parents and siblings.

**Conclusions:** The majority of Secondary school students had negative attitudes and poor knowledge about consanguinity. We recommend initiating campaigns in schools to teach students about consanguinity health-related problems. We also recommend future researchers to conduct a research including other emirates and private schools.
Coping Strategies Among Freshmen University Students

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**Background.** University has been found to be stressful for many young adults as they try to accommodate to the new changes in their lives. Therefore, coping strategies are important as they facilitate the return to a balanced state.

**Aim:** To identify and describe the coping strategies used among freshmen university students.

**Methods.** In University of Sharjah a sample of freshmen students was selected based on a Cluster Random Sampling Method to conduct a cross-sectional study. Self-administered questionnaires were completed by 411 freshmen university students (71 males, 340 females).

**Results.** Out of the 411 freshmen students, 17 % were males, 89.3 % were Arabs. The students were enrolled in Medicine 40%, Pharmacy 27.5% or Fine Arts 32.5%. 76.9 % of them reported academic stressors as source of stress, 22.1 % financial stressors, 40.9 % time management, and 15.6 % social issues. The main coping strategies used were religion mean=6.3, planning mean=6.2, active coping mean=6.15, acceptance mean=6.01, instrumental support mean=5.97, positive reframing mean=5.95, emotional support mean=5.42, self blame mean=5.01, humor mean=4.9, venting mean=4.88, self distraction mean=4.52, behavioral disunion mean=4.11, denial mean=4.04, and substance use mean=2.43. Those fall into these groups of coping strategies; emotional mean=22.96, problem mean=17.01, Social mean=16.19, Avoidant mean=15.35. Those who reported social stressors were found to use problem (mean=16.18, P=0.02) and emotional (mean=22.19, P=0.042) coping strategies. Social and avoidant techniques were used more among females; mean=16.4, P=0.025 and mean=15.4, P=0.022 respectively. Also Arabs used social support more than Non-Arabs. Nonmedical students reported a higher prevalence of using avoidant strategies, 16.4, P=0.015, than medical students, 15.2.

**Conclusion:** Freshmen students have high awareness about the different coping strategies and also use the most effective ones.
Driving Behaviors Among Adults in the United Arab Emirates

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Background: Motor vehicle crashes contribute significantly to the burden of injury and death worldwide. Risky driving behaviors are responsible for a significant proportion of this global burden (WHO, 2003).

Aim: To describe the driving behaviors among adults in the UAE.

Methods: A cross-sectional study was conducted among drivers in the UAE between October 2010 and May 2011. 500 drivers (262 males, 238 females) were selected at random using convenience sampling. An interview questionnaire was used to cover questions on demographics, driving behaviors, distracted driving, awareness and preventive measures. Data were analyzed using SPSS program.

Results: Results showed that speed was the most common unsafe driving behavior with a prevalence of 83%, followed by failing to signal for lane changes at 70%. 91% of the sample talked on the mobile phone while driving, making it the most common unsafe behavior while driving. The second most common was getting distracted by things on the road, with a prevalence of 88%, followed by distraction by other passengers at 81% and texting at 59%. Of the 253 participants who said their driving behaviors were unsafe, 69% of them stated that time efficiency was the main cause, followed by exciting driving at 40%. Significant correlations were found between gender and age when related to practicing unsafe driving behaviors with a higher prevalence in males and those aged 18-25 years, respectively. 86% of participants stated that real life stories about accidents were the most effective preventive method, followed by both fines and media advertisement with 78%.

Conclusion: The main unsafe behaviors while driving include: speeding, texting, talking on the mobile phone, and distracted driving. We recommend that future studies include more representative samples of the community; in addition to, incorporating traffic awareness in school syllabus.
Factors Influencing Academic Motivation Of Medical Students

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Background: Motivation has been found to play a major role in determining student performance in the academic process.

Aim: To identify the intrinsic & extrinsic motivational factors among medical students in the University of Sharjah.

Methods: A Cross Sectional Study was conducted among university students of medical colleges in the period between February 2011 and March 2011. A total of 452 students (337 females and 115 males) were selected using the Quota sampling method equally between each college. A self–administered questionnaire consisting of 13 demographic questions, an agreement scale of 32 questions about the motivational factors and an open ended question asking students about what the university can do to help motivate them.

Results: The most common intrinsic factors chosen by students were grade expectation (94%), interest in material (92%) and leading an honorable life (88%). While on the other hand the most common extrinsic factors were upcoming exams (88%), family expectations (88%) and praise (82%). The most common factors were similar between all students regardless of their major, gender, or performance. However, differences were visible in other factors such as in high performing students; rewards scored a 71.4% while low performing students scored it at 50%. It also shows that females consider praise as an important factor (86%) on the contrary males gave it a (72%).

Conclusions: While the most common intrinsic factors showed to be grades, interest in material and leading an honorable life. The most common extrinsic factors on the other hand were upcoming exams, family expectations and praise.
Mobile Phone Dependence And Health Related Behaviours Among Adults In UAE

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Background: In recent times, the mobile phone has transformed from a simple communication device into a necessity because of the countless features it offers, making most users dependent on this technology. However, this dependence may be associated with negative health behavior patterns such as smoking, sleep deprivation and lack of physical activity (Koivusilta et al, 2005).

Aim: To study the relationship between mobile phone dependence and health related behaviors.

Methods: For 400 participants aged 18 years and above, we collected data using a self-administered questionnaire which was divided into 2 main sections. The first section comprised of twenty-three questions on demographics, mobile phone use, mobile phone expenses, smoking and health-related behaviors in relation to mobile use. The second section consisted of twenty self-rated items from preformed questionnaire (MPDQ; Toda et al., 2004) measuring mobile phone dependence; each response was scored on a Likert scale, (0-Hardly ever, 1-Sometimes, 2-Often, 3-Always). The Likert scores for each item were then summed to provide a dependence score ranging from 0 to 60; Subjects exceeding the mean score +1SD were put in the high dependence category.

Results: 18% of the sample was found to be mobile dependent, with being young and single as major factors associated with mobile dependence. The study revealed that, mobile phone dependence was significantly associated with poor health behavior patterns. In addition, both sexes had an equal disposition to mobile dependence and poor health behavior.

Conclusion: Further studies need to be conducted in order to determine the long term effects of these behaviors on physical health and to examine whether these poor health behaviors apply to other technologies such as internet usage or video gaming.
Background: Recent studies have demonstrated the relationship between psychological well-being and physical health which indicates that a lack of psychological well-being may predispose the individual to physical illness. Despite this, adults frequently experience psychological problems but tend not to seek help.

Aim: To describe the attitudes of the adult population in UAE towards psychological help seeking.

Methods: This study used cross-sectional design to collect data from a total of 403 respondents, aged 18 years and older enrolled through a convenience sampling method. The data was collected via a self-administered questionnaire which consists of the Attitudes towards seeking professional psychological help scale (ATSPPHS) in addition to demographic data at the beginning of the questionnaire. The ATSPPHS consists of 18 negatively stated and 11 positively stated items measured on a 4-point Likert scale and categorized into 4 factors (Recognition of need for psychological help, Stigma tolerance, Interpersonal openness and Confidence in helpers). The total score was classified into low (29-49), medium (50-63) and high (64-87) scores, (Salim & Jaladin, 2010) the higher the score on ATSPPHS, the more positive the attitude is.

Results: The mean ATSPPH score was 44.9 (SD=10.3, 95% CI(43.9,45.9)). The majority of the population (69%) got low scores, 27% got medium scores and only 4% got high scores. The highest mean score was for the stigma tolerance factor (60.7%) which indicates that stigma wasn’t a barrier for help seeking in our population.

Conclusion: The subjects’ responses indicated negative attitudes towards seeking psychological help whilst maintaining neutral stigma and confidence in the helpers. Therefore efforts should be made to make psychological help seeking more acceptable in UAE community.
Perception of Health Among Adults in the UAE

College of Medicine, University of Sharjah

Research Supervisors: Mrs. Amal Hussein & Dr. Nahed Abdelkhalek

Background: WHO defined as “a state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity”.

Aim: To understand individuals’ perception of health and the factors that affect their perception. Previous research found that individuals with low levels of health perception may frequently get ill and use medical services compared to those with higher levels.

Methods: In Dubai and Sharjah in 2011, a cross-sectional study was conducted to determine the perception of health among adults. Self-administered questionnaires were completed by 402 adults from different nationalities. To measure the perception of health, WHO definition of health was used where each participant was asked to select from a list (physical, mental, social, and disease-free) the aspects that make the person healthy. The total number of correctly answered questions related to health perception (19 items) was calculated for each participant.

Results: 27% of the sample defined health correctly as defined by the WHO, 29% defined it by one aspect, 27% defined it by two aspects, and 17% defined it by three aspects. The perception of health was higher among women (p=0.015) and retired adults (p=0.001). Hygiene (68%) was rated as a highly important factor in maintaining health and routine checkups was rated the least important (23%). Even though hygiene came first on the list of factors, it came fourth on the list of practices. The most practiced factors were eating healthy food (74%) and exercise (67%) while the least was routine checkups (24%). The Internet was the most widely used source for acquiring health knowledge; 13% of the population attends health campaigns and awareness programs.

Conclusion: A quarter of the sample defined health completely as defined by the WHO while the majority defined health as being physically well and free from diseases.
Birth Spacing: Knowledge, Attitudes and Practices (KAP) Survey Among Married Adults in UAE

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Background: Birth spacing has significant effects on the social, physical, and the mental well-being of the mother, her child, and the family’s social life.

Aim: To assess the knowledge, attitudes, & practices of birth spacing among married adults in UAE.

Methods: This research was a cross-sectional study. The sample was selected based on convenience method. Married adults between the ages of 20-45 years old were randomly chosen from public places such as parks, & shopping malls. A 29-item structured questionnaire related to knowledge, attitudes, and practice was collected through face-to-face interview.

Results: The sample included 420 participants. Regarding knowledge, 46% (n=193) of the sample knew the appropriate inter-pregnancy interval (2 years), & 59% (n=252) were aware of its correct definition. According to practice, the birth spacing interval increased as the number of children increased. Individuals who intended to have more than 3 children had shorter inter-pregnancy intervals (mean = 1.78 years) than those who intended to have less than 3 (mean=1.88 years) (p-value=0.03). Although not significant, individuals with more male children had a longer birth interval as compared to those who had more female children. This indicated the desire of our sample population in getting male children due to cultural believes in UAE reported by some of the sample. 89% (n=373) agreed with the concept of birth spacing, and 78% (n=327) preferred an interval of more than 2 years.

Conclusion: The subjects’ knowledge related to birth spacing was adequate and they had positive attitudes toward birth spacing. However, their practices were affected by the number and gender of the children.
Community’s Awareness and Attitudes towards Genetically Modified Food in UAE

College of Medicine, University of Sharjah

Research Supervisors: Dr. Nahed Abdelkhalek & Mrs. Amal Hussein

**Background:** Genetically modified foods (GM foods or GMO foods) are foods derived from genetically modified organisms (GMOs). Genetically modified organisms have had specific changes introduced into their DNA by genetic engineering techniques.

**Aim:** The aim of the study is to explore the public’s knowledge and awareness of the potential or perceived benefits and risks of GMF.

**Methods:** The design of our study is Cross-sectional design. The targeted population is adults aged 25 to 60. Non-Probabilistic Convenience sampling method was used to enroll subjects. A minimum of 400 subjects was needed and subjects were asked 29 questions at one point in time about their knowledge and attitudes towards genetically modified food. For data analysis, SPSS 19 software was used.

**Results:** A total of 433 subjects participated in this study; 75% of our sample had heard of GMF of whom 68% defined it correctly. And of those that defined GMF correctly, 73% were 34 or older and 64% were younger than 34. 70% of our study sample labeled GMF unnecessary, 33% associated it with a high level of risk, and 37% considered GMF to be unhealthy as compared to non-GMF. While 39% of subjects choose variability or a variety of choices as an advantage of GMF, 57% said they would taste it, and 29% would approve of purchasing GMF if approved by the FDA and government.

**Conclusions:** This study reveals a considerable amount of people have heard about GM food and knew what it was, but the level of awareness still needs to be improved. However, their attitude towards using it was generally negative. Most of our sample was interested to know more about genetically modified foods.
Societal Views And Attitudes Towards Individuals With Special Needs

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Research supervisors: Mrs. Amal Hussein & Dr. Nahed Abdelkhalek

**Background:** Disability is defined as having a restriction that limits the person from doing activities that is performed normally. Disability has always been associated with stigma, stereotypes, and negative attitudes. Negative attitudes include impairments, activity limitations and participation restrictions.

**Aim:** The purpose of our research is to describe the attitudes and views towards individuals with special needs.

**Methods:** In UAE a cross sectional study was conducted among a convenient sample of adults enrolled from public places. Data was collected through self-administered questionnaire including 32 questions.

**Results:** Of the total 439 participants: reported positive and negative attitudes. The main positive attitudes were: 46% of the participants reported that an individual with special need is an individual who needs continuous care and attention, 96% reported that individual with special needs should be integrated in the society, 91% of people reported that individuals with special needs are very sensitive. 63% of people who were not directly related to people with special needs thought it’s not embarrassing to go out with them. The negative attitudes were; 43% of people thought that people with special needs shouldn’t have to compete for jobs with normal people. 43% of people thought they should have harder driving tests. 11% of the people who reported that they were unfriendly and weren’t comfortable to be neighbors with them 5% perceived that respect isn't an important need for individual with special needs.

**Conclusion:** We recommend initiating campaigns that raise awareness on how to deal with individuals with special needs, which would promote furthermore positive attitudes among the society.
Weight Reduction Methods Used By Females In UAE

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Research Supervisors: Mrs. Amal Hussein & Dr. Nahed Abdelkhalek

Background: Dissatisfaction with body weight and use of various weight reduction methods has been widespread among the females in the UAE. Unhealthy methods have a great impact on the health of these young females.

Objectives: The purpose of this research is to determine the weight loss methods used by females aged 18 years and above.

Methods: In this cross-sectional study a convenient sample of females above 18 years were asked to fill out a 22 item questionnaire; their heights and weights were measured to calculate BMI. SPSS 19 was used to analyze data. Percentage frequencies, correlations and chi square tests were used to conduct it.

Results: 70% of the total sample thought they needed to lose weight; 25% from underweight group and 51% from normal sample. The main reason for weight loss for underweight and the normal group was self-esteem (57%) and better health (41%) and for the overweight and obese group was better health (52%) and self-esteem (38%). 24% of the subjects were using healthy methods (mainly exercising 48%, eating less high fat food 37% and dieting 34%) and 8% were using only unhealthy methods (mainly eating very little food 44%, skipping meals 25% and using diet pills 9%) while the majority 68% used a combination of both.

Conclusion: In this study, about one fourth of females had used unhealthy weight reduction methods namely eating little food and skipping meals. Thus, we need to raise the awareness among the females regarding the healthiest methods used to reduce their weight.
Awareness of Self-Body Weight Status Among Adults in U.A.E Community

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Background: Weight perception is one of the motivating factors for weight control behaviour and is a better predictor than actual weight for adults to diet or exercise.

Aim: To evaluate adult's awareness about their own body weight.

Methods: A cross-sectional study was conducted among adults available in Dubai and Sharjah Malls in the period between June 2011 and September 2011 by using convenient sampling. A self-administered questionnaire containing 31 questions was developed to collect data. In addition to demographics, each subject was asked to report his height and weight and select the weight status group which he thought he belonged to (underweight, normal, overweight, and obese). A scale was used afterwards to measure each subject’s height and weight.

Results: The study included 400 participants (62% males, 15% locals, 59% diploma, university and graduates). 55% of subjects were aware about their body weight status. Compared to 38% of the sample who do not weigh themselves regularly, 62% of the sample who weigh themselves regularly were aware of their body weight status (p=0.007). Also, 57% of those who thought that obesity is a risk factor were aware of their body weight status as compared to 43% among those who didn't (p=0.048).

Conclusion: Approximately half of the sample were aware about their weight status. The main factors which affected the awareness were the perception that obesity is a risk to health and regular self-weighing. To increase the awareness we should encourage people to weigh themselves regularly and increase their knowledge about dangers of obesity.
Factors Influencing Health Care Seeking Behavior Among Adults In Sharjah

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Background: Health care seeking has become a complicated event, enabled or delayed by aspects other than illness alone. This research aims to identify factors influencing health care seeking behavior among the population of Sharjah.

Methods: A cross-sectional study was conducted among adults aged 21-60 years in Sharjah, UAE. A total of 408 adults were chosen, using convenience sampling method, and asked to answer 39 questions in a self-administered questionnaire. Andersen-Aday model of health care utilization was used to develop the research instrument. SPSS 19 was used to analyze the data.

Results: Of the 408 subjects, 87% reported seeking care immediately when needed. Clinical presentations for which immediate care was sought were related to cardiovascular diseases (100%) and fever (90%). The factors that significantly influenced seeking care were age, marital status, concern about own health, and self-medication. Ever married adults, aged ≥ 40 y/o, who were moderately/extremely concerned about their health and who did not find self medication effective were more likely to seek care immediately than others. The reasons that delayed seeking care were waiting for symptoms to be relieved (60%), dislike of hospitals and doctors (36%) and hospitals’ waiting time (34%).

Conclusions: Factors significantly influencing seeking care were age, marital status, concern about own health, and self-medication. Reasons causing delay in seeking care were waiting for symptoms’ relief, dislike of doctors, and waiting time. Educating patients about importance of seeking immediate care, emphasizing the patient-doctor relationship and reducing the waiting time in clinics and hospitals are recommended.
Knowledge, Attitudes and Practices towards Sustainable Development (SD) Among Young Adults in UAE

College of Medicine, University of Sharjah

Research Supervisors: Dr. Nahed Abdelkhalek & Mrs Amal Hussein

Background: In order to ensure a healthy & productive environment in harmony with nature, it is essential that people know about SD, so they would move from being eco-efficient to eco-effective.

Aim: To describe the knowledge about, and attitudes towards sustainable development and if it’s implemented in daily life practices, which aim to assess if there is a need to encourage changes in behaviors that allow for a more sustainable society for present and future generation.

Methods: A cross-sectional study among early adults in UAE population, in which people were approached in public places & asked questions using a questionnaire.

Results: A total of 396 subjects participated in this study, 37% were locals, 41% were Arabs & 23% were non-Arabs. 65% were females (n=249). This study showed that 31% of people heard of SD, probably while only 21% defined it correctly. Furthermore, Results showed that 31% of males correctly identified SD, compared to 16% of females, (p=0.001). Based on the results, Subjects' opinions on who plays an important role in SD were 41% citizens, 30% government, 21% industry and 12% environmental groups. 98% of subjects agreed that it’s their responsibilities to provide a healthy community for the next generation. Regarding to practices, 83% of subjects turned off the lights and computers when they are not using them, 27% of subjects recycled and 19% read about environmental issues. Subjects with higher knowledge tended to have more positive attitude towards.

Conclusion: Study subjects showed low level of knowledge about SD but positive attitudes and reported practices favoring SD. Subjects were practicing based on their habitual manners not on knowledge about SD. We recommend to increase awareness programs, and to include it in the educational curriculums in early school years. Government should provide more directions in what's each individual responsibilities toward the environment are. For future researchers we advise them to include more specific questions regarding knowledge and a bigger sample size.
Impact Of The Smoking Ban Policy On Students At The University Of Sharjah

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Background: A smoking ban policy was launched in Sharjah University City by the end of 2010; the purpose of which to reduce the number of smokers on campus this policy was expected to encourage smokers to quit smoking and maintain the health of non-smokers through reducing their exposure to passive smoking.

Objective: To determine the impact of the smoking ban policy on students at the UOS.

Methods: The research design was cross-sectional descriptive. The sample was selected based on Convenience Method; total of 400 students were equally recruited from the Men’s, Woman’s, Fine Arts and Medical campuses. A self-administered structured questionnaire was distributed. SPSS 19 was used to enter and analyze data. Percentage frequencies, correlations and chi square tests were used to conduct analysis. Pie charts and bar charts were used to present the results. P-value<0.05 was considered statistically significant.

Results: Among the sample, 88% were aware of the smoking ban policy. Quitting smoking was considered by 16% of smokers and 15% started using anti-smoking medications. 47% reported missing their classes and 38% had to go outside campus to smoke. As for non-smokers, 27% of those who were planning to start smoking did not. Of the total sample, 73% supported the ban policy, of whom; 82% were females, 85% non-smokers, 75% medical college. 43% reported lack of implementation and 7% would report a smoking violation incidence.

Conclusions: The smoking ban policy helped only a few smokers to quit smoking. Furthermore, it negatively affected the smokers’ academic activities as they had to miss classes to smoke outside university campus. On the other hand, the policy was strongly supported by females, and non-smokers.
Empathy Levels among Undergraduate Medical Students in UOS

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Context: Empathy is the capacity to think and feel oneself into the inner life of another person. Empathy was measured among undergraduate students in Monash University, where they found that empathy levels decrease throughout the years. This study has not been conducted till now in UAE.

Objectives: To measure the levels of empathy among medical students (years 1 – 5) at the Medical College at UOS.

Methods: A quantitative cross-sectional study was conducted using the Jefferson Scale of Empathy (student-version), reliable self-report scale and was distributed among 360 students. SPSS 19 was used to enter and analyze the data. Empathy scores were added to get a score from 20 to 140, the higher the score, the higher the empathy. Means and Percentages were used to conduct data analysis. We used independent T-Test and ANOVA to compare empathy scores between groups.

Results: The mean empathy score was 88.9 in Year 1, 87.4 in year 2 and 83.4 in year 3. While year 4 scored 85.7 and year 5 scored 88.9. Males scored higher than females (88.15 versus 85.97 respectively, P=0.042). Enjoyment of studies, and field orientation (patient or technology), were insignificantly related to empathy scores.

Conclusion: Among medical students at UOS, empathy levels were highest among years 1 and 5 students, and lowest among year 3 students. Students' year of enrollment and gender were significantly associated to empathy levels.
RESEARCH ABSTRACT

Prevalence and Perception of Risks Associated With Mobile Phone Use While Driving In UAE

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College of Medicine, University of Sharjah

Research Supervisor: Dr. Nermine Samir

Background: In 2009, WHO ranked car accidents as the 2nd leading cause of death in UAE. A local survey conducted on June, 2012 claimed that 60% of drivers in UAE use their phones while driving according. Seo & Torabi (2004) showed that 21% of the sample who reported an accident was because at least one of the drivers was talking on the phone. The aim of this study is to look for the prevalence and perception of risks associated with mobile phone use while driving among adults aged between 18 and 50 years old in UAE.

Methods: Our research design is Cross-sectional. Participants were selected using the non-probability quota sampling technique who met our criteria of having mobile phones and driving license. Face to face interviews were used to fill the questionnaires from 400 (200 males, 200 females) participants. These questionnaires were distributed in public places in Sharjah. Data analysis was done using chi-square tests on SPSS 21.

Results: Seventy-Six percent (n=304) of our sample used their mobile phones while driving. Furthermore, 58% (176) of them used their phones for texting out of whom, 66% (116) used it for BBM. Although, 90% (360) of the sample agreed that mobile phone use while driving is associated with car-accidents and 93% (372) perceive its negative effect on attention, only 40% (121) of mobile users were willing to stop. Moreover, 65% (260) considered the risks associated to be the reason to stop its use. In regards to the ban, the majority (63%; 252) agreed with the current ban and 54% (216) disagreed with a stricter ban. Mobile phone use while driving was not related to the drivers’ age or gender or length of travel.

Conclusion: Since our findings showed that using mobile phones while driving is widespread, intervention is highly recommended.
Health Seeking Behavior among Medical Students in the University of Sharjah

Sawalha A., Elawad Salih E., Aldhuhori N., Aboukalam N., Bakié R.

Research Supervisor: Dr. Naguib Hassan

Background: Medical students have different perception of symptoms and illness. Moreover, medical students report barriers to seeking help about their health, and are more likely to seek advice informally from friends and/or family. It is important to identify health seeking behaviors among medical students to be able to modify and interfere accordingly.

Aim: To describe the health seeking behavior of medical students in UOS and identify the factors affecting those behaviors.

Methods: A cross-sectional study was conducted at the University of Sharjah during the spring semester of the academic year 2012-2013. Self-administered questionnaires were distributed to all medical students from all 5 years. Questions were related to physical health seeking behaviors only. Data was analyzed using the SPSS21 software.

Results: We have found that self-prescription was the most common practiced health seeking behavior among 91.8% - 96.6% of UOS medical students (CI of 95%). Followed, in order, by: Ignoring a health problem, seeking immediate care, using the internet, reading more about the problem and self diagnosis & management. All are practiced by more than 50% of the students. A set of other behaviors was identified as well. Factors affecting these behaviors included mainly: self-care orientation & Medical education. Other factors that had a role as well were: Gender, stage of studying, having a chronic illness and Lack of knowledge about the health services available.

Conclusion: Medical Students in the University of Sharjah have a high level of self-care orientation and, accordingly, tend to react to their illness in a variety of ways. The most common of these is self-prescription. Studying Medicine is the 2nd major factor that influences their health seeking behaviors. Sufficient guidance about the consequences associated with certain behaviors may be required.
Smart Device Use in Education: Sharjah University Students’ Perceptions and Practices

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Research Supervisor: Dr. Maha Guimei

Background: The importance of smart device use in education has been significantly witnessed in the past few years. This is attributed to easy access to resources, increased motivation and independent learning among students who use them.

Objectives: Studying the perceptions and practices regarding the use of smart devices in education among Sharjah University Students.

Methods: A cross-sectional study was carried out among 502 medical and non-medical students in the University of Sharjah. The self-reported questionnaire covered 3 sections: demographics, perceptions and practices. Chi-square test was conducted for data-analysis using SPSS20.

Results: Out of 502 students, we divided the sample equally into medical and non-medical students. 95% owned a smart device. 73% (CI: 69%-77%), of those who owned smart devices used them in learning [37% being medical students and 36% being non-medical student]. Higher grades correlated with a higher proportion of smart device use in learning (p=0.047). 27% of students did not use their smart devices in learning due to preference of pen and paper, and distractions smart devices pose. Smart devices were used most in the following contexts: self-learning, 74%, and during lectures, 63%. The activities used daily are accessing the Blackboard, using the dictionary, as well as writing and studying lecture notes.

Conclusion: Prevalence of smart device use in education is widespread in university; yet students think traditional learning methods are irreplaceable. The university is recommended to encourage smart-device use in learning through increased awareness for both students and faculty.
The Impact Of Medical TV Dramas On Communication Skills And Ethical Behaviors Among University Of Sharjah Medical Students

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Research Supervisor: Dr. Mohammad Al-Homsssi

Background: Effective communication skills and knowledge of ethical issues contribute to better doctor-patient relationship and medical outcome. There are many learning resources introducing those aspects to medical students and Medical TV dramas being an example, it presents developed scenarios, which enables a focused and independent students learning.

Aim: To describe the impact of medical dramas on medical students in respect to communication skills, ethics and as a source of knowledge.

Methods: Cross-sectional study conducted in University of Sharjah - College of Medicine. Self-administered questionnaires were given to 220 undergraduate medical students in the University Of Sharjah. These students are from year one to year five and they all watch Medical TV dramas. The survey collected data on demographics, year of enrollment, benefits gained from watching medical TV dramas, and perceptions on the programs' communication skills and ethical accuracy. Then data were collected and analyzed using SPSS 20 program.

Results: The shows watched by most students were House (80%), Grey’s Anatomy (62%), ER (35%) and Scrubs (33%). 70% of the medical students reported that their aim of watching was both for entertainment and educational purposes, and 63% believed that medical dramas are beneficial for medical students. Results also showed that 75% of students reported that medical TV dramas were moderately accurate in presenting ethical issues, and said that it had improved and taught them some ethical principles. However, there was no statistical association between the year of students' enrolment and perceptions of accuracy presented by the shows. Overall, students said that medical programs generally portrayed ideals of professionalism well.

Conclusion: Medical TV dramas are effective in teaching medical students different concepts of communication skills and ethics, and may be useful in future teaching strategies that engage students in ethical lessons about practicing medicine.
The Practices and Knowledge of Women in the UAE about Wearing High Heels

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College of Medicine, University of Sharjah

Research Supervisor: Dr. Ahmad Abaub

Background: Wearing high-heeled shoes may produce deleterious effects on the musculoskeletal system, and predispose for complications like Morton’s neuroma and osteoarthritis.

Aim: This research aims to measure knowledge of women in UAE regarding the adverse effects of high-heels, and to describe their practices and attitudes towards such footwear.

Methods: This cross-sectional study included 422 females above 18 year’s old living across the UAE. Randomly chosen subjects were interviewed to fill a questionnaire containing 36 questions assessing the following variables: knowledge, practices and attitude of women living in the UAE toward the high-heels.

Results: Among the participants, (45%) of them are of different Arab nationalities, while the UAE locals (32%) were found to wear high-heels most frequently (p= 0.09), and (23%) are non-Arabs, who wear it least frequently (p= 0.09). Most women wear high-heeled shoes (78%); with (57%) of them wearing it on casual occasions. Interestingly, (80%) of women wear high-heels for beauty purposes at the cost of their comfort, since (70%) reported feeling sore after wearing them. The most common height used is 3-5 cm (54%), and most common duration was 4-6 hours (49%). (13%) mentioned that they had experienced a complication due to their use; back pain being the most problem reported (6%). (21%) of women stopped wearing high-heels due to a problem they encountered. (77%) of women believed high-heels caused health problems, while only (7%) thought it may result in health benefits. The mean score was 65% (SD= 2.46). Knowledge was not related to women’s practices and attitudes.

Conclusion: In spite of the fact that most of women in the UAE believe using high-heeled shoes is associated with a multitude of health issues and had good level of knowledge about its negative health effects, it is found to be highly prevalent.
RESEARCH ABSTRACT

Medical Students’ Perception about Small Group Learning at UOS

AbdulQadir M., Al-Lami Z., Al-Abdullah S., AbuGhoush M.
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Research Supervisor: Dr. Anwar Khurshid

Background: Learning theories are conceptual framework that describe how information is absorbed, processed, and retained. Cognitive, emotional, and environmental influences, as well as prior experience, all play a part in how understanding is acquired or changed, and knowledge and skills retained. One such approach is small group learning which is one of the most important features of medical education.

Objectives: The purpose of this study is to describe students’ perception toward small group learning.

Methods: A cross-sectional descriptive study was conducted among years one, two and three UOS medical student in September 2012 through November 2013. Convenience sampling was used.

Results: A total of 277 UOS medical students participated, year 1 (n=105), year 2 (n=84), and year 3 (n=88) where 39% were males and 61% females, the mean age was 20 years. The most rewarding experiences as perceived by medical students were exposure to different views (71%), cooperative learning environment (66%), making friends (57%) and underwent personal development (46%), while the main disadvantages included: time wasting (55%), side talks (14%), distractions (7%), conflicts within the group (4%), dominance of certain members (1%), and others (15%). The most preferred types of learning in small groups were: Clinical skills groups (88%), Anatomy lab groups (86%), TBL (77%), PBL (70%).

Conclusion: Majority of students had a good perception and positive attitude towards small group learning and agreed that it enhances their collaborative learning and teamwork skills. Small group learning was perceived as a beneficial learning method by the first and second and third year medical students as it enhances teamwork, communication and personal development skills, such as critical thinking.
The Prevalence of Using Painkillers in Sharjah Emirate

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College of Medicine, University of Sharjah

Research Supervisor: Dr. Ahmed A. Shorrab

Background: Pain is a common complaint in many societies, with analgesics being the most frequently used drugs. Most, if not all these drugs are associated with adverse effects, being more common with increased use.

Aim: The purpose of this study was to measure the prevalence of analgesic use and practices related to its consumption.

Methods: A cross-sectional study was conducted among a convenience sample of 467 adults in the Sharjah community. Data was collected in public places using self-administered questionnaires. The primary outcome was to measure the prevalence on analgesic consumption. Secondary outcomes included the types of analgesics used, indications, prescription vs. non-prescription, and awareness regarding the safety of using them.

Results: Of all the participants, 46.6% of the participants were males and 53.4% were females. 45% was below 25 years of age, and 55% were above 25. 14.2% used analgesics frequently, 37.8% moderately and 48.0% rarely. The most common reason for its use was for headaches (72.8%). Paracetamol was the most used analgesic (86.1%) followed by NSAIDs. 57.4% of participants use painkillers without a doctor’s prescription. 53% of the participants read drug leaflets before using; more people with education level of university or higher read drug leaflets (62.7%) compared to people with educational level below university (45%). 76.9% did not experience any side effects; from those who experienced side effects, sedation was the most common (46.3%).

Conclusion: The prevalence of rare use of analgesics in Sharjah was higher than that of moderate and frequent use. Paracetamol was the most used analgesic. Headaches were the most common complaint. Moreover, more than half of our participants were using the painkillers without a doctor’s prescription. For future research, studies need to be conducted on the attitudes and awareness of analgesic consumption in the UAE owing to the unique diversity of the community in this region. In addition, these studies need to be conducted among specific age subsets like elderly population.
Prevalence of Consanguinity and Knowledge about Its Social and Biological Impacts in Sharjah

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College of Medicine, University of Sharjah

Research Supervisor: Dr. Muhammad Anwar

Background: Consanguinity is traditionally common and deeply rooted throughout the Middle East (20-70%). The prevalence of consanguinity in UAE national families was 50.5% in 1997. Moreover, the highest rates of consanguineous unions were associated with genetic disorders, low socio-economic status, low education, and less awareness of consanguinity effects.

Aim: To measure the prevalence of consanguinity, knowledge about its biological impact and social perception among married adults in Sharjah.

Methods: A cross-sectional study was conducted among a non-probability convenient sampling of 457 married adults who were recruited from public places in Sharjah. A structured questionnaire including 44 questions, was used to collect data through face-to-face interviews. Collected data were coded then analyzed using “SPSS 21 software”.

Results: Age of participants ranged between 18-68 years old. 54.5% were females. 23.4% were consanguinely married, 14.2% of them were first cousins, and 9.2% were second cousins. The highest prevalence of consanguinity was among the locals (27.0%), lowest within non-local non-Arabs (14.5%) while the prevalence among non-local Arabs was in-between (24.2%) (P=0.061). The majority agreed that consanguineous marriage keeps the property and wealth within the family (61.5%), strengthen family ties and enforces family solidarity (56.7%), have excellent opportunities for the transmission of cultural values and cultural continuity (48.8%), require lower dowries (48.8%) and lead to better relationship between wives and in-laws (44.4%). 75.9% were aware that consanguinity might affect offspring’s health. However, their knowledge of specific inherited diseases varied. The most known genetic diseases are blood disorders (27.1%), congenital disabilities (24.1%), and diabetes (15.4%). Moreover, a significant relationship was evident between the consanguineous group and low education level (P=0.0005), early age of marriage (<25 years old) (P=0.014) and blood related parents (P=0.002).

Conclusion: The study showed that consanguinity is common in Sharjah population but its prevalence declined compared to results from previous studies. There was poor knowledge about consanguineous marriage impact; therefore, further awareness and health education programs are needed.
Prevalence of Stress and Coping Strategies Adopted by Students at the Medical Campus

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College of Medicine, University of Sharjah

Research Supervisor: Dr. Suzan Noori

Background: Medical students are regarded as being under a lot of stress during their medical training. High levels of stress can negatively impact cognitive functioning and learning. Using positive coping skills can help students deal with the stressors that they encounter.

Aim: The study aimed at measuring stress levels among medical students in the University of Sharjah and determining the coping strategies that they utilized.

Methods: A cross-sectional study was conducted among 300 medical and dental students studying in the University of Sharjah using a questionnaire that was constructed using the perceived stress scale (PSS) to assess stress levels and the Brief COPE Inventory to recognize the coping strategies used. Ethical committee clearance was obtained prior to the study. SPSS 21 was used for data analysis.

Results: Of the respondents (65%) were females. All the students were between 18-23 years old. The prevalence of stress was 60% (95% confidence interval of 54% - 66%) with first year medicine students having the highest prevalence (66%). There was no significant difference in stress levels between different years of both medical and dental students. Females were found to be more stressed (67%) than males (47.1%) (p-value=0.001). The most common stressful factors reported across all years were academic stress. Religion (67%) and active coping (61%) were the mostly used coping strategies among all years and majors. Use of instrumental support was associated with the lowest levels of stress while the highest was with behavioural disengagement.

Conclusion: Prevalence of stress among medical students was found to be high. Strategic plans should be made in order to tackle the main causes of stress and to provide students with consultation on the most effective ways of coping with stress in order to alleviate its impact.
Adults’ Awareness about the Physical Impact of Computer Use
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College of Medicine, University of Sharjah

Research Supervisor: Dr. Mohammad Eladl

Introduction: Computers have become an essential part of our everyday lives. Awareness and education are important prerequisites to efforts aimed at preventing the negative effects of computer use.

Objective: The aim of this study is to assess the awareness of the physical impact of computer use among adults over 18 years old in Sharjah Emirate.

Methods: A quantitative, observational, cross-sectional study was conducted by distributing questionnaires among a convenient sample of 400 adult participants 18 and above in Sharjah in 2013/2014. The questionnaire was divided into 4 sections: demographics, computer use, physical impact and prevention. The physical impact section included questions that evaluate awareness which were graded out of 25.

Results: A total of 400 adults participated, where 35% were males and 65% females. The mean age was 26 years. The most experienced symptoms were eyestrain (74.5%), neck pain (61%), headache (60%) and back pain (60%). 63% of the sample showed a good level of awareness of the physical impact of computer use while 37% of the sample showed a poor level. The mean score was 18/25 (SD=4.5). The participants' response to the symptoms experienced were mostly done by taking breaks (75.7%), changing posture (52.4%) and performing stretching exercises (28%).

Conclusion: Majority of the people were aware of the negative physical impact of computer use. Young adults and students were more aware of the impact than the older employed adults. Majority of people were also moderately concerned about the issue and perceive that this negative impact is preventable. Therefore, recommendations include seminars and literature supplementation to educate the population about the important risk factors and offer tips for prevention.
The Patterns of Usage and Perceived Impact of Social Networking Sites on Medical students’ Education

College of Medicine, University of Sharjah

Research Supervisor: Dr. Akram Jaffar.

Background. The use of Social Networking Sites (SNSs) is rising among college students. Instructors are beginning to consider the possible significance and implications of social media for education practice and provision; making this topic a target for further research.

Objectives. To describe, among medical students, the patterns of usage of SNSs and their perception about the positive and negative effects of SNSs on students’ education.

Methods. A cross-sectional study was done in University of Sharjah using Quota sampling method to enroll equal numbers of first to third year students in the colleges of Medicine, Dentistry and Pharmacy. Self-administered questionnaires were completed. Data was processed and analyzed using SPSS 22.

Results: A total of 350 students (74% females and 26% males) participated in the study. All of the participants had accounts on social networking sites. YouTube ranked first as the SNS used for educational purposes (53%), while Facebook was first for non-educational purposes (45%). Smartphones were most used to access SNSs (80%), which explains how 69% of students had SNSs always run on their devices, while videos (55%) and photos (24%) were the most preferred media for educational enhancement. Of our total sample, 92% thought that SNSs were helpful in studying mainly due to fast access to information (79%), easy communication (69%) and help socializing with colleagues (45%). Of those who disagreed said that it wasted a lot of time (67%) and that the information was not always authentic (34%).

Conclusion. Majority of medical students depended greatly on SNSs to enhance their learning experience, as they believed that the positive effects of SNSs on education outweighs the negative effects. Thus, we suggest implementing SNSs in the educational process to a greater extent.
Characteristics of a Trusted Doctor: Patients’ Point of View
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College of Medicine - University of Sharjah

Research Supervisor: Dr. Toufik Tabbara

Introduction: Trusting a person is defined as the reliance on the integrity, strength, and ability of a person. Trust is established after several experiences.

Objective: To identify the most influential characteristics of a trusted doctor within the adult UAE community.

Methods: A cross-sectional study was conducted among a convenient sample of adults in the emirates of Abu Dhabi, Ajman, Dubai, and Sharjah. The chosen sample participated in the study by filling out a self-administered questionnaire that included 40 closed-ended questions. SPSS 22 was used to enter and analyze the data.

Results: A total of 409 individuals, between the ages of 18 and 65 (203 males and 206 females) participated in the study. Among non-communication skills, 45% of the participants chose “Qualifications” as the most favorable characteristic of a trusted doctor, followed by reputation (24%) and speaking the same language (23%). White coats were the preferred attire among the most (46%), no preference of specific attire and preference of scrubs were 22% and 21% respectively. Detailed explanation of the illness scored the highest (62%) as opposed to 28% of subjects who preferred a simplified explanation, and 7% preferred explanation of the serious illnesses only. The top five influential factors were honesty (95%), performance/efficacy (93%), attitude and interaction (91%), punctuality (89%), and patient involvement in management decisions (80%). 60% of the participants’ who were 26 years or below preferred use of technology (e.g. ipads) by the doctor, whereas 44.5% of participants who were above 26 years preferred use of such technology by the doctor (p value<0.0005).

Conclusion: Honesty, performance/efficacy, and good attitude/interaction were strong influential factors in patient-physician trust among the adult UAE community. Another main factor is a doctor’s qualifications.
Knowledge and Attitudes Towards Thalassemia Among Adult Population in Sharjah, UAE

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College of Medicine, University of Sharjah

Research Supervisor: Dr. Ahmed Al-Serafi

Introduction: Thalassemia is an inherited disorder of red blood cells in which there is a defect in the production of normal hemoglobin. Previous preliminary studies indicated that about one in twelve UAE nationals are carriers for beta-thalassemia trait. This highlights the growing threat thalassemia has on the UAE society.

Objective: The study aims to evaluate the general knowledge and attitudes towards thalassemia among adults in Sharjah.

Methodology: This was a cross-sectional study conducted among 400 adults from the population of Sharjah, UAE. A self-administered questionnaire was specifically designed to collect the data. SPSS 21 was used to enter and analyze the data.

Results: Out of the total 400 participants, 259 (65%) heard of thalassemia previously. The main sources of knowledge were television (38%), and educational institutes (33%) while the least was through general reading (17%) and health care providers (11%). The participants knew the definition of thalassemia (94%) and how it was diagnosed (84%), however; they had less knowledge towards its method of inheritance (39%) and its types (18%). The knowledge score was measured with nine questions that assessed the general knowledge of thalassemia, the mean knowledge score in participants was 5 out of 9. A significantly higher level of awareness about thalassemia was found among ever married individuals ($P=0.009$) compared to singles and among individuals with postgraduate studies ($P=0.006$) compared to lower levels of education. Participants strongly agreed/agreed to premarital (86%) and prenatal testing (74%) and strongly disagreed/disagreed to marrying a thalassemia carrier (29%).

Conclusion: Although thalassemia poses an important public health problem in the United Arab Emirates, our participants showed a lack of understanding of its inheritance patterns. This difficulty in differentiating thalassemia carriers from thalassemia major led the participants to show a more negative attitude towards issues regarding thalassemia carriers. We recommend that these gaps be filled by further awareness efforts lead by the government and health care facilities.
Background: Medical schools worldwide are increasingly switching to student centered methods such as problem based learning (PBL) since it has been found to be beneficial for student’s life-long learning.

Objective: We aim to know the students' perception and utilization regarding this learning method as well as to assess any difficulties facing them.

Methods: This is a cross-sectional study in which self-administered questionnaires were distributed among all students (n=294) enrolled in year one, two and three in Medicine in University of Sharjah in 2013/2014. SPSS 22 was used to enter and analyze the data and Microsoft Excel to generate graphs and charts.

Results: Of the students 75.4% gained skills from using SDL. Independence and responsibility (constituting 73.3% and 67.9% of the total skills gained respectively) were the most prominent followed by better learning and understanding (28.1%). Other advantages included better focus on ones interests and needs. On the other hand, SDL application consumed a lot of time and effort (41.1%) as identified from the students’ responses. Other drawbacks included difficulties in grasping certain topics (13.0%) and how deep to study a particular subject (11.9%). Moreover, preference of students tilted towards the traditional method (69.7%) even though most admitted that SDL is a beneficial (70.7%) and effective learning method.

Conclusion: Almost all students said that they used SDL as a main learning method. Most students had positive perception about SDL; they agreed that it is beneficial and that it helped them gain several skills. However, the majority still preferred the traditional learning method.
Body Image Perception Correlation With Self-Esteem Among UAE Residents

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Research supervisor: Dr. Maha Gumei

Introduction: Individual’s body image has been a concern. It is influenced by globalization, which has been invading the 21st century, by celebrities, that are viewed as idols, and by social pressure. These factors are seen to lead to misperception of body image and cause an enhanced perception of being thin as ideal. There is overwhelmingly evidence that body image is intrinsically linked with self-esteem and the society’s emphasis on how we look also seems to affect the way people feel about themselves.

Objective: This research aims to investigate the correlation between one’s body image perception and his self-esteem.

Methods: A cross-sectional study was conducted using a self-administered questionnaire among Sharjah community whom age ranges between 20-40 years old. Rosenberg’s test & five likert scale were used to evaluate one’s self-esteem & body image perception, respectively. In addition, other related variables were evaluated.

Results: A total of 326 people were included: 203 males (62.3%) & 122 females (37.4%). Age groups were distributed between 20-40 years old. A significant positive correlation was found to exist between satisfaction with body image and self-esteem (p=0.001). People who are satisfied with their body image were found to have higher self-esteem. The less the satisfaction with body image, the less self-esteem people have. Among those satisfied: 7 (43.8%), 129 (63.5%), and 65 (80.2%) had low, moderate, and high self-esteem respectively. Furthermore, people who are more satisfied with their body image have experienced less social influence. As social influence increases, people are more likely to have lower self-esteem.

Conclusion: This study shows a positive correlation between satisfaction with body image and self esteem in which those satisfied with their body image have higher self-esteem.
Knowledge Of Body Mechanics Among Adults in Sharjah

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Research Supervisor: Dr. Nihar Dash

Introduction: Having a proper posture helps protect the body and allows it to perform safe maneuvers in a stable manner. Therefore it is essential to better understand community’s knowledge towards the correct body mechanics.

Aim: To describe the knowledge of proper body mechanics among the adult population in Sharjah, UAE.

Methods: A cross-sectional study was conducted among adults in Sharjah. A total of 400 participants (200 males and 200 females) were selected randomly using non-probability quota sampling method. Self-administered questionnaires were completed by the participants. The questionnaire consisted of 34 questions divided into two sections including demographics and knowledge. To assess their knowledge, images of different positions for each body mechanic were used, and the subjects were asked to select the correct body posture for each body mechanic. A total score for knowledge was then quantified by gaining one point from each correct answer, and zero point for each incorrect answer.

Results: Of the total 400 participants, 55% knew the correct body posture for sitting, 28% for standing, 38% for lifting and 9% for pushing/pulling body mechanic. For the total knowledge score, 79% of the sample gained a score of 50% or above. Only 24% of the subjects thought about their posture repeatedly, while 33% rarely or didn't consider their posture at all. Of the participants, 37% believed that an unhealthy posture would ultimately cause back pain or related disorders. Furthermore, subjects with college and postgraduate educational level had the highest level of knowledge. However, there was no significant difference between genders in their perception regarding proper body mechanic.

Conclusion: This research study reflected poor level of knowledge regarding the different body mechanics of sitting, standing, pushing/pulling and lifting among adults in Sharjah. Awareness campaigns regarding body mechanics should be raised in order to minimize the long-term adverse effects of incorrect body postures.
Knowledge about Autism among Adults in Sharjah, United Arab Emirates

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College of Medicine, University of Sharjah

Research Supervisor: Dr. Muhammad Anwar

Introduction: The prevalence of autistic spectrum disorder is estimated to be 1 - 6 per 1000 according to the WHO. An earlier detection of this disorder will lead to earlier intervention and thus a successful treatment that reduces the symptoms of autism.

Objective: This research aims to determine the level of knowledge of adults' population above 18 years old in Sharjah about Autism.

Methods: A cross sectional study was conducted, with 400 residents in Sharjah of age 18 years and above excluding those working in medical professions. They were selected at random between January and February 2013 using a convenience sampling method and were asked to fill out a 27-items questionnaire. SPSS 22 was used to enter and analyze the data. The number of questions answered correctly in each section was adjusted to a 100% and considered as the mean knowledge score out of 100.

Results: The majority (96.3%, n= 385) indicated they had heard of Autism, whereas 45.8% (n= 174) reported that they personally met someone with Autism. Mean knowledge score of females in the sample was 65.3% while the score of males was 60.4% (p-value = 0.002 and 95% Confidence Interval between -2.660 and -0.606). Participants with university education scored 64.5% on their total knowledge of Autism, while those with an educational level below university scored 58.2% (p-value = 0.002 and 95% Confidence Interval between -3.424 and -0.747). 70% of the sample indicated that the main cause of Autism is genetic.

Conclusion: The majority of the participants heard about Autism, but they do not have enough information about it. In terms of attitudes, the majority of subjects encouraged autistic individuals to live independently. However, attitudes regarding autistic individuals driving were variant and didn’t show a favorable opinion. More health awareness programs and general education on Autism should be publicized to the public in efforts to increase the society level of knowledge about Autism.
E. Students’ Testimonials
Medical research has a great influence on current and future professional medical practice. It has become a vital component of the educational process. The Community Based Research course was an unforgettable learning experience. We were required to go through every single step of making a research; starting with research topic selection and writing out a research proposal to collecting, analyzing and presenting the data. We were guided throughout the entire process by the course faculty and research supervisor.

This experience has helped me develop the skills necessary to carry out a research. It has taught me how to deal with and solve obstacles that I may encounter. I am thankful for such an opportunity that helped me develop the skills to become a better doctor in the future.

Mona Hussein Nasser Lootah

Year 3 Medical Student
What Our Students Say

Looking back at the past 4 years when working on my community based research, I find myself learning more than I expected. Starting off as a junior medical student, you do not tend to have much horizon and an awareness of what is important and what’s not and this is where I am extremely thankful to my teachers for always emphasizing research in medicine. Learning the basics of research so early on has allowed me to develop new tools at my disposal, tools that I did not realize to be vital only after I went out to the real world, the hospital setting. The most important weapon in my arsenal is being able to read a research article and being able to tell what I can gain from it, whether or not I need it and the unheard of information I can learn from it. The Community Based Research course was also a cornerstone in our continuous thrive to become updated and evidence-driven doctors, who can safely practice, knowing they are backed up by recent proven and reliable information. I will forever utilize the skills I have attained during the hours I have put in conducting my very own research. Not only has it made me see the importance of finding answers to questions that tackle the greatest minds in medicine, but it has also given me the courage to pursue these answers throughout my clinical career.

Nhayan Q. Shahin

Year 5 Medical Student
Community based research (CBR) course was one of the best courses that I have taken. Although it was hard and it required a lot of time and effort from me and my group it was worth it at the end. The whole process of working with different people, having a supervisor with experience to guide you, searching for an applicable idea to do a research on, planning how to do the research and actually conducting it among people was very educational in all aspects. The course helped us realize how sometimes we may not get the results that we expected or on the contrary be pleasantly surprised. Reading research articles after taking the course was different because now we can relate and critique the articles on the basis that we learned throughout the course. Overall the whole experience was worth it and I would recommend it to any medical student who plans to be up-to-date in medicine.

Dalia Ali Alhababneh

Year 3 Medical Student
Community-Based Research (CBR) is one of the main activities which help medical students acquire several outcome competences expected of the medical program. Upon completing the CBR course, we have learnt "research by actually performing research".

CBR course has helped us to be lifelong learners. Our communication skills were refined and increased when we had to deal with different people during the data collection phase. Additionally, being part of a research team molded us into becoming better team players, our teamwork skills had enhanced, and we learnt the meaning and importance of being part of a team.

Finally, the research process was a fun experience. We met new people, interacted with group members and visited new research sites. Also, it provided us with a new way of acquiring knowledge. We are very thankful for being given such an opportunity to be involved in a course of this nature.

Mustafa Younis

Year 4 Medical Student
What Our Students Say

In this ever-changing world & rapidly evolving field of medicine, research plays a vital role. Every day, we hear of new discoveries being made, new drugs being formulated and new evidence being unearthed. All of this, of course, is the result of the tremendous efforts dedicated to research from different scientists & researchers around the globe.

Due to the importance of research, the College of Medicine has incorporated a research course as part of its curriculum, which in my humble opinion, is crucial as it provides us, the future doctors, with first-hand training on how to conduct proper scientific research. We learned basic concepts of conducting scientific research in addition to many other skills which culminated in a research poster that I am really proud of.

The time & efforts that I put while conducting this research were worth this marvelous learning experience. As Aristotle once said, “The roots of education are bitter, but the fruit is sweet.”

Umar Abdel Nasser Ismail

Graduate 2013