An Annotated Bibliography on Trauma, Mental Health, and Primary Health Care in the Middle East

Noor Amawi, PsyD.
Richard Mollica, M.D., MAR
Jim Lavelle, LICSW
Ossama Osman, M.D.
Laeth Nasir, M.D.

The Harvard Program in Refugee Trauma
Massachusetts General Hospital
Harvard Medical School
United Arab Emirates University
Introduction

Over the past three decades the international community has increasingly become interested in the health and mental health impact of traumatic life experiences among their civilians and special population groups. This includes not only those interested in traumatic events such as domestic violence but also more extreme forms of violence related to trauma and the conflict e.g. torture. In 2011, the United Arab Emirates University in Al-Ain hosted a global competition to research projects capable of developing a new global health program in the United Arab Emirates University (UAEU). Participants in the conference and the competition came from the United States, Europe, Asia, and the Middle East. The Harvard Program in Refugee Trauma was selected as one of the two successful projects to help the UAEU develop a Global Mental Health program, centered in the UAE, for the UAE and the Middle Eastern Countries. One specific task of HPRT was to review the published studies in English by Arab scientists in the 22 countries that belong to the Arab League.

The specific focus of this project was to identify scientific studies by Arab researchers in the Middle Eastern region that linked traumatic life experiences to Mental Health and to Health, with a specific focus on Mental Health programs, institutions, and the Primary Health Care system. Examples of important research from each country were found except for Mauritania and Comoros. The focus was primarily on English peer reviewed journals, because we found few of any publications in French or the Arabic language.

Among the criteria used to determine which articles are to be included in this annotated bibliography were: A) The study focus was on Arab populations living within the Middle East, B) the research, either qualitative or quantitative, met acceptable minimal international scientific standards, and C) the studies focused on trauma, mental health, and primary health care. Computerized searches allowed us to obtain reference listings of the relevant scientific literature between 1995 and 2012. An occasional article was included from an earlier period because of its significant value on the topic being addressed. Few important studies generated by non-Arabic researchers are also included.

Every identified possible study to be included in this Annotated Bibliography was downloaded and shared with the minimum of two of the co-authors. The reviews followed the format of: A) Topic, B) Demographic population studied, C) Sample size, D) Methods including scientific instruments used, E) Conclusions including clinical and policy recommendations. Since this Annotated Bibliography was planned not as a Meta analysis but as a general resource to policy planners and clinicians working in the Middle Eastern region, no judgments were made as to the overall scientific quality of the research except that they met acceptable minimal international standards. The final judgment of the value and quality of the research has been left to the reader.

The authors would like to acknowledge the editor Dr. Hamid Hamada of the Journal of Muslim Mental Health for his contributions of scientific studies to our efforts. In addition, the libraries of Harvard University and the United Arab Emirates University. Finally we would like to thank the UAEU for providing funding of this project through their Global Health award.
USER’S GUIDE FOR THE BIBLIOGRAPHY

The references in this bibliography are organized by content areas referring either to the nature of the study or to the object in analysis. When appropriate, chapters are divided into studies on adults, children, and/or adolescents. Studies were selected primarily on the basis of their original contribution to the field, the significance of major findings in the study, the fact that they were written primarily by Arab authors about the Middle East. All papers were published in English by peer reviewed journals. This is the first version of the annotated bibliography and it includes articles published in 1995 until 2012.

Despite our search for significant and important publications, some works may have been unintentionally missed and not included in this current bibliography. The authors of this annotated bibliography would be pleased to receive from the readers major contributions that they deem necessary for inclusion in any subsequent revisions of this document.

The table of contents provides guidance to the reader in locating articles by major study topics. Additionally, in the index, all the articles have been indexed by the country of origin. It should be noted that no manuscripts were found for Mauritania and Comoros for this time period.

Sources for references include technical databases on clinical and epidemiological studies pertaining to Arab countries, i.e.

- PubMed: Developed by the National Center for Biotechnology Information at the National Library of Medicine.
- PsychInfo
- Pilots database: Index to literature on posttraumatic stress disorder and other mental-health consequences of exposure to traumatic events.
- Muslim Journal of Mental Health
## Contents Pages: By Topic

<table>
<thead>
<tr>
<th></th>
<th>Topic</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Children/ Adolescents</td>
<td>2-12</td>
</tr>
<tr>
<td>2</td>
<td>Adults</td>
<td>13-35</td>
</tr>
<tr>
<td>3</td>
<td>Elderly</td>
<td>36-37</td>
</tr>
<tr>
<td>4</td>
<td>Women</td>
<td>38-44</td>
</tr>
<tr>
<td>5</td>
<td>Men</td>
<td>45</td>
</tr>
<tr>
<td>6</td>
<td>Primary Health Care</td>
<td>46 - 57</td>
</tr>
<tr>
<td>7</td>
<td>Mental / Behavioral Health Care</td>
<td>58 - 84</td>
</tr>
<tr>
<td>8</td>
<td>Research/ Training/ Evaluation</td>
<td>85 - 90</td>
</tr>
<tr>
<td>9</td>
<td>Substance Abuse</td>
<td>91-92</td>
</tr>
<tr>
<td>10</td>
<td>Human Rights</td>
<td>93 - 94</td>
</tr>
<tr>
<td>11</td>
<td>Social/ Environmental Issues</td>
<td>95 - 104</td>
</tr>
<tr>
<td>12</td>
<td>War</td>
<td>105 - 110</td>
</tr>
<tr>
<td>13</td>
<td>Refugees</td>
<td>111 - 113</td>
</tr>
<tr>
<td>14</td>
<td>Law/ Policy</td>
<td>114 - 116</td>
</tr>
<tr>
<td>15</td>
<td>Other topics</td>
<td>117-118</td>
</tr>
<tr>
<td>16</td>
<td>Index- Contents by Country</td>
<td>119</td>
</tr>
</tbody>
</table>
1. Children/ Adolescents


This article presents clinical personal impressions of children from the following countries: Uganda, Sudan, Mozambique, Palestine, Iraq, and the former Yugoslavia. In addition, discussion of steps that need to be taken, are presented, in regards to mitigating the effects of war on children's wellbeing.


A cross correlational study assessed N=224 Lebanese children from different areas of Beirut, Lebanon between the ages of 10 -16. The study was done in an attempt to relate specific types of war trauma to PTSD symptoms, and to explore developmental and adaptational outcomes. The number and types of war trauma experienced by the children were related to both PTSD symptoms and adaptation outcomes. Children separated from their parents displayed more depressive symptoms, meanwhile children witnessing violent acts showed increases in pro-social behavior. Perhaps one of the most significant finding is that only a small percentage of variance in children's developmental outcomes could be attributed to war related traumatic experiences.


Iraq, Kurdistan. Two months after the mass escape tragedy (MET) a sample of displaced Kurdish children on the Iraq-Turkey border reported a high level of PTSD based on DSM-II-R criteria. After a decrease in symptoms at the 4 month follow-up, the 14 month follow-up showed a significant increase in PTSD-related symptoms, and they were found to persist even at the 26 month follow-up. Further discussion by the authors analysis of PTSD symptoms course over time, and socio-cultural aspects affecting measurement of PTSD symptomology will be found in this article.


A retrospective study of N=60 children ages 15 to 17 was carried out five years after the Gulf War. This study divided the subjects into: persons present in Kuwait during the Gulf War, and persons not present in Kuwait during the Gulf War, and therefore presumably not exposed to violence. The mothers of the children reported to investigators whether or not their children had exhibited signs and symptoms of PTSD five years prior to the war, during the war, and whether they displayed the symptoms at the time of the study. The authors reported that those children presumably exposed to violence showed higher rates of PTSD symptoms both at the time of the war, and five years later. Mothers reported that more females displayed PTSD symptoms at the
time of the war than did males. However five years later, the previously reported gender differences had resolved. The study reports that many of the participants suffered from psychiatrically induced somatic complaints, social withdrawal, attention problems, depression and anxiety.


A subset of a stratified random sample of Kuwaiti children who had been involved in the study that intended to evaluate the test- retest reliability of the Wechsler Intelligence Scales for Children, Revised (WISC-R) prior to the Gulf conflict, were retested one year after the conflict. At the second test children were also tested for posttraumatic stress and depression. Children were also interviewed regarding their level of exposure to violence during the conflict, and parents were tested for depression using a translated version of the Beck Depression Inventory. The authors report no significant declines in IQ scores one year after the conflict. Levels of depression were generally low among the children as was the incidence of posttraumatic stress disorder, but these symptoms were increased among those experiencing exposure to violence as reported to the investigators. Parental depression was not associated with increased risk among the children. The authors attribute this to the traditional communal family structure in Kuwait, in which children are raised by multiple adult relatives. It is thought that this cultural pattern tends to mitigate the negative impact of parental impairment on the child.


In Finland, a study was conducted regarding the mental health function of dreaming of Palestinian children and adolescents in a trauma group (n=144) and a comparison group (n=268) using a 7 day dream diary to recall the dreams they had every morning. The article introduces two terms: compensatory dreams and poor dreams. The results indicated that compensatory dreams moderate the effects between trauma and psychological symptoms, and that poor dreams were associated with poor adjustment. A mediating model was suggested and discussed.


In Palestine, families of those that were affected during the Hebron massacre were interviewed and were administered the PTSD scale by two mental health professionals. This was done for N=23 wives, N=12 daughters, and N=26 sons of the heads of households that were massacred. The results indicated that 50% of daughters, 23% of wives, 23% of sons met the criteria for PTSD.

In Palestine, a study was conducted on children (n=239 ages 6-11 years) who were randomly chosen from 97 elementary schools in the Gaza strip. The study was conducted using the following instruments: the Rutter A2 (parent) and B2 (teacher) Scales, the Gaza traumatic checklist to measure experience of traumatic events, and the Child Post-Traumatic Stress Reaction Index. Results indicated that the total number of ‘experienced trauma’ was the best predictor of presence and severity of PTSD.


Iraq, Kurdistan. Five years after operation ‘Anfal’ in Iraqi Kurdistan a random selection of n=45 families residing in two displacement camps were interviewed, while utilizing the Posttraumatic Stress Symptoms for Children (PTSS-C) and the Harvard Trauma Questionnaire (HTQ). The subjects chosen were the eldest child and a caregiver in each family. Results indicated that PTSD was reported in 87% of the children, and in 60% of the caregivers. Childhood PTSD was significantly predicted by the ‘child trauma’ score and the duration of captivity, though not by maternal PTSD. In addition, childhood PTSD did not disappear after the child’s reunion with their PTSD free fathers.


In Palestine, a study was conducted with a random sample of children in refugee camps and, other urban areas. A few instruments were used, those including: the Traumatic experience checklist to describe the experiences of the children during the Intifada, the Eysenck neuroticism scale (JEPQ) to measure psychological adjustment, Saleh Picture IQ test to measure IQ, and mental flexibility was also measured. This was done to an N=108 children, and also to an N=86 in a follow-up sample. The results conveyed that if children indicated a perception of mental flexibility then they were protected from negative long-term consequences of trauma. Also, the more intelligent and less exposed to violence the children were, the more mentally flexible they had.


In Palestine, a cross sectional survey was conducted to examine the rates of sexual abuse in Palestinian society, and psychological implications of sexual victimization. This was done with an N=652 Palestinian undergraduate college students, using Finkelhor’s scale to measure sexual abuse and the Brief Symptom Inventory to measure psychological effects. The results indicated that similar rates of abuse were found among males and females. In addition, sexually abused
participants had higher levels of psychoticism, hostility, anxiety, paranoid ideation, depression, and psychological distress.


In Denmark, a study was conducted with N=311 refugee children ages 3-15 from the Middle East using structured interviews involving the children’s parents, to inquire about children’s health and their exposure to war and violence. Results indicated that the strongest sleep disturbance in children is history of violence and stressful present family situation. The mediating factor, however, was the presence of both parents and the effect of trauma.


This study was conducted to evaluate the presence and severity of disordered eating in Western populations to a convenience sample of N=106 Omani teenagers, N=87 non-Omani expatriate (mostly Western) teenagers residing in Omani, and N=100 Omani adults. The Eating Attitudes Test (EAT), and the Bulimia Investigatory Test (BITE) were translated into Arabic and administered to the Omani subjects, and the original English versions of the scales were administered to the non-Omani’s.

Thirty three percent of the Omani teenagers (29% of females and 36% of males) showed a propensity for anorexic behavior, while only 9% of the non-Omani’s did. Among the non-Omani’s, 18% of the teenagers reported bulimic behavior as opposed to 12% of the Omani teenagers. Fewer than 2% of the Omani adults reported elevated levels of either type of behavior.


In Palestine, two mental health professionals visited homes or tents of victims who had suffered due to bombings or shellings, to assess the prevalence and determinants of PTSD using the checklist for military violence, a 15 question scale to measure PTSD for the parents, and Pynoos-Nader version of the Reaction Index to measure PTSD in children. This was done with N=121 Palestinian children ages 6-16 and their mothers ages 21-55. The results indicated that 54% suffered from severe PTSD with girls being more vulnerable. Gender, mothers’ education, and exposure to traumatic experiences were significant factors that influenced PTSD symptoms.


In Palestine, a study was conducted with Children living in rural, urban areas, and refugee camps; N=206 children ages 6-13. Rutter A2 (parent) Scale was used to measure psychological
morbidity, and the Gaza Socioeconomic Adversities Questionnaire to measure economic status among families. The results indicated that there was 42.3% psychological morbidity among Palestinian children; 46.3% were among boys and 37.8% were among girls.


In the UAE, a study was conducted to assess the help seeking patterns for mental health problems in N=325 of a community sample contacted as part of a child psychiatric disorder study. Semi structured interviews were utilized. Results indicated that only 38% would seek help from a mental health specialist in the case that one of their family members was developing a psychiatric problem. This was due to the following factors: stigma, unwillingness to acknowledge that a family member has a mental health problem, feeling a sense of ambiguity around how useful mental health services would be.

Those that were less skeptical about utilizing these services were better educated, had better occupations, and were of higher socioeconomic status. Therefore, it was concluded that the parent’s situation reflects whether or not their child would receive professional help.


Iraq, Kurdistan, and Sweden. Using the Child Behavior Checklist (CBCL), the Harvard-Uppsala Trauma Questionnaire for Children, and Post-traumatic Stress Symptoms for Children (PTSS-C) administered to care givers, an attempt to measure differences in orphans’ development was made by comparing n = 94 children in traditional foster care, and n = 48 children placed in orphanages. One year after initial administration of the questionnaires the CBCL was re-administered, and at 2 years both the CBCL and the PTSS-C were re-administered consecutively. Improvement in activity scale, externalizing problem scores, and PTSD related symptoms were more significant in the foster care group. Though the activity scale improved in the foster care group, school competence deteriorated in both groups studied, particularly amongst the girls placed in orphanages. Results are further analyzed in the context of gender, age, socio-economic status, cultural values and characteristics of the two care systems.


In Denmark, a study was conducted with N=311 refugee children from the Middle East whose families were either able or not able to stay in Denmark as Asylum Seekers. This was done through structured interviews with the children’s parents regarding exposure to violence and mental health. Results indicated that 8 out of 10 children were exposed to violence, and 7 out of 10 had witnessed violence. In both groups of Asylum Seekers, 66% suffered from anxiety, and 30% had sleeping problems.

In Palestine, a study was conducted on N=65 Palestinian families from the Gaza Strip using Family Military Trauma to measure traumatic events families experienced during the first Intifada, Beck Depression Index to measure depression symptoms and Post Traumatic symptom. Other instruments used were: Resiliency Attitude Scales and Health Related Quality of Life. This was done to measure symmetries and asymmetries between families when exposed to traumatic events. Results indicated four types of families: resilient families, children’s strength families, ordeal families, and parental strength families. The resilient and ordeal families were symmetrical, whereas the parental strength families and the children’s strength families were asymmetrical.


In Palestine, a study was conducted with polygamous families residing in a Bedion Arab town in the south of Israel using in-depth structured interviews. There was N=10 families consisting of 1 husband, two wives, and children. Results indicated that polygamy is painful for the wife in both well functioning and poorly functioning families. Contributing factors are mentioned in the article.


This study aimed to establish Egyptian women’s attitudes and beliefs about female genital cutting (FGC) or mutilation. Methods used a questionnaire module about violence to a sub sample of N=5249 married women from a total of N=19,474 women who participated in the 2005 Egypt Demographic Health Survey. Women were interviewed to establish whether they had been exposed to marital violence in the year prior to the survey, their attitudes and beliefs about FGC, if they had abused their children physically, and the association of beliefs about FGC with maternal physical abuse.

The study adjusted for exposure to marital violence and other socio-demographic variables. Results indicated that, of the women surveyed, 16.4% and 3.4% had been exposed to physical and sexual violence, respectively, during the year prior to the survey. Also that 76% of the women surveyed intended to continue the FGC practice, and 69.8% had slapped or hit their children during the year prior to the survey. The author concluded that holding positive beliefs about the practice of FGC, or intending to continue it, was associated with maternal physical abuse and has significant public health implications in Egypt.

Gaza, Palestine. A study was conducted with an N=108 of 17 year old adolescents living in traumatic and stressful events. They were recruited through a community based random sample. Measurements used were: the Saleh Picture IQ Test to measure intelligence, WISC digit span to measure cognitive capacity, Eysenck’s Neuroticism Scale to measure Neuroticism, Reaction Index to measure PTSD, Beck Depressive Index to measure depressive symptoms, and other measures. The results indicated that those exposed to high levels of traumatic events, had poor cognitive capacity, and had high neuroticism in middle childhood would have PTSD symptoms. Low satisfaction with quality of life and depressive symptoms were conveyed among those with high levels of military violence during childhood and stressful life experiences.


Iraq, Kurdistan. Author comments on data presented in separate article by Ahmed Abdolbaghi. In the city of Dohuk school children were evaluated and 1/3 were found to have symptoms of PTSD. Kurdish Iraq has been a very violent locale during the regime of Saddam Hussein, but the invasion made things worse. Many parents of the same children studied have similar or higher rates of PTSD, depression and trauma. Conclusion is that psychological somatoform and psychoform dissociation, PTSD and secondary mental and somatic illness are a major public health problem in Iraq. Author also suggests implementation of complementary and alternative medicine for treating PTSD (abdominal breathing, MBSR, Qi-Gong, EFT-acupressure, etc.).


To evaluate for the prevalence of behavioral and emotional problems among Algerian children, 1045 Algerian children and adolescents 6 to 18 years of age were evaluated by administration of the French version of the child behavioral checklist (CLBL). Although males were found to have higher scores on externalizing behavior than did females, consistent with other international studies, the raw scores on “all problems” scales were much higher than those seen in most previous cross-cultural studies. It is unclear whether these high rates are secondary to exposure to civil conflict or unanticipated cultural factors. Additionally the use of a screening instrument written in French, rather than Arabic may have affected the results.


In Denmark, a study was conducted with refugee children and adolescents from the Middle East using structured interviews and the Achenback System of Empirically-based assessments (which covers aspects of adolescent psychopathology) with an N=122. This was done to analyze the differences between self and parents ratings of behaviors that are internalized and those
externalized, in order to identify predictors of these differences. The results indicated that parents and children differ in self-ratings, and this could be due to aspects other than inter-observer disagreement.


Gaza, Palestine. A study was conducted in areas undergoing continuous bombing. The instruments used included the Gaza traumatic checklist to measure experience of traumatic events, Children’s Revised Impact of Events Scale to measure PTSD, and Revised Children’s Manifest Anxiety Scale to measure anxiety. This was done with an N=100 families, 200 parents, and 197 children aged 9-18 years. Both adults and children had anxiety rates above the previous cut-off rates, high rates of PTSD, and a high number of experienced traumatic events.


In Palestine, a cross-sectional survey was conducted on a convenience sample of N=1185 adolescents drawn from secondary schools in the Western Bank and East Jerusalem using the Conflict Tactic Scales to measure adolescents witnessing and experiencing abuse in their families, and the Youth Self Report to measure psychological symptoms. The results indicated that exposure to violence led to significant amounts of variance in aggressive behavior, withdrawal, somatization, delinquent behaviors, social problems, and thought problems.


The aim of this study was to explore variations in how parents of Egyptian origins, who are living as immigrants in Denmark, compared to those living in Egypt, had perceived learning to live with a child with diabetes. This was done in order to identify potential problems related to immigration and cross-cultural care. Methods used semi-structured interviews with Arabic-speaking immigrant parents of N=6 children with diabetes in Denmark, and matched Egyptian parents of N=6 children in Cairo. The children were 7–16 years old and had been diagnosed in 2003–2005.

Data were analyzed using a phenomenographic approach, focusing on describing variations in the parents’ perceptions of the phenomenon ‘Learning to live with a child with diabetes’. Although the parents in the two countries shared many reactions and concerns, they responded and were affected in different ways. The immigrant parents experienced their parental role and the life of their diabetic child in a more doubtful and negative way. The authors concluded that parents with an immigrant background are likely to require special pedagogic, psychological and social support to learn to adapt, and come to terms with, the diagnosis of a chronic disease in a child. They recommended that the establishment of a trustful relationship between the immigrant families and the health-care professionals should be given high priority.

This is a population prevalence study of emotional and behavioral disorders among N=1186, 6–12 year old children in Minia, Egypt. Data was collected from teachers and parents using the Strengths and Difficulties Questionnaire (SDQ) with a 98% and 91% response respectively. Prevalence of abnormal symptom scores is reported for both parents and teachers. Prevalence of probable psychiatric diagnoses was measured using the SDQ multi-informant algorithm. The prevalence was then compared to those published in the UK data.

The prevalence of emotional and behavioral symptoms was high as reported by both parents and teachers (Abnormal total difficulties: teachers 34.7% (95% CI 32.0–37.5), parents 20.6% (18.2–23.2). Abnormal pro-social scores: teachers 24.9% (22.5–27.5), parents 11.8% (9.9–13.9)) but prevalence of probable psychiatric diagnoses was much lower (Any psychiatric diagnosis 8.5% (6.9–10.5); Emotional disorder 2.0% (1.2–3.0); Conduct disorder 6.6% (5.1–8.3); Hyperactivity disorder 0.7% (0.3–1.4)).

Comparison with UK data showed higher rates of symptoms but similar rates of probable disorders. Despite public, professional and political underestimation of child mental health problems in Egypt, rates of symptoms are higher than in developed countries, and rates of disorders are comparable. This epidemiological information about prevalence of child mental health problems is essential to inform policy and public health practice. The findings support greater investment in community and primary care prevention and treatment initiatives.


In Saudi Arabia, using stratified random sampling techniques for N=1552 adolescents were screened for mental health disorders using the SCL-90-R. Results indicated that phobic anxiety, interpersonal sensitivity, and obsessive-compulsive disorder (in that respective order) were the most frequent mental symptoms. The biggest factor affecting mental health was sociodemographic characteristics.


In Palestine and Israel, two groups of students, N=1,235 Palestinians and N=1,016 Israeli’s ages 14 to 17, were assessed for rates of exposure to conflict, relationship of exposure and posttraumatic symptoms, functional impairments, somatic complaints, and coping strategies. This was done through measuring: Posttraumatic stress symptoms using UCLA PTSD Reaction Index, functional impairment questionnaire, Somatic complaints checklist, and Brief COPE to measure coping strategies.

Results indicated that females relayed more distress than males and greater exposure was associated with more posttraumatic symptoms and somatic complaints. There was a
significantly higher rate of PTSD with Palestinian adolescents than there was with the Israeli adolescents. Those with higher rates of PTSD also had higher rates of functional impairments and somatic complaints. This article concludes with an emphasis on the need for school-based programs to aid children in coping and to help intervene in regards to their mental wellbeing.


Iraq: The focus on trauma alone, has led to the inadequate attention to factors associated with resilience. The study focused on concept of resilience in the children affected by the Iraqi war, and to their learning processes. School age students 10-18 years old were administered a Likert scale (0-3) based questionnaire composed of several sections; a) social demographic, b) depression, c) PTSD, d) GAD. A 75% of an N=48, (26 female, 22 male) responding were found to manifest the majority of symptoms associated with GAD and PTSD. Further analysis explores related rates of school attendance, school participation and rates of reported depression symptoms.


Iraq, Baghdad. During Jan–Feb 2006 N=600 school children aged 6-15 years were interviewed using the PTSD Module 1 of the Mini International Neuropsychiatric Interview with the goal of determining the prevalence of PTSD. During the previous 2 years 47% of those surveyed had experienced major traumatic events. The prevalence of PTSD was 14% with a male\female ratio of 1/3. The prevalence of PTSD was lower than expected suggesting that there is some form of stress-hardy adaptive response or behavior that has been learned by the Iraqi population over the last 3 decades of stressful traumatic events on a local and national level.


A random sample of N=1035 Lebanese children between the ages of eight and 17 years presenting to primary care clinics and attending summer camps were surveyed. Refusal rates were not documented, and therefore it is unclear how representative the sample was. The survey sought to determine the rates of child sexual abuse experienced by these children before, during and after the 33 day Israeli-Hezbollah war in 2006.

The study reported lifetime prevalence in child sexual abuse of 17.3%, which is similar to rates reported in studies from other parts of the world. Rates were reported to be equal for males and females before and after the war, but higher among boys during the war. It is unclear whether this higher rate among boys is due to underreporting, but the few other studies done in Arab countries report similar findings. The study also reported higher rates of child sexual abuse after the war in families of low social economic status, the fathers low educational level, large family size and poor family functioning.

In Syria, a cross-sectional study was conducted to measure the prevalence of obesity among adolescents, and to measure its associated factors. The sample was randomly selected from 6 different schools in Damascus, and contained N=776 adolescents ages 15-18 years. This study used a two stage sampling method; the first was a probability sample of the student population size, and the second was a random sample of sections of various grades in the school. The measures utilized were measurement of dietary intake through a 24 hour recall; subjects were weighed, height was measured, BMI registered, and waist circumference noted. Results indicated that 8.6% were estimated as obese or overweight. Those that were obese had higher carbohydrate and fatty acid intake than those that were of normal weight. Through regression analysis it was apparent that more boys were obese than were girls, and the higher the parents’ education was, the more likely the adolescent is to be obese.


Integrated Management of Childhood Illness (IMCI) is a cost-effective strategy that improves the quality of care through the use of evidence-based management protocols for the most common causes of childhood death and illness. Evidence-based clinical guidelines are critical to promoting rational use of medicines. Despite the large number of studies that assessed process and outcome of care delivered to children utilizing IMCI protocol, there is a scarcity of studies that assessed the effect of adopting IMCI on the drug use. The aim of the study was to examine the impact of adopting IMCI guidelines on drug use at one of the primary health care (PHC) centers, Alexandria, Egypt.

The results showed that correct drug choice, dose dosage from, route of administration were significantly higher in the clinic adopting IMCI than in the clinic not adopting it. Non-pharmacological remedies prescribed were significantly higher in clinic B than A. Average number of drugs/encounter was lower in clinic B than A and the difference between clinics was statistically significant. Difference between clinics regarding percentages of drugs prescribed by generic name, antibiotics prescribed, drugs prescribed from essential drug list, and drugs prescribed out of stock was significant. The conclusion is adopting IMCI strategy improved prescribing performance and treatment regimen.
2. Adults


A descriptive epidemiologic survey that studied N=5,788 displaced and non-displaced civilians during a period of active warfare in Beirut in 1982. The information was gathered by interviews and questionnaires of key informants in each family. The study reports that young children, older adults, females and those in poor health and having experienced losses in income were the groups most prone to be suffering from psychological distress. The authors suggest that social integration tended to protect individuals against psychological distress.

Further, the study suggests that the expression of psychological distress is diminished during times of active warfare, and is modulated by social integration or isolation after the conflict. Inconsistent results on the impact of loss, and the type of displacement on individuals were found in this study.


In Beirut, Lebanon, a report was written based upon a case control analysis of health problems. These problems were identified from a health survey conducted in Beirut in 1984. An n=2752 households were surveyed for headache, back pain, and ulcers and then matched and compared for sex, age, and neighborhood. Results indicated that headaches were more prevalent in educated females with a 1:3 ratio for married and non-married. In regards to back pain, alcohol consumption was 2:40, yet when compared to those unemployed it was 2:33. There were no reportable findings for the ulcers group. Interpretations and methodological critiques were also presented in the article.


In Khartoum, N=224 ages 22-35 years were assessed using Eysenck Personality Inventory, Self-Rating Questionnaire, and Sudanese rating scale of Anxiety and Depression, in order to estimate psychiatric morbidity in a Suburban area of Sudan. Results indicated no sex difference with the following: 40.3% had a psychiatric disorder, and only 16.6% had a diagnosis. The most common diagnosis was Depression 8.4%, followed by anxiety 3.4%, and, although rare, alcohol abuse was 0.4%.


In Saudi Arabia, N=80 Saudi males diagnosed with Social Phobia were assessed for Social Withdrawal using the Saudi adapted MMPI. In addition, they were symptomatically evaluated for both Anxiety and Depression using the Leeds Anxiety-Depression Scale. Results indicated no linear correlation between the levels of Anxiety and Depression with the levels of Social
Phobia. Also, different factors from the ratings correlated either positively or negatively with the Social Withdrawal scale.


A cross-sectional survey carried out in 1987 studied N=540 families in Beirut, Lebanon. The study sought to correlate several measures of personal and family distress with exposure to war related events. It was reported that violence, daily life disruptions and deterioration of economic conditions all contributed to stress within the families studied.

There was a high prevalence of physical symptoms reported in the study population, such as headache, back pain, faintness and dizziness. These were attributed to somatization, however this was not independently verified. There was also a high prevalence of mental health symptoms, although specific diagnoses could not be confirmed, given the study design. Problems with interpersonal relations were also reported by many of the subjects. On the other hand, the overwhelming majority of married couples rated their marital relationship is average or better. This may represent a reluctance to report personal matters to strangers. The study reported correlations between exposure to war related events and physical symptoms, as well as the attenuation of social relationships due to associated stress.


In Qatar, a study was conducted regarding top morbid fears conveyed by women in Qatar who are seeking therapy on an outpatient basis with an N=64 using clinical interviews. Results indicated that social phobic symptoms appeared in encounters with Qatari nationals who were scrutinizing the patient’s behaviors. Only 8% of women had Agoraphobia, and Coitophobia was present in newlywed women.


Most of the N=152 patients interviewed rated their consultations positively; but less than a tenth was completely satisfied. Components associated with patient satisfaction in developed countries (such as taking a history and advising how to deal with the conditions) also had the same impact in the United Arab Emirates. The doctor’s decision about whether or not to include a component was usually perceived as appropriate by the patients. Nonetheless, patients tended to give higher ratings to doctors who discussed issues with them and whom they perceived as empathic. Mothers consulting the doctor about their children’s health were especially sensitive to such factors. Among the issues discussed is whether doctors should more routinely be addressing social, family and affective issues; so shaping patients’ expectations that such components are appropriate and sometimes vital. Although difficult, given the lack of continuity of care in primary health clinics, the present study suggest that Emirati patients would be comfortable with, and many would value, inclusion of such components.

This article presents findings from a study that previously looked at divorce in Israeli-Arab societies from the perspective of Arab professionals and Israeli-Arab women living in Jaffa. Based on the experiences of N=9 divorced Muslim women, and N=6 professionals engaged in therapeutic work, this article explored the causes of divorce, coping, and adjustment post-divorce. Some factors leading to the divorce were: husband’s mental state, violence, and substance abuse.


A group of N=268 students completed questionnaires inquiring about their experience of war events. The groups were divided according to whether they had experienced many events (N=125 subjects) or few events (N=143 subjects). The Beck Depression Inventory, State-Trait anxiety inventory, and the civilian Mississippi PTSD Scale were administered. Although female students as a group consistently scored higher than males on measures of anxiety, students in the “many war experiences” group scored higher on all three measures of psychopathology than the students reporting low exposure.

Gender differences among the groups reporting war experiences were significant. The group reporting “few wartime experiences” was two thirds female, while the group with many wartime experiences was only one third female. This may reflect recall bias or a real difference between the groups, possibly due to the strong social imperative protecting women from danger during times of conflict.


In Palestine, study was conducted with 22 non psychotic Bedouin Arabs that utilize traditional and biomedical healing mental health care systems. The results indicated that the traditional system conveyed more therapeutic alliance while the biomedical system successfully addressed physical symptoms. Gender differences were found in both symptomatology and in patient construction of etiology.


This article is a review of studies conducted by Palestinians, Jordanians, and Israelis on the current state of substance abuse of Muslims, Christians, and Druze in the three regions. All in all there were 12 Israeli studies on Arabs, 11 Jordanian studies, and 4 Palestinian studies. The Israeli research in the region was regarding alcohol use, the Jordanian research was focused on illicit drug use, and the Palestinian research was still new. The results indicate that Israeli Arabs have higher rates of drug abuse than Israeli Jews, the Jordanian drug user has a higher level of
education than the Palestinian drug addict, and the Palestinian is more likely to use multiple drugs.


In Palestine, families of those that were affected during the Hebron massacre were interviewed and were administered the PTSD scale by two mental health professionals. This was done for N=23 wives, N=12 daughters, and N=26 sons of the heads of households that were massacred. The results indicated that 50% of daughters, 23% of wives, 23% of sons met the criteria for PTSD.


In Al Ain a study was conducted to evaluate the course of psychiatric disorders among an Arab community of N=245 subjects without a psychiatric diagnosis over a year long period using structured interviews with questions based on DSM-III-R mental disorders. This was done through assessing the rate by which psychiatric services were utilized, and by dividing the sample into the following: DSM-III-R disorder, no disorder, sub threshold to disorder, and reassessing them with SCID one year later. Results indicated the percentages of new cases, recovery rates, gender differences, and those that have no contact with psychiatric services.


In the UAE, a study was conducted to assess the fatigue levels in a group of patients in a Family Medicine Clinic with an N=254, and to examine the factors associated with these levels. The methods utilized were: fatigue scale, psychological questionnaire, and both their physical examinations and detailed history. Results indicated the following factors: fatigue was more prevalent in young anxious adults, depression was more prevalent in females, and severity of fatigue was also slightly affected by illiteracy, obesity, and lack of exercise. It was concluded that fatigue was influenced by anxiety and depression and used as a cultural idiom of distress.


In Djibouti City, Sudan, and Ethiopia sexual risk behavior surveys were conducted on 2 cluster samples of N= 48 clusters of adults aged 15-49 years. These risk behaviors including: marriage, regular partnerships, non-regular sexual partnerships, condom use, and other relevant topics. The survey was a 20-minute questionnaire that was translated into different languages. The results indicated the following:
- More reported non-regular partnerships in Djibouti City than in Sudan

- Non-regular partnerships with men with no schooling were less likely to report than other men in all the sampled populations.

- Women that were widowed, divorced, or separated reported more non-regular partnerships than other women.

- Condom use was higher in Djibouti than the other countries.

- Lower risk of HIV/STDs in Sudan than in the other countries.


In the UAE, a study was conducted regarding the prevalence of psychiatric morbidity on N=1394 adults that were systematically sampled from Al Ain community. The following instruments were used: a modified version of Composite International Diagnostic Interview (CIDI), and Self-Reporting Questionnaire (SRQ-20). Also utilized were structured interviews to measure Axis I diagnosis from the DSM-IV (SCID), and the ICD-10 to measure mental distress and lifetime prevalence. Results indicated that the lifetime prevalence rate of mental distress was 18.9% while the prevalence of psychiatric disorders, through ICD-10, was 8.2%. In addition, females were more likely to struggle with mood disorders and anxiety, while men were more likely to struggle with substance abuse.


In Al Ain, a study was conducted to examine the gender differences in depressive disorders in an Arab community of N=1394 that were systemically sampled. This was done through both a demographic questionnaire and a modified version of the Composite International Diagnostic Interview (CIDI). Results indicated that sex, life events, and chronic difficulties were risk factors for depression, and that females were found to be more at risk than are males.


The aim of this study was to establish the reliability of the Death Obsession Scale (DO)-designed by the author- among a total sample of N=762 Egyptians subjects (clinical and non-clinical samples) to construct norm-like information about this scale and to examine the differences between these samples including gender related differences. Seven groups (n = 765) of Egyptian normal (non-clinical), anxiety disorder patients, and patients suffering from schizophrenia (males and females), and addicts (males only) were selected. They were generally matched as groups according to age, occupation, and education. Cronbach’s alpha reliability statistics for the 7 groups ranged between .83 and .94, denoting from good to high internal consistency of the DOS.

This paper is a review of Jordanian court records from 1995. Of N=89 cases of homicide reviewed, N=38 were homicides involving women, and N=23 of these were classified as "honor crimes"; defined as killing due to actual or perceived violation of social norms. Sexual misconduct or perception of such misconduct was reported to be the most common reason given for the murder. Most often, a male relative (usually the brother) was the perpetrator.


This study is one of the very few in the Middle Eastern literature that looks at patients with a dual diagnosis. A retrospective chart review of N=1643 available charts of admissions to a Lebanese inpatient psychiatric unit. The charts of patients admitted for substance abuse were reviewed, and the presence of a co-morbid psychiatric history was assessed.

The male to female ratio of the sample was two to one, and 65% of the patients were judged to have a present or past history of coexisting psychiatric diagnosis and substance use. 35% of the sample was shown to suffer from substance abuse alone with no past or present history of psychiatric disorder. Alcohol was found to be the substance most abused overall, but females were more likely to abuse tranquilizers and stimulants than men. Males were more likely to have abused illicit substances such as cannabis or heroin.

In the co-morbid population, depression was the most common diagnosis, followed by bipolar disorder, anxiety disorder, and then schizophrenia. Polydrug abuse was found in 44.9% of the total sample, and the rate of polydrug use did not differ by gender. Personality disorders, particularly antisocial personality disorder was found in 48% of the sample.


A convenience sample of N=468 Omani's, comprised of senior medical students, the visiting relatives of patients of an inpatient psychiatric ward, and members of the general public answered questions related to their attitudes towards and perceptions of people suffering from mental illness. The survey instrument was completed individually by the medical students, while administration of the questionnaire was facilitated by research assistants for family members and members of the general public. Medical students and members of the general public were equally likely to identify evil spirits is the cause of mental illness. All three groups tended to disagree with genetic factors as the cause of mental illness. Student attitudes towards people with mental illness was otherwise moderately positive, as were the attitudes of the other two groups.

In Palestine, study was conducted with previously married Muslim men and woman that had been divorced through the Shariya court. This was done with an N=147 woman and N=165 of men using the Fisher Divorce adjustment Scale to measure the degree of adjustment post-divorce, and the Mental Health Inventory to measure general mental health. The results indicated that both universal and culture specific variables contributed to post-divorce adjustment for both men and women.


Arabs, Iranians, Turks, and Swedes were surveyed to assess etiologic factors associated with PTSD. Histories were collected from an n=115 patients using a questionnaire and a self rating instrument for PTSD, with no reference to specific trauma, in order to study the relationship between trauma and PTSD outcome. Of the n=115, 895 had experienced at least one trauma, 775 had multiple events. The prevalence of probable PTSD varied between ethnic groups: Iranians 69%, Arabs 59%, Turks 53% and Swedes 29%. Logistic regression analysis also showed that probable PTSD was associated with multiplicity of relatives’ traumas (OR=3.14), multiplicity of own traumas (OR=2.56) and belonging to an ethnic minority (OR=2.44), but not with gender.

Alansari B., (2003) Gender Differences in Anxiety Among Undergraduates from Sixteen Islamic Countries. Social Behavior and Personality, 34(6); 651-660.

Algiers, Egypt, Emirates, Iraq, Jordan, Kuwait, Lebanon, Morocco, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Sudan, Syria, and Yemen. Volunteer undergraduates (n=7,506) were surveyed to assess gender differences in anxiety. The instrument used was the Kuwait University Anxiety Scale (KUAS). Female groups had significantly higher anxiety scores in 11/16 countries than their male counterparts.


In Iraq, self-administered surveys and semi structured interviews were administered to N=98 physicians and hospital directors in order to assess physicians human rights abuses, identify the factors that facilitate abuse, and find methods of creating accountability in order to achieve prevention of the abuses. Results indicated that 71% of the respondents reported that torture was an extreme problem in Iraq. The majority of the respondents reported on peers conducting various forms of torture, with the minority admitting to torture themselves. 52% reported that these abuses were not willful; rather they were forced to do so by Saddams military. Physicians that refused to conduct torture would face anything from torture themselves to imprisonment. Respondents also advised increasing education, enforcing stricter laws, and increasing human rights in order to prevent future involvement of physicians in human rights abuses.

In Saudi Arabia, a study was conducted to evaluate if Primary Care physicians are able to correctly diagnose somatization and depression. N=431 primary care patients were screened for both somatization and depression in Riyadh in Saudi Arabia using the Patient Health Questionnaire (PHQ). The physicians blindly assessed these patients and later were evaluated for agreement between their assessment and the questionnaire. Results indicated that physicians assessed for somatization on a much higher rate than was needed, and also physicians, particularly for male patients, demonstrated poor diagnostic abilities especially between somatization and depression. This article later concludes that although the Saudi Physicians know the psychiatric disorders, they have poor diagnostic abilities.


In New Zealand, a report was written in an attempt to reduce barriers and difficulties of working with Somali clients by conveying their conceptions and expectations about mental health services. The main points presented in the article addressed the following:

- The majority views their resettlement and family reunification as the direct cause of their problems rather than war related trauma.
- In regards to dealing with mental and physical health problems, traditional treatments help in outlining the treatment and common use of Quran readings.
- Reliance on practitioners is caused by the somatization of their problems.
- Adequate treatment of Somali clients is hindered by lack of cultural skills and complications with specialist referrals.
- Translation and interpretation problems.


Kuwait, Saudi Arabia, United Arab Emirates, Oman, Egypt, Syria, Lebanon, Palestine (Nablus and Gaza), Jordan and Iraq. N = 3,064 were administered the Kuwait University Anxiety Scale (KUAS) in Arabic. Females had higher mean anxiety scores than their male counterparts in all 10 countries. Significant differences were found in 7/10 countries, differences were conjectured to be related to socialization processes, especially sex-typing and gender roles.


Examines changes in incidence and prevalence of road traffic fatalities in different regions of the world for the time period 1987-1995. Notes that traffic fatalities have risen steadily in the Middles East and North Africa since the late 1980s.

In Saudi Arabia, a study was conducted to determine the prevalence of Depression for patients diagnosed with Social Anxiety Disorder (SAD), and also to determine the correlation between the severity of SAD and depression symptoms on an N=98. This was done using a structured clinical interview, and the Leibowitz Social Anxiety Scale (LSAS) which measures the severity of SAD. Results indicated that 59% of those diagnosed with SAD were also diagnosed with other psychiatric disorders. Those with severe SAD were 4 times more likely to have Depression; however, early detection and treatment of SAD can reduce the chances of Depression.


In Palestine, a study was conducted in randomly chosen cities, refugee camps and resettled areas. This was done using an adapted version of Life Events and Social History Questionnaire to measure both PTSD and trauma events, and Peritraumatic Dissociative Experiences Questionnaire to measure Peritraumatic Dissociation. N=311 of women and N=276 of men ages 16-60 participated in the study. The results indicated that between both genders exposure to trauma was associated with PTSD, however, women reported a lower level of lifetime trauma than men. In regards to pertitraumatic dissociation, both men and women were made more vulnerable to hostility, yet men were more vulnerable to depressive symptoms.


In Jordan, focus groups were conducted in order to measure barriers to both the diagnosis and treatment of depression. This was done through 5 focus groups for a sample of N=50 primary health care practitioners providing services in public health clinics across Jordan. Results indicated that among the most important barriers to diagnosis and treating depression is: social issues, lack of education, lack of appropriate therapies, lack of patient acceptance of the diagnosis, and other pertinent clinical demands. The article concluded by stating that education about depression is a necessary tool in solving this problem in addition to providing services to destigmatize depression, as well as counseling services.


Jordan. N=395 married individuals (262 women and 133 men) were included in the study. The investigators asked women whether they had ever experienced specific acts of violence, and separately asked the men whether they had committed the same acts of violence against their wives. The lifetime prevalence rate of beating reported by women was 44.7% with 48.9% of men
reporting the perpetration of such violence. Prevalence estimates of beating in the past year were lower at about 17%. Women were slightly more likely to report more serious forms of assault than men were to report carrying out these acts.


In Iraq an N=2,700 were surveyed using a single-item measure of national pride. It was found that the only common factor linked to national pride for Sunnis, Shi’is, and Kurds is their attitude towards foreign Muslim militants. For Shi’is national pride was inversely related to their attitudes towards American moral values. For Kurds, national pride is linked to attitudes towards which Sunnis and Shi’is have consensus – attitudes versus foreign presence and disbanding the former Iraqi army, and a rejection of American moral values.


As part of the WHO World Mental Health Survey Initiative, a nationally representative survey was carried out in Lebanon in September of 2003. The survey found that 17% of the respondents met criteria for a specific DSM-IV psychiatric disorder within the past 12 months. Most commonly diagnosed was specific phobia (88.2% of all conditions), and major depression in 4.9%. Twenty seven percent of those with a diagnosis were classified as having a "serious" degree of impairment. Nearly half of the population studied reported exposure to war related traumatic events. Sociodemographic correlates of mood and anxiety disorders were female sex, middle age, and never married status.

Those persons reporting exposure to two or more war related traumatic events had an increased likelihood of anxiety or impulse control disorders. Only 11% of persons suffering from a 12 month disorder had ever sought treatment. Of those who had sought treatment, 85% of them sought treatment from the medical sector. The remainder was treated in alternative settings, such as faith- or religious-based healers or fortunetellers.

The authors note that the study’s 70% response rate makes it likely that the prevalence of mental disorders is underestimated. Other notable anomalies are the low proportion of cases of obsessive-compulsive disorder reported, and the high numbers of cases of social phobia that were classified as being serious. This raises the possibility of sampling issues or sociocultural factors that may have affected the results. The low numbers of people being treated in the formal medical sector likely represents a combination of the taboo nature of mental illness in Arab society, lack of awareness, as well as accepted cultural understanding and solutions of disorders that are classified as mental health issues in Western medical culture.


This is a cross-sectional study of a Southern Lebanese town that was occupied by Israeli troops for 20 years. A random sample of N=142 residents were assessed for psychiatric distress carried
out using the GHQ 12, and a number of other measures, including reported exposure to war related events. After adjusting for all variables, excess psychiatric distress was found to be associated with older age and lower education. The incidence of psychiatric distress as measured by the GHQ 12 was reported to be 26%. It was noted that certain social and religious groups in the town had been in collaboration with the occupying forces, and many of these individuals refused to be interviewed.


In Palestine, a study was conducted among a sample living in a city, another in a village, and another in a refugee camp using the Death Obsession Scale with an N=601. The results yielded General Death Obsession among women; however, among men it yielded Death rumination, Death dominance, and Death Idea repetition. That being said, Palestinian men and women yielded lower scores than those from Egypt, Syria, Lebanon, and Kuwait.


In Palestine, a study was conducted on N=65 Palestinian families from the Gaza Strip using Family Military Trauma to measure traumatic events families experienced during the first Intifada, Beck Depression Index to measure depression symptoms and Post Traumatic symptom. Other instruments used were: Resiliency Attitude Scales and Health Related Quality of Life. This was done to measure symmetries and asymmetries between families when exposed to traumatic events. Results indicated four types of families: resilient families, children’s strength families, ordeal families, and parental strength families. The resilient and ordeal families were symmetrical, whereas the parental strength families and the children’s strength families were asymmetrical.


In Palestine, a study was conducted on polygamous families residing in a Bedion Arab town in the south of Israel using in-depth structured interviews with an N=10 families consisting of 1 husband, two wives, and children. Results indicated that polygamy is painful for the wife in both well functioning and poorly functioning families. Factors contributing to that are mentioned in the article.


In the Netherlands, a study was conducted to identify risk factors associated with physical and mental health problems. This was done through a population based study of adults N=178,
selected randomly from 3 municipalities, from Afghanistan, Iran, and Somali who are refugees and asylum seekers. The measures used were the Harvard Trauma Questionnaire and the Hopkins Symptom Checklist.

Results indicated the following:
- 59.1% of Asylum seekers and 42% of refugees considered their health to be poor.
- In both the refugee and the asylum seekers groups, approximately half of the respondents had one or more chronic conditions.
- More asylum seekers had PTSD than did refugees.
- Those from Iran had higher rates of PTSD, Depression, or Anxiety.
- Being female was associated with higher rates of PTSD, Depression, and Anxiety.
- More post migration stress and less social support was associated with PTSD, Depression, and Anxiety.


This is a report written to identify the following: self-reported trauma, torture prevalence, demographic characteristics, and health and social problems associated with the trauma experience of Somali and Oromo refugee women. This was done using a cross-sectional population based survey with N=1134 of Somali and Oromo women living in USA. Results indicated the following:
- Physical, social, and psychological problems were associated with torture and high trauma exposures.
- Women with larger families reported: higher trauma, more torture, and more problems than the others.


In Juba, a town in southern Sudan, a cross-sectional random cluster survey was conducted to measure PTSD and Depression in relation to trauma exposure, displacement, and other demographics with an N=1242 of individuals over the age of 18 years. This was done using the Hopkins Symptom Checklist to measure symptoms of Depression and the Harvard Trauma Questionnaire to measure PTSD. Results indicated that 36% met the criteria for PTSD, and 50% met the criteria for Depression. Through multivariate regression analysis it was conveyed that with the outcomes of PTSD and Depression there was strong associations with gender, marital status, forced displacement, and trauma exposure. Those that will experience higher rates of trauma are: IDP’s, men, refugees, and those that have been displaced more than once.

A cross-sectional survey of low income married couples in Lebanon. The data was derived from information from N=2797 households. The study reported a strong positive correlation between involvement of the husband in some housekeeping tasks, and the wife's psychosocial health. Several other notable results were higher levels of distress among women in the labor force. This finding is consistent with other regional literature, and attributable to the “double burden” effect of work and social expectations for care at home. Another finding was the association between smoking and distress in women, particularly in relation to marital dissatisfaction. Again this phenomenon has been noted in regional literature and is likely an "externalization" of distress, as smoking among women in Arab countries is relatively taboo behavior.


The aim of this study was to understand the experience of Egyptian families caring for a relative with mental illness in Australia. N=7 participants from Egyptian background, caring for a relative with mental illness, were included. A hermeneutic phenomenological approach, informed by the work of Heidegger, was used. Qualitative methods used data collection through in-depth audio taped interviews conducted in the Arabic language, which were then translated and transcribed in English. Data analysis revealed five themes: Why did it happen? How do I protect my loved ones? What has it done to me? What has it done to us? How do I survive? Findings of the study have the potential to raise health-care professionals' awareness of the needs of Egyptian families, their beliefs, values, and coping with mental illness. This study reveals the perspective of addressing the complexity of migration in the way families of non-English speaking origins manage the experience of caring for members with mental illness. It sheds some light on the marginalization and misunderstanding of their needs.


In Iraq, there was a study to examine the extent of using the insanity defense to determine the length of detention of offenders in high security units, and to identify types of mental illnesses and offenses committed. The sample was N=65: N=56 participants from Ibn-Alhaithem Secure Detention unit for male offenders and N=9 of participants from Zeinab Secure Detention unit for females. Study was conducted through an interview followed by a ‘semi structured interview questionnaire based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), to determine the types of mental illness. The results indicated 69% of the mentally ill offenders had been detained for duration of less than 5 years, while 4.61 % being detained more than 15 years, and 23% detained in the hospital over the past year. Schizophrenia was the most frequent mental illness affecting 74% of the sample, followed by 12.4 % affected by delusional disorder. 70.7% of inmates had murdered someone making it the most common crime, while arson was the least common at 1.53%. Results also indicated the length of stay by mentally ill offenders in a high-security psychiatric hospital is relatively short, and that the insanity defense
is used at a higher frequency in Iraq than that of western societies; which might explain the high rate of repeated crimes by this population.


In Kuwait, a study was conducted to examine the test-retest, concurrent, and factorial validity of a single self-rating scale to assess religiosity. The Self-Rating of Religiosity, the Self-Rating of Strength of Religious Belief, and the Hoge scale of IRM was used with an N=277 of Kuwaiti Muslim undergraduate men and N=304 undergraduate woman (Total=531). The results indicated a SRR of (0.89), which had strong correlations with both SRSRB (.577) and IRM(.498). A striking component was extracted in which the SRR had a high loading of (0.84). Therefore, the study was concluded that assessing religiosity with a single item scale is reliable, valid, and viable in community surveys.


Iraq / United States. A retrospective study of Iraqi immigrants in the United States arriving after the Gulf War (early 1990s) was conducted. Medical charts were examined and compared to American citizen, non-immigrant controls. N=375 Iraqi immigrant clients had their charts examined in a clinic that serves Arab-Americans. There was higher prevalence of PTSD and other co-morbid health problems found in Iraqi refugees than in the control population whose charts were examined. Authors suggest further research on immigrant populations with trauma histories to better facilitate treatment.


Iraq and Syria. This is an article exploring the implications of the Iraqi refugee crisis for the country of Syria. Sources of data include United Nations High Commission for Refugees, Dutch Red Cross, Syrian government, and US Department of Homeland Security. Detailed socio-political and historical perspectives that cover: refugee’s social features and humanitarian conditions, Syrian government response (entry and visa policies, economic and financial impact, security response, humanitarian aid and Syria’s relations with foreign donors), potential for conflict spillover (Iraqi political factions and activity in Syria, refugee’s propensity for violence, potential for refugee violence fuelled by socioeconomic destitution), etc.


In Kuwait, the Sahin-Francis Scale of Attitude and the Sahin Index of Islamic Moral values were tested on a sample of N=1,199 of that 603 were males and 596 were females all from secondary schools in six different educational districts in Kuwait. The data collected supported the internal consistency reliability and construct validity of both instruments.

Gaza, Palestine. A study was conducted in areas undergoing continuous bombing. The instruments used included the Gaza traumatic checklist to measure experience of traumatic events, Children’s Revised Impact of Events Scale to measure PTSD, and Revised Children’s Manifest Anxiety Scale to measure anxiety. This was done with an N=100 families, 200 parents, and 197 children aged 9-18 years. Both adults and children had anxiety rates above the previous cut-off rates, high rates of PTSD, and a high number of experienced traumatic events.


In Saudi Arabia, a study was conducted measuring the patients’ beliefs about causes of their physical symptoms, and whether or not having a psychological problem affects those beliefs. N=224 of patients completed a questionnaire developed to measure the aforementioned factors. Results indicated that patient’s religious and supernatural aspects of their culture had an impact on their beliefs in regards to their physical and psychological symptoms.


In Saudi Arabia, a study was conducted to evaluate the pattern of disability among patients. A cross-cultural study was carried out on those admitted to the Rehabilitation Center N=850. Results indicated that disability was more common on non-traumatized males ages 16-45 years, and that paralyzed patients were more likely to stay in the hospital longer. Ultimately, it was concluded that home care programs needs to be expanded in order to reduce hospital costs on both the patient and the administration.


In Sweden, a study was conducted to identify the impact of various models of stress on refugees pre and post settlement. N=124 Middle Eastern refugees were sampled using a questionnaire, Symptoms of Common Mental Disorders (GHQ), and Core Symptoms of Post-traumatic Stress (CPTS). Results indicated that pre-settlement trauma exposure had the strongest impact.


In Sweden, a study was conducted on a group of males for symptoms of PTSD or PTSD hypothetical clusters. N= 161 men were included in the study: N=36 Iraqi male refugees who had long lasting torture experience as adults; N=42 Swedish prisoners with early childhood trauma; N=31 Arab refugee men without self-reported torture or violence; and N=52 non-traumatized Swedish males. The results conclude the individuals who suffer prolonged torture
experiences or had early childhood trauma exposure showed impaired personality profiles, and enhancement of cognitive, affective, and behavioral vulnerabilities.


In the Aseer region of Saudi Arabia, an audit was conducted in two primary health care centers to evaluate how well Hypertension was managed. To assess the health outcome and to audit the process, a checklist was made from the Quality Assurance Manuel. A study was conducted on N=120 of the 256 hypertension files in both health care centers. Results indicted that 92% had primary hypertension, and 25% had a family history of hypertension. It was also reported that even though the recordings were not perfect, there were no statistical differences in socio-demographic data. The study concluded that the two Primary Health Care centers were not in accordance with the recommended national standards due to the following reasons: lack of updated system, provision of laboratory services, and recall system. In order to improve care, these factors need to be addressed.


Resettled Sudanese refugees in New Zealand and Australia were studied for impact of post-migration trauma, resettlement, and social support on current mental health of N=63 resettled refugees. Measures included: Hopkins Symptom Checklist, Harvard Trauma Questionnaire, and Post Migration Living Difficulties. Results indicated that 25% high levels of psychological distress, while 5% met the criteria for PTSD. Perceived social support, pre migration trauma, family status, and gender were predictors of mental health outcomes.


At the Behman hospital in Egypt, adult inpatient clients were assessed for substance abuse using EBASS with an N=324 of inpatients with mental disorders due to drug/alcohol abuse. Demographics of the patients were 91.4% male and 91.9% Muslim. Families supported 48.9%. Results indicated the most common substances used were cannabis (93.4%), alcohol (89.7%), psychotropic medications (80.9%) and heroin (78.4%). Anxiety (80.1%) and depression (77.4%) were found common in the patients.


In Egypt, a study investigated the association of substance use with daily hassles and coping strategies using questionnaires that included DHI, CSF and Souef’s Drug Abuse Patterns Inventory with an of N= 300 male Egyptian manufacturing workers. Results indicated that 20.7% drank alcohol, 16% used psychotropic medications and 17% used illegal drugs. Of those
using multiple substances 8.7% used psychotropic medication and illegal drugs, 8% used both psychotropic drugs and alcohol, and 12% used both alcohol and illegal drugs. Daily hassles were associated with substance abuse. However positive coping strategies reduced the likelihood of using substances, while negative coping strategies increased the probability of using some sort of substance.


Iraqi-Mandaean refugees, N=315, in Australia were surveyed to assess post traumatic experiences and resettlement difficulties. Mental health outcomes, including PTSD and depression were also assessed. Instruments used included the Post Migration Living Difficulties Checklist (PMLD), the Harvard Trauma Questionnaire, and the Hopkins Symptom Checklist adapted for refugees (HSCL-25). Fear of cultural extinction was measured by use of five items developed by the researchers. Using a scale of 1=not worried at all, to 4=extremely worried, participants were asked to rate how worried they were that the Mandaean religion and culture would cease to exist in the future. Four additional items with yes/no responses assessed participants’ beliefs regarding the reason for potential extinction: “The Mandaean religion is closed to others,” “The Mandaean community is spread world wide,” “Mandaeans are being persecuted,” and “Mandaeans are the target of genocide.” Results are discussed in pp. 230-231 of the article.


An analysis of nationally representative data of N=560 Jews and N=182 Arabs in Israel was conducted with a prediction that exposure to violence and terrorism would result in psychosocial and economic loss, in addition to the fact that distress related to ethnocentrism and violence would increase posttraumatic growth. The results indicated that psychosocial resource loss, social support, and posttraumatic growth had both direct and indirect effects on psychological distress. Also, political attitudes were not related to posttraumatic or depressive symptoms.


In Palestine, a study was conducted on a national sample of Jews and Arabs undergoing violence using a structured survey instrument and a 17-item PTSD Symptom Scale. Also used was 10-item scale by Norris to measure loss of economic and psychosocial resources due to the second Intifada. This was done on an N=709 of Jews and Arabs. Results indicated that less psychosocial resource loss and majority status were most indicative of resilience and resistance; this is followed by socioeconomic status, support of friends, and posttraumatic growth.

29

In Palestine, study was conducted among N=7 recruited Israeli families and N=9 recruited Palestinian families with at least one civilian family member was killed during violent attacks. Semi structured interviews were conducted, of which 6 of the questions asked were about the experience and long-term consequences. The narratives conveyed similarities between the Palestinian and Israeli families in relation to coping, influence on family interaction, and the perception of death.


Africa, the Americas, Asia, Europe, Middle East, and the Pacific. N = 72,933 community dwelling adults were interviewed using face-to-face household surveys to study cohort-country variables in gender differences in lifetime DSM-IV mental disorders, across 15 countries in the WHO-World Mental Health Survey Initiative, seeking to determine variable correlations to female gender roles (as measured by aggregate patterns of female education, employment, marital timing, and use of birth control). In all cohorts and countries women had more anxiety and mood disorders than men, and men had more externalizing and substance abuse disorders than women.


Saudi Arabia, Qatar, Libya, Kuwait, Jordan, UAE, Bahrain, Tunisia, Iraq and Sudan. Study searched and reviewed published literature on stroke in these Arab countries covering date range of 1983-2008, 31 articles were found. Annual stroke incidence ranged from 27.5-63 per 100,000 and prevalence between 42-68 per100,000. Ischemic stroke was most common in all series. However one series of cases reviewed in Sudan had a prevalence of 41% hemorrhagic stroke, more similar to Asian country statistics. Hypertension, diabetes, hyperlipidemia, and cardiac disease were the most common risk factors associated with stroke. Case-fatality at 30 days was between 10% and 17.5%.


The objective of this study was to assess for the existence of therapeutic misconception (TM) amongst Egyptians. Therapeutic misconception in this context was defined as the failure of research participants to appreciate the difference between research and medical care. Methods used a semi-structured interview guide to elicit the knowledge, attitudes, and perspectives of Egyptians regarding medical research. Subjects were recruited from the outpatient settings (public and private) at Ain Shams University in Cairo, Egypt. Interviews were taped, transcribed, and translated. The content of the transcribed text were analyzed to identify the presence of a TM, defined in one of two ways: TM1 = inaccurate beliefs about how individualized care can be compromised by the procedures in the research and TM2 = inaccurate appraisal of benefit obtained from the research study.

Contrasts data from Egypt, Kuwait, Lebanon and Syria with data from Spain, UK, and USA. Study focused on sex/gender related differences in data gathered with the Arabic Scale of Death Anxiety (ASDA). N = 2,978 undergraduate volunteers participated while residing in their countries of origin and survey was administered in their native tongue. Sex-related differences on the ASDA were found statistically significant in all countries except the UK, with women having higher mean scores than their male peers. Except for Lebanon, all Arabs had significantly higher mean ASDA scores than their Western counterparts. Explanations include difference in socio-economic status of most Arabs v. Westerners, higher emotional responsiveness of Arab personae, and differences in individualism, collectivism, and secularism in the respective countries sampled.


This study aimed to assess the attributional style among Egyptians with schizophrenia. The attributional style is one domain of social cognition that involves perceiving, interpreting, and generating responses to others’ intentions and behaviors in different situations. The study took place in a psychiatric hospital in Egypt. N=150 from eight psychiatric wards were randomly selected. Data was collected using the Ambiguous Intention Hostility Questionnaire (AIHQ), the attributional style interview schedule, and the sociodemographic/clinical data sheet. The attributional style of the studied participants with schizophrenia, regarding their perceived social problems, tended to be external, unstable, and specific. It tended to be related to specific causes which were mostly externally attributed to other people and to circumstances, and were perceived not to persist in the future. Subjects tend to blame other people for negative events if these events are perceived to cause intentional harm. In this study, the authors acknowledged the limitations including the lack of standardization of the used tools for the Egyptian culture. In addition, no comparative groups were included and no transcultural discussion was provided.


The aim of this study was to assess consanguinity as a risk factor for psychoses among a subset of Egyptian patients. The authors extended their earlier analyses of parental consanguinity rates among patients with bipolar I disorder (BP1), to schizophrenia (SZ) in the same population. Methods used a case–control study conducted at Mansoura University Hospital, in Mansoura, Egypt (SZ, n=75; controls, n=126, and their available parents). The prevalence of consanguinity was estimated from family history data (‘self report’), followed by DNA analysis using short and repeat polymorphisms (STRPs, n=63) (‘DNA-based’ rates). Results show self-reported consanguinity was significantly elevated among the patients (SZ: 46.6%, controls: 19.8%, OR 3.53, 95% CI 1.88, 6.64; p=0.000058, 1 d.f). These differences were confirmed using DNA-
based estimates for coefficients of inbreeding (inbreeding coefficients as means ± standard error, cases: 0.058±0.007, controls: 0.022±0.003).

The authors concluded that consanguinity rates are significantly elevated among Egyptian SZ patients in the Nile delta region. The associations are similar to those observed with BP1 in their earlier study. This raises public health concerns to the substantial risk associated with consanguinity. The study also paves the way for gene mapping studies.


Middle East - (Bahrain, Cyprus, Egypt, Gaza Strip, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Turkey, UAE, West Bank and Yemen). Review of growing body of literature on trauma and PTSD with the goal of bringing to light literature that may be relevant and timely for those researchers, clinicians and policy makers who are concerned with addressing the mental health care needs of affected Middle East populations. Data from Israel, Palestine and Iran is plentiful, while few to no studies exist for the populations affected in Cyprus, Egypt, UAE, Bahrain, Oman, Qatar, Jordan, and Syria.


This study aimed to estimate the associations of social learning in childhood, marital resources and constraints, community gender stratification, and norms of women’s risk of physical domestic violence in a national sample of N=5,272 married Egyptian women. The sample comes from the 2005 Egypt Demographic and Health Survey [EDHS] (El-Zanaty and Way 2006). The Demographic and Health Surveys [DHS] are nationally representative, cross-sectional household surveys that have collected data on women of reproductive age (15–49 years) and their children in more than 80 low-to-middle-income countries since 1985. The DHS provide national estimates of domestic violence against women in more than 25 of these countries. The 2005 EDHS is the first national survey in the Arab Middle East that included multiple questions on domestic violence, as well as relevant individual, partner, and community-level data.

Results showed that women who experienced corporal punishment or maltreatment as children had higher odds of such violence. An increase in women’s household standard-of-living was associated with lower odds of such violence. Wives with unusually less and unusually more schooling than their spouse had higher odds of such violence, and the wives of paternal cousins had lower odds of such violence. Measures of community gender stratification and norms were inconsistently and weakly associated with such violence. Women’s marital resources and constraints accounted for most of their risk of experiencing physical domestic violence.

Rahim, T., (2010). Rate of Alcohol and Substance Use Disorders Among the Journalists in Erbil City. The Arab Journal of Psychiatry. Vol.21, No.1; 50-60.

Iraq, Erbil City. Using the Mini International Neuropsychiatric Interview 5.0 (M.I.N.I.), an N=200 journalists, and N=486 other professionals were interviewed between Sept and Nov 2008 with the goal of assessing rates of EtOH and substance abuse. Amongst journalists, 34.5% were EtOH dependent, and 7.5% were abusers, another 1% were substance dependent, and 1% were substance abusers. Amongst the non-journalists 7.6% were EtOH dependent, and 2.26%
were abusers, 1.44 were substance dependent and 1.02% were substance abusers. 50% of journalists and 75% of non-journalists who were either substance dependents or abusers, wereEtOH dependents or abusers at the same time. Male gender and higher levels of education were associated with higher dependency and abuse rates in both groups surveyed.


A convenience sample of N=206 male and female undergraduate students at the American University Beirut completed questionnaires that explored patriarchal attitudes, beliefs about wife beating, religion as a social identity, as well as childhood experiences with family violence. A total of 10 separate scales, some adjusted for cultural context, and others not, were administered.

Among the findings reported were that younger students were less likely to endorse wife beating than older students, students from more affluent families were likely to have more benevolent attitudes towards women, and that over 75% of the sample had never witnessed violence between their parents.

Over 50% of the sample strongly opposed wife beating except in the situation where the wife was sexually unfaithful. Of the sample, 81% agreed that the husband was always responsible for his violent behavior. However, male students were less likely than females to hold husbands accountable. Further, those endorsing a more traditional view of women’s roles were more likely to justify wife beating. There was also suggestion that students took into account the context of violence with fewer students willing to harshly punish the perpetrator, less willing to consider stereotyped legal and policy remedies for the situation, and more likely to endorse family and community interventions.


A convenience sample of N=300 male and female university students at the American University of Beirut completed several surveys that explored their attitudes towards rape victims, attitudes towards the opposite sex, as well as an assessment of their degree of self reported religiosity.

In general, participants were inclined to believe all rape victims regardless of the scenario presented. Predictors that individuals would endorse myths about rape were reported to be negative attitudes towards rape victims and hostile sexism. The study highlights the need for development of culturally appropriate scales and surveys assessing issues around sexuality, and also the problems associated with carrying out studies on sensitive topics in a representative population.


This manuscript focuses on the development of undergraduate medical education in the six Gulf Cooperation Council (GCC) countries. The development of medical education is relatively new dating from the 1960s. N=14 senior medical faculty from the GCC’s medical colleges were interviewed on 7 topics related to undergraduate medical education. The survey respondents
provided information on 27 medical colleges. In the article medical colleges in Saudi Arabia, UAE, and Oman are reviewed. Evaluation of the actual implementation of well-designed medical curriculum doesn't exist and still needs to be conducted.


In Syria, a cross-sectional population based survey was conducted to examine physical impairment’s association with Depression, gender, and other socio-demographic characteristics on an N=2038 of adults ages 18-65 years. Computer-based questionnaires were used, including the 12-item World Health Organization adapted version used to measure physical impairment. Also obtained were self-reported physician diagnosed Depression and chronic disease. Results indicated that high physical impairment was associated with being female, low socioeconomic status, and depression. In addition, depression was viewed as being mediated by co-existing chronic disease when associated with physical impairment.


This article strongly assesses the pattern of use of Dokha (Iranian tobacco with aromatic leaves and herbs) among UAE medical students. A total of N=104 students between 17-27 years of age participated (78 females). A self-administered questionnaire was used. Dokha use was higher among males; 11.5% reported being lifetime users and 25% had smoked continuously in over the past month. The study brings to light the dangers of smoking in the next generation of medical practitioners.


Diabetes is associated with increased risk of depression and anxiety. UAE has one of the highest rates of diabetes in the world, second only to Nauru. The objectives of this study were to estimate the prevalence of psychiatric distress and to identify associated risk factors in a cross-sectional study of diabetic persons in Sharjah UAE (N=347). Results indicated that persons with higher scores on a mental health scale (i.e. k-6) had poorer diabetic control and were more likely to have eye and vascular/neurological complications from their diabetes. Authors claim that their results highlight the importance of assessing and treating co-morbid mental health problems in diabetic patients. Authors discuss the impact of traditional beliefs of diabetic management.


To assess the Knowledge Attitude and Practice (KAP) of MOH primary health care physician in the management of Type 2 Diabetes Mellitus (DM). A cross sectional survey was conducted
between April and October 2010 on MOH Primary Health Care physicians working in Al Hassa district of Saudi Arabia by filling up of pre-tested specially designed questionnaires focus on Knowledge, Attitude and practice towards Type 2 DM patients. This study explored several aspects of diabetes related KAP of Ministry of Health appointed GPs and identified the need for improvement in their knowledge, attitude and practices for treating Type 2 DM patients. It is recommended that awareness and education program is necessary to update the GPs (especially those working in urban areas, females and Saudi physicians) on epidemiology, diagnostic criteria of type 2 diabetes, DSME, effective treatment of diabetes, practice of insulin injection, adherence to the Clinical Practice Guidelines (CPG) and prevention of the complications of type 2 diabetes. It is of paramount importance that CPG be made available to each physician.


This study aimed to determine if lack of seatbelt compliance was a major risk factor associated with high mortality rates for road traffic collisions in the gulf co-operation council countries (GCC). For all the GCC countries (N=6) compare to high-income countries (N=34). The median road traffic death rates, occupant death rates, and seatbelt non-compliance were significantly higher in the GCC countries. Seatbelt non-compliance was the most significant factor associated with mortality. Authors recommend that enforcement of seatbelt to be mandatory in the GCC.
3. Elderly


In Palestine, a quasi-experimental design was set up to compare abused elders with non-abused elders from the same population, in an effort to understand elder abuse and neglect. The study was conducted using community types to measure Urbanization and five measures of a social network to measure social isolation with an N=120 of abused elders and N=120 of non-abused elders. The results indicated that Arab-Israeli elders who were abused were more socially isolated than those that had not been abused. In addition, those abused elders that resided in cities had lower social networks than those that resided in rural or semi urban areas.


In the UAE, a study was conducted to assess the correlates of mental disorders among the elderly in relation to prevalence, nature, and sociodemographic correlates. A random sample of N=610 those over the age of 60 were recruited and interviewed in their household. The measures used were as follows: Geriatric Mental State Interview (analyzed by AGECAT) and a short demographic questionnaire. Results indicated that:

- Depression 20.2%, Anxiety 5.6%, and hypochondriasis 4.4%
- Correlate to organic syndromes (cognitive impairments without dementia) was age
- Correlates to the rest of the mental disorders were female gender, single (separated, divorced, or widowed), and low income.


This is an article that explores a number of encounters between older Libyan patients and younger Libyan physicians using linguistic analysis and semi structured interviews. This study highlights the formalized, stylized, and highly social interactions that persist between these actors despite the introduction of a new hierarchy (the physician-patient relationship) into their interaction.


This study assessed the prevalence of depressive symptoms and antidepressant medication use among elderly with and without type 2 diabetes and the association between depression and
diabetes complications. Research design and methods: In 2004–2006, the Primary Health Care research in Type 2 Diabetes Study applied the Beck Depression Inventory II (BDI-II) to N=458 participants with Type 2 Diabetes (47% male, aged 65±8.9 years, type 2 diabetes duration 19±8.7 years) and N=546 participants without diabetes (non diabetic group) (51% male, aged 59±8.7 years). Use of antidepressant medication was self-reported. Depressive disorder was defined as a BDI-II score>14 and/or use of antidepressant medication. Occurrence of diabetes complications (retinopathy, blindness, neuropathy, diabetes-related amputation, and kidney or pancreas transplantation) was self-reported.

Results revealed that Mean BDI-II score, adjusted for age and sex, was significantly higher in participants with Type 2 Diabetes than in non-diabetic participants (least-squares mean ± SE: 7.4±0.3 vs.5.0±0.3; P<0.0001). The prevalence of depressive disorder (as defined by BDI-II>14 and/or antidepressant use) in participants with Type 2 Diabetes was significantly higher than that of age- and sex-adjusted non-diabetic participants (32.1 vs. 16.0%, P<0.0001). Type 2 diabetic participants reported using more antidepressant medications (20.7 vs. 12.1%, P=0.0003). More type 2 diabetic than non-diabetic participants were classified as depressed by BDI-II cut score (17.5 vs. 5.7%, P<0.0001) or by either BDI-II cut score or antidepressant use (32.1 vs. 16.0%, P<0.0001). Participants reporting diabetes complications (n=209) had higher mean BDI-II scores than those without complications (10.7±9.3 vs. 6.4±6.3, P<0.0001).

**Al-Khandari, Y. (2011) Religiosity, Social Support and Health Among the elderly in Kuwait. Journal of Muslim Mental Health, Vol 6 (1).**

In Kuwait, there was a study to evaluate the correlation between religiosity, social support and health using trained nurses to collect data with an N= 1,472 of adults over the age of 60 from six different home care units. Data indicated that individuals that responded with high religiosity had strong social support from their relatives and friends and more frequency of contact. Data also indicated that respondents with a high degree of self-reported religiosity had a lower blood pressure than respondents who indicated they had a low degree of religiosity.
4. Women


This study conducted a large-scale epidemiologic survey in Southern Iraq to determine the (1) extent of human right abuses and (2) local attitudes towards women's health and human rights. A cross-sectional randomized survey of Iraqi men and women was conducted in 2003 after the 1991 Gulf War’s Shiite uprising in the south. A semi-structured interview developed by the authors was used. Results (N=1991 respondents) represented 16520 household members. Overall 47% of those interviewed had experienced one or two episodes of extreme violence. Local men and women did not support a full range of human rights aimed for women; 50% of the men and women agreed that a husband has the right to beat his wife.


In Qatar, a study was conducted regarding top morbid fears conveyed by women in Qatar who are seeking therapy on an outpatient basis with an N=64 using clinical interviews. Results indicated that social phobic symptoms appeared in encounters with Qatari nationals who were scrutinizing the patient’s behaviors. Only 8% of women had Agoraphobia, and Coitophobia was present in newly wed women.


This article presents findings from a study that previously looked at divorce in Israeli-Arab societies from the perspective of Arab professionals and Israeli-Arab women living in Jaffa. Based on the experiences of N=9 divorced Muslim women, and N=6 professionals engaged in therapeutic work, this article explored the causes of divorce, coping, and adjustment post-divorce. Some factors leading to the divorce were: husband’s mental state, violence, and substance abuse.


In Palestine, families of those that were affected during the Hebron massacre were interviewed and were administered the PTSD scale by two mental health professionals. This was done for N=23 wives, N=12 daughters, and N=26 sons of the heads of households that were massacred. The results indicated that 50% of daughters, 23% of wives, 23% of sons met the criteria for PTSD.

In Palestine, study was conducted on a national systemic random sample of N=2410 women from the West Bank using the First Palestinian National Survey on Violence Against Women. Results indicated that during the 12 months preceding the study, women had experienced physical, sexual, and economic abuse. In addition, results indicated that with higher levels of psychological distress, anger, or fear the rates and patterns of abuse increased.


In Palestine, a study was conducted on a systemic random sample of N=1334 women in the west bank and the Gaza strip, using the Second Palestinian National Survey on Violence Against Women. The results indicated that 87.2%, 54%, 40%, and 44% conveyed that 12 months preceding the survey they have experienced one of more acts of psychological, physical, sexual, economic abuse once or more by their husbands. In addition, low self-esteem was explained by their experiences of abuse.


A self-administered questionnaire was completed by a convenience sample of 356 low-income Jordanian women. Women generally supported statements justifying wife beating in certain circumstances in which it was perceived that women had violated social norms. Women who were employed, and women with a higher level of education were less likely to subscribe to these beliefs. Levels of self reported religiosity were not a predictor of subscribing to these beliefs. In addition most women rejected intervention by extra familial agents (e.g. the police) in cases of wife beating.


This paper is a review of Jordanian court records from 1995. Of N=89 cases of homicide reviewed, N=38 were homicides involving women, and N=23 of these were classified as "honor crimes"; defined as killing due to actual or perceived violation of social norms. Sexual misconduct or perception of such misconduct was reported to be the most common reason given for the murder. Most often, a male relative (usually the brother) was the perpetrator.

This study was conducted to evaluate the presence and severity of disordered eating in Western populations to a convenience sample of N=106 Omani teenagers, N=87 non-Omani expatriate (mostly Western) teenagers residing in Oman, and N=100 Omani adults. The Eating Attitudes Test (EAT), and the Bulimia Investigatory Test (BITE) were translated into Arabic and administered to the Omani subjects, and the original English versions of the scales were administered to the non-Omani’s.

Thirty three percent of the Omani teenagers (29% of females and 36% of males) showed a propensity for anorexic behavior, while only 9% of the non-Omani’s did. Among the non-Omani’s, 18% of the teenagers reported bulimic behavior as opposed to 12% of the Omani teenagers. Fewer than 2% of the Omani adults reported elevated levels of either type of behavior.


In Syria, a study was conducted to determine the socio-demographic correlates of mental health for women with a low-income background. A randomly selected sample of N=412 from primary care centers in Aleppo, Syria ages 20-37 years were studied using a specially constructed questions that utilized SRQ-20 non-psychotic items and other questions relevant to the women's mental health. Results indicated that 55.6% were undergoing psychiatric distress. In addition, the following were predictors of mental health: physical abuse, education, polygamy, residence, age, age of marriage. Predictors of the worst outcomes were: illiteracy, polygamy, and physical abuse.


In Aleppo, Syria a randomly selected study of N=411 women ages 20-36 years old was conducted to determine physical abuse and its sociodemographic characteristics in regards to low-income women. A specially constructed survey was used that utilized SRQ-20 and other questions regarding physical abuse, and demographic information. Results indicated that 23% were physically abused at least 3 times during the past year, and 26% of those were married women. Meanwhile, those abused at least once weekly were 3.3% of married women. Although women's education was the most modifiable factor, other factors included age, marital status, religion, and mental distress.


In Egypt, Palestine, Israel, and Tunisia research on domestic violence provided considerable evidence that it affected a large percentage of the women. In Egypt N= 14,779 women were sampled. In Palestine two national surveys were taken N1= 2,410 and N2= 1,334, in Tunisia N=
500 women sampled. The article concludes domestic abuse and acceptance cannot be attributed solely to religion but mainly to patriarchal ideas.


This is a cross-sectional study involving N=493 randomly selected women from the capital city of Jordan. The Beck Depression Inventory (BDI) was administered, and the scores were correlated with answers from a questionnaire that explored negative life events. Self-reported financial problems, independent of actual income bracket, marital separation, self-reported poor health, and depressive symptoms were the largest contributors to higher BDI scores among this group of women.


This is a report written to identify the following: self-reported trauma, torture prevalence, demographic characteristics, and health and social problems associated with the trauma experience of Somali and Oromo refugee women. This was done using a cross-sectional population based survey with N=1134 of Somali and Oromo women living in USA. Results indicated the following: physical, social, and psychological problems were associated with torture and high trauma exposures, and women with larger families reported: higher trauma, more torture, and more problems than the others.


A cross-sectional survey of low income married couples in Lebanon. The data was derived from information from N=2797 households. The study reported a strong positive correlation between involvement of the husband in some housekeeping tasks, and the wife's psychosocial health. Several other notable results were higher levels of distress among women in the labor force. This finding is consistent with other regional literature, and attributable to the “double burden” effect of work and social expectations for care at home. Another finding was the association between smoking and distress in women, particularly in relation to marital dissatisfaction. Again this phenomenon has been noted in regional literature and is likely an "externalization" of distress, as smoking among women in Arab countries is relatively taboo behavior.

**Afifi M., Von Bothmer, M., (2007).** Egyptian women’s attitudes and beliefs about female genital cutting and its association with childhood maltreatment. *Nursing and Health Sciences, 9*, 270-276

This study aimed to establish Egyptian women’s attitudes and beliefs about female genital cutting (FGC) or mutilation. Methods used a questionnaire module about violence to a sub sample of N=5249 married women from a total of N=19,474 women who participated in the 2005 Egypt Demographic Health Survey. Women were interviewed to establish whether they
had been exposed to marital violence in the year prior to the survey, their attitudes and beliefs about FGC, if they had abused their children physically, and the association of beliefs about FGC with maternal physical abuse.

The study adjusted for exposure to marital violence and other socio-demographic variables. Results indicated that, of the women surveyed, 16.4% and 3.4% had been exposed to physical and sexual violence, respectively, during the year prior to the survey. Also that 76% of the women surveyed intended to continue the FGC practice, and 69.8% had slapped or hit their children during the year prior to the survey. The author concluded that holding positive beliefs about the practice of FGC, or intending to continue it, was associated with maternal physical abuse and has significant public health implications in Egypt.


Iraq. A study was undertaken to assess the incidence and nature of violence against women in Iraq, with the goal of identifying possible solutions to prevent gender based violence and to change accepted norms of gender-based social roles and social tolerance. N=1,000 women and N=100 men were interviewed using a questionnaire administered by trained interviewers, that included questions covering general information about husbands and wives, exposure to violence and factors related to that exposure (type, frequency and source, reasons for it, consequences, reactions and measures to ensure protection, and possible solutions). Of the N=1,000 women interviewed 61.6% had been exposed to different forms of violence (physical, psychological and verbal). The principal source of violence was from husbands (30.7%), brothers (11.2%), and more than 12% of women surveyed reported violence from more than one source. Reasons given to rationalize violence were; life stress (43.5%), psychological (18.5%), social and financial (13.9% and 12.7% respectively). 23.4% of women identified more than one perceived cause for the violence directed to them.


This study investigated the association of the Wealth Index of married women in Egypt with a number of gender and reproductive health issues found in the 2005 Egypt Demographic Health Survey. The data from a sub sample of N=5249 currently married women from a total of N=19,474 was examined using logistic regression analysis. The women’s lowest wealth quintile predicted the intention to continue female genital cutting for their daughters, exposure to physical and sexual marital violence, not being empowered in household decisions, having a higher number of children, having an unintended last child, mothers’ maltreatment of their children, the perception of a lack of health-care providers or drugs as an obstacle to receiving care, and not being covered by health insurance. The author discussed the association of poverty with those adverse health outcomes and recommended that physicians should play a role to reduce it through influencing policy-makers.

Arab region – author is from UAE. A general overview of Arab-female Mental Health, through reviewing the literature and WHO statistic. A thorough review of treatment of all aspects of mental health, risk factors, co-morbidities, trends in seeking care and health care delivery, with recommendations for improving the recognition of mental illness, and the delivery of mental health care in the Arab region.


This study aimed to estimate the associations of social learning in childhood, marital resources and constraints, community gender stratification, and norms of women’s risk of physical domestic violence in a national sample of N=5,272 married Egyptian women. The sample comes from the 2005 Egypt Demographic and Health Survey (EDHS) (El-Zanaty and Way 2006). The Demographic and Health Surveys (DHS) are nationally representative, cross-sectional household surveys that have collected data on women of reproductive age (15–49 years) and their children in more than 80 low-to-middle-income countries since 1985. The DHS provide national estimates of domestic violence against women in more than 25 of these countries. The 2005 EDHS is the first national survey in the Arab Middle East that included multiple questions on domestic violence, as well as relevant individual, partner, and community-level data.

Results showed that women who experienced corporal punishment or maltreatment as children had higher odds of such violence. An increase in women’s household standard-of-living was associated with lower odds of such violence. Wives with unusually less and unusually more schooling than their spouse had higher odds of such violence, and the wives of paternal cousins had lower odds of such violence. Measures of community gender stratification and norms were inconsistently and weakly associated with such violence. Women’s marital resources and constraints accounted for most of their risk of experiencing physical domestic violence.


A convenience sample of N=206 male and female undergraduate students at the American University Beirut completed questionnaires that explored patriarchal attitudes, beliefs about wife beating, religion as a social identity, as well as childhood experiences with family violence. A total of 10 separate scales, some adjusted for cultural context, and others not, were administered.

Among the findings reported were that younger students were less likely to endorse wife beating than older students, students from more affluent families were likely to have more benevolent attitudes towards women, and that over 75% of the sample had never witnessed violence between their parents.

Over 50% of the sample strongly opposed wife beating except in the situation where the wife was sexually unfaithful. Of the sample, 81% agreed that the husband was always responsible for his violent behavior. However, male students were less likely than females to hold husbands accountable. Further, those endorsing a more traditional view of women's roles were more likely
to justify wife beating. There was also suggestion that students took into account the context of violence with fewer students willing to harshly punish the perpetrator, less willing to consider stereotyped legal and policy remedies for the situation, and more likely to endorse family and community interventions.


A convenience sample of N=300 male and female university students at the American University of Beirut completed several surveys that explored their attitudes towards rape victims, attitudes towards the opposite sex, as well as an assessment of their degree of self reported religiosity.

In general, participants were inclined to believe all rape victims regardless of the scenario presented. Predictors that individuals would endorse myths about rape were reported to be negative attitudes towards rape victims and hostile sexism. The study highlights the need for development of culturally appropriate scales and surveys assessing issues around sexuality, and also the problems associated with carrying out studies on sensitive topics in a representative population.
5. Men


This study sought to detect the differences in prevalence and intensity of PTSD among three groups of men who served in the Kuwaiti military. The study was carried out by interviews as well as the administration of questionnaires. Comparison was made between individuals in the military who had retired prior to the Gulf War, those who served during the conflict but were uninvolved in battle, those involved in battle, and those who had been held as prisoners of war. A total of N=200 individuals were studied. Subjects were interviewed using the clinician administered PTSD scale, the Hopkins Symptoms Checklist, the Internal/External locus of control, as well as the Self Esteem scale. Rates of PTSD were significantly higher among the “POW” group than the “retired” and “in battle” groups (40% versus 24 and 22% respectively).

The characteristics of PTSD in this population were consistent with populations elsewhere. Self-esteem was the only covariate of PTSD scores. External locus of control was associated with anxiety, depression, and PTSD. Among the groups with PTSD, symptoms of low self-esteem and avoidance were prominent.
6. Primary Health Care


This study conducted a large-scale epidemiologic survey in Southern Iraq to determine the (1) extent of human right abuses and (2) local attitudes towards women's health and human rights. A cross-sectional randomized survey of Iraqi men and women was conducted in 2003 after the 1991 Gulf War’s Shiite uprising in the south. A semi-structured interview developed by the authors was used. Results (N=1991 respondents) represented 16520 household members. Overall 47% of those interviewed had experienced one or two episodes of extreme violence. Local men and women did not support a full range of human rights aimed for women; 50% of the men and women agreed that a husband has the right to beat his wife.


In Beirut, Lebanon, a report was written based upon a case control analysis of health problems. These problems were identified from a health survey conducted in Beirut in 1984. An n=2752 households were surveyed for headache, back pain, and ulcers and then matched and compared for sex, age, and neighborhood. Results indicated that headaches were more prevalent in educated females with a 1:3 ratio for married and non-married. In regards to back pain, alcohol consumption was 2:40, yet when compared to those unemployed it was 2:33. There were no reportable findings for the ulcers group. Interpretations and methodological critiques were also presented in the article.


In the UAE, a study was conducted to assess the factors related to health care in the UAE, specifically primary health care. Other factors taken into account were: population per bed, physician, dentist, nurse, and pharmacists. Results indicated the numbers served by the aforementioned factors. Although this article is dated, it seems that the government had planned to adopt the Primary Health Care model by the year 2000. Recommendations were made for improving health care, specifically for those that need specialized medical care.


Most of the N=152 patients interviewed rated their consultations positively; but less than a tenth was completely satisfied. Components associated with patient satisfaction in developed countries (such as taking a history and advising how to deal with the conditions) also had the same impact in the United Arab Emirates. The doctor’s decision about whether or not to include a component was usually perceived as appropriate by the patients. Nonetheless, patients tended to give higher
ratings to doctors who discussed issues with them and whom they perceived as empathic. Mothers consulting the doctor about their children’s health were especially sensitive to such factors. Among the issues discussed is whether doctors should more routinely be addressing social, family and affective issues; so shaping patients’ expectations that such components are appropriate and sometimes vital. Although difficult, given the lack of continuity of care in primary health clinics, the present study suggest that Emirati patients would be comfortable with, and many would value, inclusion of such components.


In Palestine, study was conducted with 22 non-psychotic Bedion Arabs that utilize traditional and biomedical healing mental health care systems. The results indicated that the traditional system conveyed more therapeutic alliance while the biomedical system successfully addressed physical symptoms. Gender differences were found in both symptomatology and in patient construction of etiology.


In the UAE, a study was conducted to assess the fatigue levels in a group of patients in a Family Medicine Clinic with an N=254, and to examine the factors associated with these levels. The methods utilized were: fatigue scale, psychological questionnaire, and both their physical examinations and detailed history. Results indicated the following factors: fatigue was more prevalent in young anxious adults, depression was more prevalent in females, and severity of fatigue was also slightly affected by illiteracy, obesity, and lack of exercise. It was concluded that fatigue was influenced by anxiety and depression and used as a cultural idiom of distress.


In Djibouti City, Sudan, and Ethiopia sexual risk behavior surveys were conducted on 2 cluster samples of N= 48 clusters of adults aged 15-49 years. These risk behaviors including: marriage, regular partnerships, non-regular sexual partnerships, condom use, and other relevant topics. The survey was a 20-minute questionnaire that was translated into different languages. The results indicated the following:

- More reported non-regular partnerships in Djibouti City than in Sudan
- Non-regular partnerships with men with no schooling were less likely to report than other men in all the sampled populations.
- Women that were widowed, divorced, or separated reported more non-regular partnerships than other women.
- Condom use was higher in Djibouti than the other countries.
- Lower risk of HIV/STDs in Sudan than in the other countries.

In Al-Ain a study was conducted to evaluate the course of psychiatric disorders among an Arab community of N=245 subjects without a psychiatric diagnosis, over a year long period using structured interviews with questions based on DSM-III-R mental disorders. This was done through assessing the rate by which psychiatric services were utilized, and by dividing the sample into the following: DSM-III-R disorder, no disorder, sub threshold to disorder, and reassessing them with SCID one year later. Results indicated the percentages of new cases, recovery rates, gender differences, and those that have no contact with psychiatric services.


This is a cross-sectional study involving N=493 randomly selected women from the capital city of Jordan. The Beck Depression Inventory (BDI) was administered, and the scores were correlated with answers from a questionnaire that explored negative life events. Self-reported financial problems, independent of actual income bracket, marital separation, self-reported poor health, and depressive symptoms were the largest contributors to higher BDI scores among this group of women.


In Saudi Arabia, a study was conducted to evaluate if Primary Care physicians are able to correctly diagnose somatization and depression. N=431 primary care patients were screened for both somatization and depression in Riyadh in Saudi Arabia using the Patient Health Questionnaire (PHQ). The physicians blindly assessed these patients and later were evaluated for agreement between their assessment and the questionnaire. Results indicated that physicians assessed for somatization on a much higher rate than was needed, and also physicians, particularly for male patients, demonstrated poor diagnostic abilities especially between somatization and depression. This article later concludes that although the Saudi Physicians know the psychiatric disorders, they have poor diagnostic abilities.


In Jordan, focus groups were conducted in order to measure barriers to both the diagnosis and treatment of depression. This was done through 5 focus groups for a sample of N=50 primary health care practitioners providing services in public health clinics across Jordan. Results indicated that among the most important barriers to diagnosis and treating depression is: social issues, lack of education, lack of appropriate therapies, lack of patient acceptance of the diagnosis, and other pertinent clinical demands. The article concluded by stating that education
about depression is a necessary tool in solving this problem in addition to providing services to
destigmatize depression, as well as counseling services.


United Arab Emirates, Saudi Arabia, Jordan, and Bahrain. The Saudi Arabia study used Hospital Anxiety and Depression scale (HAD) showing prevalence of depression at 17% and anxiety 16% in primary care patients, total for anxiety, depression and/or both was 26%. The UAE study used Clinical Interview Schedule (CIS) and identified most common diagnoses as neurotic depression (55%), mixed anxiety and expressive disorder (13.3%) and anxiety states (11.7%). In Jordan an Arabic translation of the GHQ-28 estimated the prevalence of psychiatric morbidity as 61% with highest rates in females ≥ 40 years, in uneducated and highly educated groups, in the
unemployed, and in those perceived to have fair or poor physical health. The Bahraini study, also using the GHQ in a primary health care setting, found the prevalence of psychiatric morbidity at 45.1%, using the HAD scale the prevalence was 44.4%, and morbidity was highest in women aged 50-55 years, in divorcees or widows, and in less educated patients. Authors express concern that Arab PCPs need to be better educated in screening for psychiatric morbidity, depression and anxiety as currently most psychiatric co-morbidities pass undetected in the primary care population.


In Iraq a study attempted to assess the risk of aggression on resident physicians using a 15-item questionnaire with an N=80 of resident physicians working at Al Yarmook and Al Kendi hospitals. The results indicated 87.5% reported being the target of some patient aggression during their residency, of those 95% reported verbal attacks with 9% reported being on the receiving end of both physical and verbal attacks. Only 59% of participants informed the hospital administration about the incidents and of those only 34% were satisfied with the response by administration.


In Iraq, there was a cross-sectional survey conducted at two primary health care centers in Al-Nisiriya City using the PHQ and WHOQOL-100, with an N=214 of primary health care patients 16 and older. The results indicated that 10.2% experienced depressive disorders while 8.4% experienced anxiety disorders; 25% of the detected cases had both disorders simultaneously. It was also found that the prevalence of the disorders were more significant among woman (p<.4) and people who were illiterate (p<.3). Results also suggest having one or more of these disorders decreased the quality of life compared to a patient without these disorders.

In the Netherlands, a study was conducted to identify risk factors associated with physical and mental health problems. This was done through a population based study of adults N=178, selected randomly from 3 municipalities, from Afghanistan, Iran, and Somali who are refugees and asylum seekers. The measures used were the Harvard Trauma Questionnaire and the Hopkins Symptom Checklist.

Results indicated the following:
- 59.1% of Asylum seekers and 42% of refugees considered their health to be poor.
- In both the refugee and the asylum seekers groups, approximately half of the respondents had one or more chronic conditions.
- More asylum seekers had PTSD than did refugees.
- Those from Iran had higher rates of PTSD, Depression, or Anxiety.
- Being female was associated with higher rates of PTSD, Depression, and Anxiety.
- More post migration stress and less social support was associated with PTSD, Depression, and Anxiety.


This study aimed to establish Egyptian women’s attitudes and beliefs about female genital cutting (FGC) or mutilation. Methods used a questionnaire module about violence to a sub sample of N=5249 married women from a total of N=19,474 women who participated in the 2005 Egypt Demographic Health Survey. Women were interviewed to establish whether they had been exposed to marital violence in the year prior to the survey, their attitudes and beliefs about FGC, if they had abused their children physically, and the association of beliefs about FGC with maternal physical abuse.

The study adjusted for exposure to marital violence and other socio-demographic variables. Results indicated that, of the women surveyed, 16.4% and 3.4% had been exposed to physical and sexual violence, respectively, during the year prior to the survey. Also that 76% of the women surveyed intended to continue the FGC practice, and 69.8% had slapped or hit their children during the year prior to the survey. The author concluded that holding positive beliefs about the practice of FGC, or intending to continue it, was associated with maternal physical abuse and has significant public health implications in Egypt.

In Basra, Iraq, a physician was asked to plan and implement a rehabilitation service for torture survivors- the Al-Fuad Center for Rehabilitation of Torture Victims (FRCT). The center worked under the concept of developing its work under health promotions and illness prevention. This was done through the training or professionals that would be able to establish treatment areas in different parts of Iraq. Training will include: trauma symptoms and signs, in order to address these issues in their early stages. In addition to the aforementioned, the reconstruction of civil society will be done alongside an NGO especially because illness, in this case, is directly related to violence.


A convenience sample of N=1082 students (mean age 17) from 10 high schools in five Libyan cities answered a questionnaire that explored knowledge about, and attitudes towards, people suffering from HIV. Although the students expressed a very high level of perceived stigma towards people with HIV, 91% supported the provision of free care to HIV-positive individuals.


In the Aseer region of Saudi Arabia, an audit was conducted in two primary health care centers to evaluate how well Hypertension was managed. To assess the health outcome and to audit the process, a checklist was made from the Quality Assurance Manuel. A study was conducted on N=120 of the 256 hypertension files in both health care centers. Results indicted that 92% had primary hypertension, and 25% had a family history of hypertension. It was also reported that even though the recordings were not perfect, there were no statistical differences in socio-demographic data. The study concluded that the two Primary Health Care centers were not in accordance with the recommended national standards due to the following reasons: lack of updated system, provision of laboratory services, and recall system. In order to improve care, these factors need to be addressed.


In Saudi Arabia, a study was conducted measuring the patients beliefs about causes of their physical symptoms, and whether or not having a psychological problem affects those beliefs. N=224 of patients completed a questionnaire developed to measure the aforementioned factors. Results indicated that patients’ religious and super natural aspects of their culture had an impact on their beliefs in regards to their physical and psychological symptoms.

In Saudi Arabia, a study was conducted to evaluate the pattern of disability among patients. A cross-cultural study was carried out on those admitted to the Rehabilitation Center N=850. Results indicated that disability was more common on non-traumatized males ages 16-45 years, and that paralyzed patients were more likely to stay in the hospital longer. Ultimately, it was concluded that home care programs needs to be expanded in order to reduce hospital costs on both the patient and the administration.


The aim of this study was to explore variations in how parents of Egyptian origins, who are living as immigrants in Denmark, compared to those living in Egypt, had perceived learning to live with a child with diabetes. This was done in order to identify potential problems related to immigration and cross-cultural care. Methods used semi-structured interviews with Arabic-speaking immigrant parents of N=6 children with diabetes in Denmark, and matched Egyptian parents of N=6 children in Cairo. The children were 7–16 years old and had been diagnosed in 2003–2005.

Data were analyzed using a phenomenographic approach, focusing on describing variations in the parents’ perceptions of the phenomenon ‘Learning to live with a child with diabetes’.

Although the parents in the two countries shared many reactions and concerns, they responded and were affected in different ways. The immigrant parents experienced their parental role and the life of their diabetic child in a more doubtful and negative way. The authors concluded that parents with an immigrant background are likely to require special pedagogic, psychological and social support to learn to adapt, and come to terms with, the diagnosis of a chronic disease in a child. They recommended that the establishment of a trustful relationship between the immigrant families and the health-care professionals should be given high priority.


This study investigated the association of the Wealth Index of married women in Egypt with a number of gender and reproductive health issues found in the 2005 *Egypt Demographic Health Survey*. The data from a sub sample of N=5249 currently married women from a total of N=19,474 was examined using logistic regression analysis. The women’s lowest wealth quintile predicted the intention to continue female genital cutting for their daughters, exposure to physical and sexual marital violence, not being empowered in household decisions, having a higher number of children, having an unintended last child, mothers’ maltreatment of their children, the perception of a lack of health-care providers or drugs as an obstacle to receiving care, and not being covered by health insurance. The author discussed the association of poverty with those adverse health outcomes and recommended that physicians should play a role to reduce it through influencing policy-makers.

The objective of this study was to assess for the existence of therapeutic misconception (TM) amongst Egyptians. Therapeutic misconception in this context was defined as the failure of research participants to appreciate the difference between research and medical care. Methods used a semi-structured interview guide to elicit the knowledge, attitudes, and perspectives of Egyptians regarding medical research. Subjects were recruited from the outpatient settings (public and private) at Ain Shams University in Cairo, Egypt. Interviews were taped, transcribed, and translated. The content of the transcribed text were analyzed to identify the presence of a TM, defined in one of two ways: TM1 = inaccurate beliefs about how individualized care can be compromised by the procedures in the research and TM2 = inaccurate appraisal of benefit obtained from the research study.


Iraq, Baghdad. Editorial - Author expresses concern over administrative failures in Iraqi hospitals, contrasting solutions offered or attempted by international aid organizations with the reality of weak management, corruption, poor discipline, insufficient security, lack of female or nursing personnel working at night, and absurdly short working hours.


Questionnaire study of N=386 randomly selected physicians working in hospitals in Jordan. The questionnaire sought to assess physician’s knowledge, attitudes, and practices related to the implementation of evidence-based medicine. Barriers to the implementation of research based clinical practice included perceived threats to physician autonomy, limited technological resources, and clinical overload. In addition, there were significant variations in knowledge among physicians regarding the accessing of research information and clinical guidelines.

The physician sample was very heterogeneous and included residents, attendings, and other physicians working in both academic and government settings. In addition, the physicians surveyed had done their medical training in many different countries. It is likely that previous training and exposure would influence attitudes and skills related to evidence-based medicine, however, the relationships between these variables were not assessed.


This is an article that explores a number of encounters between older Libyan patients and younger Libyan physicians using linguistic analysis and semi structured interviews. This study
highlights the formalized, stylized, and highly social interactions that persist between these actors despite the introduction of a new hierarchy (the physician-patient relationship) into their interaction.


In Yemen, focus group discussions were carried out in N=4 different health centers and hospitals in an urban, semi-urban, and two rural areas. All participants in the focus group had at least one child. An Arabic speaking female facilitator used a guide to introduce Malaria related topics to be discussed among the participants. Those included: perceptions, transmission, prevention, symptoms, treatment, and so on. These discussions were translated, transcribed, and then used to develop a questionnaire. This questionnaire was used with parents or guardians of patients with severe malaria. The questionnaire included demographic information and beliefs of transmission and severity of Malaria.

Results indicated that 78% of patients delayed treatment after symptom onset. Delays were due to financial constraints, and the lack of male presence for females presenting with symptoms. Differences were present between male and female knowledge of Malaria. Post hospital admission, 29% were inappropriate for treatment, and it was ineffective in 57%. Article concluded that some beliefs present in Yemen were barriers to Malaria treatment and improvement.


Africa, the Americas, Asia, Europe, Middle East, and the Pacific. N = 72,933 community dwelling adults were interviewed using face-to-face household surveys to study cohort-country variables in gender differences in lifetime DSM-IV mental disorders, across 15 countries in the WHO-World Mental Health Survey Initiative, seeking to determine variable correlations to female gender roles (as measured by aggregate patterns of female education, employment, marital timing, and use of birth control). In all cohorts and countries women had more anxiety and mood disorders than men, and men had more externalizing and substance abuse disorders than women.


Saudi Arabia, Qatar, Libya, Kuwait, Jordan, UAE, Bahrain, Tunisia, Iraq and Sudan. Study searched and reviewed published literature on stroke in these Arab countries covering date range of 1983-2008, 31 articles were found. Annual stroke incidence ranged from 27.5-63 per 100,000 and prevalence between 42-68 per 100,000. Ischemic stroke was most common in all series. However one series of cases reviewed in Sudan had a prevalence of 41% hemorrhagic stroke, more similar to Asian country statistics. Hypertension, diabetes, hyperlipidemia, and cardiac disease were the most common risk factors associated with stroke. Case-fatality at 30 days was between 10% and 17.5%.

In Qatar, data was used from the Annual Health Report of the National Health Authority and various other sources in order to calculate the populations in hospital related settings such as: physicians, nurses, beds, etc. Results indicated that due to the fact that the population of Qatar has doubled in the last decade, so have the numbers of health care providers. This has improved the quality of health care services, yet there remains the need for primary health care workers.


This study assessed the prevalence of depressive symptoms and antidepressant medication use among elderly with and without type 2 diabetes and the association between depression and diabetes complications. Research design and methods: In 2004–2006, the Primary Health Care research in Type 2 Diabetes Study applied the Beck Depression Inventory II (BDI-II) to N=458 participants with Type 2 Diabetes (47% male, aged 65±8.9 years, type 2 diabetes duration 19±8.7 years) and N=546 participants without diabetes (non diabetic group) (51% male, aged 59±8.7 years). Use of antidepressant medication was self-reported. Depressive disorder was defined as a BDI-II score>14 and/or use of antidepressant medication. Occurrence of diabetes complications (retinopathy, blindness, neuropathy, diabetes-related amputation, and kidney or pancreas transplantation) was self-reported.

Results revealed that Mean BDI-II score, adjusted for age and sex, was significantly higher in participants with Type 2 Diabetes than in non-diabetic participants (least-squares mean ± SE: 7.4±0.3 vs.5.0±0.3; P<0.0001). The prevalence of depressive disorder (as defined by BDI-II>14 and/or antidepressant use) in participants with Type 2 Diabetes was significantly higher than that of age- and sex-adjusted non-diabetic participants (32.1 vs. 16.0%, P<0.0001). Type 2 diabetic participants reported using more antidepressant medications (20.7 vs. 12.1%, P=0.0003). More type 2 diabetic than non-diabetic participants were classified as depressed by BDI-II cut score (17.5 vs. 5.7%, P<0.0001) or by either BDI-II cut score or antidepressant use (32.1 vs. 16.0%, P<0.0001). Participants reporting diabetes complications (n=209) had higher mean BDI-II scores than those without complications (10.7±9.3 vs. 6.4±6.3, P<0.0001).


Diabetes is associated with increased risk of depression and anxiety. UAE has one of the highest rates of diabetes in the world, second only to Nauru. The objectives of this study were to estimate the prevalence of psychiatric distress and to identify associated risk factors in a cross-sectional study of diabetic persons in Sharjah UAE (N=347). Results indicated that persons with higher scores on a mental health scale (i.e. k-6) had poorer diabetic control and were more likely to have eye and vascular/neurological complications from their diabetes. Authors claim that their results highlight the importance of assessing and treating co-morbid mental health problems in diabetic patients. Authors discuss the impact of traditional beliefs of diabetic management.
In the Aseer region in Saudi Arabia, a study was conducted to evaluate the experience of health promotion clinic. Records of N=429 individuals attending health promotion clinics were reviewed, and statistical analysis was carried out on SPSS. Results indicated that 90% had an imbalanced diet and did not perform any physical activity, 25% were obese, 14% were diagnosed with depression, and 8% were smokers. In addition, pre-hypertension was detected for 44%, hypertension was detected for 12%, and 3% were diabetic. Those that suffer from depression, obesity, high blood sugar, and abnormal lipid profile were referred to suitable clinics for further treatment. The article concluded that health promotion clinics could be a good tool for early detection and management in primary care settings.


Integrated Management of Childhood Illness (IMCI) is a cost-effective strategy that improves the quality of care through the use of evidence-based management protocols for the most common causes of childhood death and illness. Evidence-based clinical guidelines are critical to promoting rational use of medicines. Despite the large number of studies that assessed process and outcome of care delivered to children utilizing IMCI protocol, there is a scarcity of studies that assessed the effect of adopting IMCI on the drug use. The aim of the study was to examine the impact of adopting IMCI guidelines on drug use at one of the primary health care (PHC) centers, Alexandria, Egypt. The results showed that correct drug choice, dose dosage from, route of administration were significantly higher in the clinic adopting IMCI than in the clinic not adopting it. Non-pharmacological remedies prescribed were significantly higher in clinic B than A. Average number of drugs/encounter was lower in clinic B than A and the difference between clinics was statistically significant. Difference between clinics regarding percentages of drugs prescribed by generic name, antibiotics prescribed, drugs prescribed from essential drug list, and drugs prescribed out of stock was significant. The conclusion is adopting IMCI strategy improved prescribing performance and treatment regimen.


In Kuwait, there was a study to evaluate the correlation between religiosity, social support and health using trained nurses to collect data with an N= 1,472 of adults over the age of 60 from six different home care units. Data indicated that individuals that responded with high religiosity had strong social support from their relatives and friends and more frequency of contact. Data also indicated that respondents with a high degree of self-reported religiosity had a lower blood pressure than respondents who indicated they had a low degree of religiosity.

To assess the Knowledge Attitude and Practice (KAP) of MOH primary health care physician in the management of Type 2 Diabetes Mellitus (DM). A cross-sectional survey was conducted between April and October 2010 on MOH Primary Health Care physicians working in Al Hassa district of Saudi Arabia by filling up of pre-tested specially designed questionnaires focus on Knowledge, Attitude and practice towards Type 2 DM patients. This study explored several aspects of diabetes related KAP of Ministry of Health appointed GPs and identified the need for improvement in their knowledge, attitude and practices for treating Type 2 DM patients. It is recommended that awareness and education program is necessary to update the GPs (especially those working in urban areas, females and Saudi physicians) on epidemiology, diagnostic criteria of type 2 diabetes, DSME, effective treatment of diabetes, practice of insulin injection, adherence to the Clinical Practice Guidelines (CPG) and prevention of the complications of type 2 diabetes. It is of paramount importance that CPG be made available to each physician.
7. Mental/Behavioral Health Care


A descriptive epidemiologic survey that studied N=5,788 displaced and non-displaced civilians during a period of active warfare in Beirut in 1982. The information was gathered by interviews and questionnaires of key informants in each family. The study reports that young children, older adults, females and those in poor health and having experienced losses in income were the groups most prone to suffering from psychological distress. The authors suggest that social integration tended to protect individuals against psychological distress.

Further, the study suggests that the expression of psychological distress is diminished during times of active warfare, and is modulated by social integration or isolation after the conflict. Inconsistent results on the impact of loss, and the type of displacement on individuals were found in this study.


In Khartoum, N=224 ages 22-35 years were assessed using Eysenck Personality Inventory, Self-Rating Questionnaire, and Sudanese rating scale of Anxiety and Depression, in order to estimate psychiatric morbidity in a Suburban area of Sudan. Results indicated no sex difference with the following: 40.3% had a psychiatric disorder, and only 16.6% had a diagnosis. The most common diagnosis was Depression 8.4%, followed by anxiety 3.4%, and, although rare, alcohol abuse was 0.4%.


In Saudi Arabia, N=80 Saudi males diagnosed with Social Phobia were assessed for Social Withdrawal using the Saudi adapted MMPI. In addition, they were symptomatically evaluated for both Anxiety and Depression using the Leeds Anxiety-Depression Scale. Results indicated no linear correlation between the levels of Anxiety and Depression with the levels of Social Phobia. Also, different factors from the ratings correlated either positively or negatively with the Social Withdrawal scale.


A cross-sectional survey carried out in 1987 studied N=540 families in Beirut, Lebanon. The study sought to correlate several measures of personal and family distress with exposure to war related events. It was reported that violence, daily life disruptions and deterioration of economic conditions all contributed to stress within the families studied.

There was a high prevalence of physical symptoms reported in the study population, such as headache, back pain, faintness and dizziness. These were attributed to somatization, however this...
was not independently verified. There was also a high prevalence of mental health symptoms, although specific diagnoses could not be confirmed, given the study design. Problems with interpersonal relations were also reported by many of the subjects. On the other hand, the overwhelming majority of married couples rated their marital relationship is average or better. This may represent a reluctance to report personal matters to strangers. The study reported correlations between exposure to war related events and physical symptoms, as well as the attenuation of social relationships due to associated stress.


In Qatar, a study was conducted regarding top morbid fears conveyed by women in Qatar who are seeking therapy on an outpatient basis with an N=64 using clinical interviews. Results indicated that social phobic symptoms appeared in encounters with Qatari nationals who were scrutinizing the patient’s behaviors. Only 8% of women had Agoraphobia, and Coitophobia was present in newly wed women.


This article presents clinical personal impressions of children from the following countries: Uganda, Sudan, Mozambique, Palestine, Iraq, and the former Yugoslavia. In addition, discussion of steps that need to be taken, are presented, in regards to mitigating the effects of war on children's wellbeing.


A cross-correlational study assessed N=224 Lebanese children from different areas of Beirut, Lebanon between the ages of 10 -16. The study was done in an attempt to relate specific types of war trauma to PTSD symptoms, and to explore developmental and adaptational outcomes. The number and types of war trauma experienced by the children were related to both PTSD symptoms and adaptation outcomes. Children separated from their parents displayed more depressive symptoms, meanwhile children witnessing violent acts showed increases in pro-social behavior. Perhaps one of the most significant finding is that only a small percentage of variance in children’s developmental outcomes could be attributed to war related traumatic experiences.


Iraq, Kurdistan. Two months after the mass escape tragedy (MET) a sample of displaced Kurdish children on the Iraq-Turkey border reported a high level of PTSD based on DSM-II-R criteria. After a decrease in symptoms at the 4 month follow-up, the 14 month follow-up showed a significant increase in PTSD-related symptoms, and they were found to persist even at the 26 month follow-up. Further discussion by the authors analysis of PTSD symptoms course over time, and socio-cultural aspects affecting measurement of PTSD symptomology will be found in this article.

A retrospective study of N=60 children ages 15 to 17 was carried out five years after the Gulf War. This study divided the subjects into: persons present in Kuwait during the Gulf War, and persons not present in Kuwait during the Gulf War, and therefore presumably not exposed to violence. The mothers of the children reported to investigators whether or not their children had exhibited signs and symptoms of PTSD five years prior to the war, during the war, and whether they displayed the symptoms at the time of the study. The authors reported that those children presumably exposed to violence showed higher rates of PTSD symptoms both at the time of the war, and five years later. Mothers reported that more females displayed PTSD symptoms at the time of the war than did males. However five years later, the previously reported gender differences had resolved. The study reports that many of the participants suffered from psychiatrically induced somatic complaints, social withdrawal, attention problems, depression and anxiety.


A subset of a stratified random sample of Kuwaiti children who had been involved in the study that intended to evaluate the test-retest reliability of the Wechsler Intelligence Scales for Children, Revised (WISC-R) prior to the Gulf conflict, were retested one year after the conflict. At the second test children were also tested for posttraumatic stress and depression. Children were also interviewed regarding their level of exposure to violence during the conflict, and parents were tested for depression using a translated version of the Beck Depression Inventory. The authors report no significant declines in IQ scores one year after the conflict. Levels of depression were generally low among the children as was the incidence of posttraumatic stress disorder, but these symptoms were increased among those experiencing exposure to violence as reported to the investigators. Parental depression was not associated with increased risk among the children. The authors attribute this to the traditional communal family structure in Kuwait, in which children are raised by multiple adult relatives. It is thought that this cultural pattern tends to mitigate the negative impact of parental impairment on the child.


In Finland, a study was conducted in regards to the mental health function of dreaming of Palestinian children and adolescents in a trauma group (n=144) and a comparison group (n=268) using a 7 day dream diary to recall the dreams they had every morning. The results indicated that compensatory dreams moderate the effects between trauma and psychological symptoms, and that poor dreams were associated with poor adjustment. A mediating model was suggested and discussed.

A group of N=268 students completed questionnaires inquiring about their experience of war events. The groups were divided according to whether they had experienced many events (N=125 subjects) or few events (N=143 subjects). The Beck Depression Inventory, State-Trait anxiety inventory, and the civilian Mississippi PTSD Scale were administered. Although female students as a group consistently scored higher than males on measures of anxiety, students in the “many war experiences” group scored higher on all three measures of psychopathology than the students reporting low exposure.

Gender differences among the groups reporting war experiences were significant. The group reporting “few wartime experiences” was two thirds female, while the group with many wartime experiences was only one third female. This may reflect recall bias or a real difference between the groups, possibly due to the strong social imperative protecting women from danger during times of conflict.


In Palestine, families of those that were affected during the Hebron massacre were interviewed and were administered the PTSD scale by two mental health professionals. This was done for N=23 wives, N=12 daughters, and N=26 sons of the heads of households that were massacred. The results indicated that 50% of daughters, 23% of wives, 23% of sons met the criteria for PTSD.


In Palestine, study was conducted on a national systemic random sample of N=2410 women from the West Bank using the First Palestinian National Survey on Violence Against Women. Results indicated that during the 12 months preceding the study, women had experienced physical, sexual, and economic abuse. In addition, results indicated that with higher levels of psychological distress, anger, or fear the rates and patterns of abuse increased.


In Palestine, a study was conducted on children (n=239 ages 6-11 years) who were randomly chosen from 97 elementary schools in the Gaza strip. The study was conducted using the following instruments: the Rutter A2 (parent) and B2 (teacher) Scales, the Gaza traumatic checklist to measure experience of traumatic events, and the Child Post-Traumatic Stress Reaction Index. Results indicated that the total number of ‘experienced trauma’ was the best predictor of presence and severity of PTSD.

In Palestine, a study was conducted on a systemic random sample of N=1334 women in the west bank and the Gaza strip, using the Second Palestinian National Survey on Violence Against Women. The results indicated that 87.2%, 54%, 40%, and 44% conveyed that 12 months preceding the survey they have experienced one of more acts of psychological, physical, sexual, economic abuse once or more by their husbands. In addition, low self esteem was explained by their experiences of abuse.


Iraq, Kurdistan. Five years after operation ‘Anfal’ in Iraqi Kurdistan a random selection of n=45 families residing in two displacement camps were interviewed, while utilizing the Posttraumatic Stress Symptoms for Children (PTSS-C) and the Harvard Trauma Questionnaire (HTQ). The subjects chosen were the eldest child and a caregiver in each family. Results indicated that PTSD was reported in 87% of the children, and in 60% of the caregivers. Childhood PTSD was significantly predicted by the ‘child trauma’ score and the duration of captivity, though not by maternal PTSD. In addition, childhood PTSD did not disappear after the child’s reunion with their PTSD free fathers.


In Al Ain a study was conducted to evaluate the course of psychiatric disorders among an Arab community of N=245 subjects without a psychiatric diagnosis over a year long period using structured interviews with questions based on DSM-III-R mental disorders. This was done through assessing the rate by which psychiatric services were utilized, and by dividing the sample into the following: DSM-III-R disorder, no disorder, sub threshold to disorder, and reassessing them with SCID one year later. Results indicated the percentages of new cases, recovery rates, gender differences, and those that have no contact with psychiatric services.


In Palestine, a study was conducted with a random sample of children in refugee camps and, other urban areas. A few instruments were used, those including: the Traumatic experience checklist to describe the experiences of the children during the Intifada, the Eysenck neuroticism scale (JEPQ) to measure psychological adjustment, Saleh Picture IQ test to measure IQ, and mental flexibility was also measured. This was done to an N=108 children, and also to an N=86 in a follow-up sample. The results conveyed that if children indicated a perception of mental flexibility then they were protected from negative long-term consequences of trauma. Also, the
more intelligent and less exposed to violence the children were, the more mentally flexible they had.


In Palestine, a cross sectional survey was conducted to examine the rates of sexual abuse in Palestinian society, and psychological implications of sexual victimization. This was done with an N=652 Palestinian undergraduate college students, using Finkelhor’s scale to measure sexual abuse and the Brief Symptom Inventory to measure psychological effects. The results indicated that similar rates of abuse were found among males and females. In addition, sexually abused participants had higher levels of psychoticism, hostility, anxiety, paranoid ideation, depression, and psychological distress.


In Denmark, a study was conducted with N=311 refugee children ages 3-15 from the Middle East using structured interviews involving the children’s parents, to inquire about children’s health and their exposure to war and violence. Results indicated that the strongest sleep disturbance in children is history of violence and stressful present family situation. The mediating factor, however, was the presence of both parents and the effect of trauma.


In the UAE, a study was conducted regarding the prevalence of psychiatric morbidity on N=1394 adults that were systematically sampled from Al-Ain community. The following instruments were used: a modified version of Composite International Diagnostic Interview (CIDI), and Self-Reporting Questionnaire (SRQ-20). Also utilized were structured interviews to measure Axis I diagnosis from the DSM-IV (SCID), and the ICD-10 to measure mental distress and lifetime prevalence. Results indicated that the lifetime prevalence rate of mental distress was 18.9% while the prevalence of psychiatric disorders, through ICD-10, was 8.2%. In addition, females were more likely to struggle with mood disorders and anxiety, while men were more likely to struggle with substance abuse.


In Al-Ain, a study was conducted to examine the gender differences with depressive disorders in an Arab community N=1394 systemically sampled population. This was done through both a demographic questionnaire and a modified version of the Composite International Diagnostic Interview (CIDI). Results indicated that sex, life events, and chronic difficulties were risk factors for depression, and that overall females were found to be more at risk than are males.

The aim of this study was to establish the reliability of the Death Obsession Scale (DO)-designed by the author- among a total sample of N=762 Egyptians subjects (clinical and non-clinical samples) to construct norm-like information about this scale and to examine the differences between these samples including gender related differences. Seven groups (n = 765) of Egyptian normal (non-clinical), anxiety disorder patients, and patients suffering from schizophrenia (males and females), and addicts (males only) were selected. They were generally matched as groups according to age, occupation, and education. Cronbach’s alpha reliability statistics for the 7 groups ranged between .83 and.94, denoting from good to high internal consistency of the DOS.


This study is one of the very few in the Middle Eastern literature that looks at patients with a dual diagnosis. A retrospective chart review of N=1643 available charts of admissions to a Lebanese inpatient psychiatric unit. The charts of patients admitted for substance abuse were reviewed, and the presence of a co-morbid psychiatric history was assessed.

The male to female ratio of the sample was two to one, and 65% of the patients were judged to have a present or past history of coexisting psychiatric diagnosis and substance use. 35% of the sample was shown to suffer from substance abuse alone with no past or present history of psychiatric disorder. Alcohol was found to be the substance most abused overall, but females were more likely to abuse tranquilizers and stimulants than men. Males were more likely to have abused illicit substances such as cannabis or heroin.

In the co morbid population, depression was the most common diagnosis, followed by bipolar disorder, anxiety disorder, and then schizophrenia. Polydrug abuse was found in 44.9% of the total sample, and the rate of polydrug use did not differ by gender. Personality disorders, particularly antisocial personality disorder was found in 48% of the sample.


A convenience sample of N=468 Omani's, comprised of senior medical students, the visiting relatives of patients of an inpatient psychiatric ward, and members of the general public answered questions related to their attitudes towards and perceptions of people suffering from mental illness. The survey instrument was completed individually by the medical students, while administration of the questionnaire was facilitated by research assistants for family members and members of the general public. Medical students and members of the general public were equally likely to identify evil spirits is the cause of mental illness. All three groups tended to disagree with genetic factors as the cause of mental illness. Student attitudes towards people with mental illness was otherwise moderately positive, as were the attitudes of the other two groups.

This study was conducted to evaluate the presence and severity of disordered eating in Western populations to a convenience sample of N=106 Omani teenagers, N=87 non-Omani expatriate (mostly Western) teenagers residing in Oman, and N=100 Omani adults. The Eating Attitudes Test (EAT), and the Bulimia Investigatory Test (BITE) were translated into Arabic and administered to the Omani subjects, and the original English versions of the scales were administered to the non-Omani’s.

Thirty three percent of the Omani teenagers (29% of females and 36% of males) showed a propensity for anorexic behavior, while only 9% of the non-Omani’s did. Among the non-Omani’s, 18% of the teenagers reported bulimic behavior as opposed to 12% of the Omani teenagers. Fewer than 2% of the Omani adults reported elevated levels of either type of behavior.


In Syria, a study was conducted to determine the socio-demographic correlates of mental health for women with a low-income background. A randomly selected sample of N=412 from primary care centers in Aleppo, Syria ages 20-37 years were studied using a specially constructed questions that utilized SRQ-20 non-psychotic items and other questions relevant to the women's mental health. Results indicated that 55.6% were undergoing psychiatric distress. In addition, the following were predictors of mental health: physical abuse, education, polygamy, residence, age, age of marriage. Predictors of the worst outcomes were: illiteracy, polygamy, and physical abuse.


Algiers, Egypt, Emirates, Iraq, Jordan, Kuwait, Lebanon, Morocco, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Sudan, Syria, and Yemen. Volunteer undergraduates (n=7,506) were surveyed to assess gender differences in anxiety. The instrument used was the Kuwait University Anxiety Scale (KUAS). Female groups had significantly higher anxiety scores in 11/16 countries than their male counterparts.


In Aleppo, Syria a randomly selected study of N=411 women ages 20-36 years old was conducted to determine physical abuse and its sociodemographic characteristics in regards to low-income women. A specially constructed survey was used that utilized SRQ-20 and other questions regarding physical abuse, and demographic information. Results indicated that 23% were physically abused at least 3 times during the past year, and 26% of those were married women. Meanwhile, those abused at least once weekly were 3.3% of married women. Although
women's education was the most modifiable factor, other factors included age, marital status, religion, and mental distress.


In Palestine, two mental health professionals visited homes or tents of victims who had suffered due to bombings or shellings, to assess the prevalence and determinants of PTSD using the checklist for military violence, a 15 question scale to measure PTSD for the parents, and Pynoos-Nader version of the Reaction Index to measure PTSD in children. This was done with N=121 Palestinian children ages 6-16 and their mothers ages 21-55. The results indicated that 54% suffered from severe PTSD with girls being more vulnerable. Gender, mothers’ education, and exposure to traumatic experiences were significant factors that influenced PTSD symptoms.


In Palestine, study was conducted with previously married Muslim men and woman that had been divorced through the Shariya court. This was done with an N=147 woman and N=165 of men using the Fisher Divorce adjustment Scale to measure the degree of adjustment post-divorce, and the Mental Health Inventory to measure general mental health. The results indicated that both universal and culture specific variables contributed to post-divorce adjustment for both men and women.


Arabs, Iranians, Turks, and Swedes were surveyed to assess etiologic factors associated with PTSD. Histories were collected from an n=115 patients using a questionnaire and a self rating instrument for PTSD, with no reference to specific trauma, in order to study the relationship between trauma and PTSD outcome. Of the n=115, 89% had experienced at least one trauma, 77% had multiple events. The prevalence of probable PTSD varied between ethnic groups: Iranians 69%, Arabs 59%, Turks 53% and Swedes 29%. Logistic regression analysis also showed that probable PTSD was associated with multiplicity of relatives’ traumas (OR=3.14), multiplicity of own traumas (OR=2.56) and belonging to an ethnic minority (OR=2.44), but not with gender.


This is a cross-sectional study involving N=493 randomly selected women from the capital city of Jordan. The Beck Depression Inventory (BDI) was administered, and the scores were correlated with answers from a questionnaire that explored negative life events. Self-reported financial problems, independent of actual income bracket, marital separation, self-reported poor
health, and depressive symptoms were the largest contributors to higher BDI scores among this group of women.


In Palestine, a study was conducted with Children living in rural, urban areas, and refugee camps; N=206 children ages 6-13. Rutter A2 (parent) Scale was used to measure psychological morbidity, and the Gaza Socioeconomic Adversities Questionnaire to measure economic status among families. The results indicated that there was 42.3% psychological morbidity among Palestinian children; 46.3% were among boys and 37.8% were among girls.


In Saudi Arabia, a study was conducted to evaluate if Primary Care physicians are able to correctly diagnose somatization and depression. N=431 primary care patients were screened for both somatization and depression in Riyadh in Saudi Arabia using the Patient Health Questionnaire (PHQ). The physicians blindly assessed these patients and later were evaluated for agreement between their assessment and the questionnaire. Results indicated that physicians assessed for somatization on a much higher rate than was needed, and also physicians, particularly for male patients, demonstrated poor diagnostic abilities especially between somatization and depression. This article later concludes that although the Saudi Physicians know the psychiatric disorders, they have poor diagnostic abilities.


In New Zealand, a report was written in an attempt to reduce barriers and difficulties of working with Somali clients by conveying their conceptions and expectations about mental health services. The main points presented in the article addressed the following:

- The majority views their resettlement and family reunification as the direct cause of their problems rather than war related trauma.
- In regards to dealing with mental and physical health problems, traditional treatments help in outlining the treatment and common use of Quran readings.
- Reliance on practitioners is caused by the somatization of their problems.
- Adequate treatment of Somali clients is hindered by lack of cultural skills and complications with specialist referrals.
- Translation and interpretation problems.


In the UAE, a study was conducted to assess the help seeking patterns for mental health problems in N=325 of a community sample contacted as part of a child psychiatric disorder
study. Semi structured interviews were utilized. Results indicated that only 38% would seek help from a mental health specialist in the case that one of their family members was developing a psychiatric problem. This was due to the following factors: stigma, unwillingness to acknowledge that a family member has a mental health problem, feeling a sense of ambiguity around how useful mental health services would be.

Those that were less skeptical about utilizing these services were better educated, had better occupations, and were of higher socioeconomic status. Therefore, it was concluded that the parent’s situation reflects whether or not their child would receive professional help.


In the UAE, a study was conducted to assess the correlates of mental disorders among the elderly in relation to prevalence, nature, and sociodemographic correlates. A random sample of N=610 those over the age of 60 were recruited and interviewed in their household. The measures used were as follows: Geriatric Mental State Interview (analyzed by AGECAT) and a short demographic questionnaire. Results indicated that:

- Depression 20.2%, Anxiety 5.6%, and hypochondriasis 4.4%
- Correlate to organic syndromes (cognitive impairments without dementia) was age
- Correlates to the rest of the mental disorders were female gender, single (separated, divorced, or widowed), and low income.


Kuwait, Saudi Arabia, United Arab Emirates, Oman, Egypt, Syria, Lebanon, Palestine (Nablus and Gaza), Jordan and Iraq. N = 3,064 were administered the Kuwait University Anxiety Scale (KUAS) in Arabic. Females had higher mean anxiety scores than their male counterparts in all 10 countries. Significant differences were found in 7/10 countries, differences were conjectured to be related to socialization processes, especially sex-typing and gender roles.


Pan-Arab. Study identifies mental health publications cited in PubMed from 1987-2002 with specific focus on those in the field of child and adolescent mental health studies. Total number of mental health research citations published in Arab countries = 338, representing 1.2% of the total of all articles in the biomedical research field. 17% of those were on child and adolescent mental health. The most prevalent areas of research were; anxiety and mood disorders and substance abuse. Authors conclude that child psychiatry, especially pediatric ADHD, and child autism are not receiving much attention from Arab researchers.

In Saudi Arabia, a study was conducted to determine the prevalence of Depression for patients diagnosed with Social Anxiety Disorder (SAD), and also to determine the correlation between the severity of SAD and depression symptoms on an N=98. This was done using a structured clinical interview, and the Leibowitz Social Anxiety Scale (LSAS) which measures the severity of SAD. Results indicated that 59% of those diagnosed with SAD were also diagnosed with other psychiatric disorders. Those with severe SAD were 4 times more likely to have Depression; however, early detection and treatment of SAD can reduce the chances of Depression.


In Palestine, a study was conducted in randomly chosen cities, refugee camps and resettled areas. This was done using an adapted version of Life Events and Social History Questionnaire to measure both PTSD and trauma events, and Peritraumatic Dissociative Experiences Questionnaire to measure Peritraumatic Dissociation. N=311 of women and N=276 of men ages 16-60 participated in the study. The results indicated that between both genders exposure to trauma was associated with PTSD, however, women reported a lower level of lifetime trauma than men. In regards to pertitraumatic dissociation, both men and women were made more vulnerable to hostility, yet men were more vulnerable to depressive symptoms.


This paper presents the results of a qualitative study of psychiatric stigma in Egypt from the perspective of lay respondents. A vignette method was used to elicit judgments of social distance and qualitative responses to stories depicting psychosis, depression, alcohol abuse and a ‘possession state’ from N=208 respondents recruited through their places of work. The results indicated that while stigma does exist in Egypt, the form that it takes must be understood with reference to Egyptian notions of selfhood that locate behavioral disturbances in the inter subjective rather than intra psychic realm. Individual blame was diffused with responsibility for the illness and its cure being placed in the social, not personal (or biological) realm. However, behavioral disorders that threaten the social fabric of society are particularly stigmatized and were met with social rejection. The specific form that stigma takes place in Egyptian society therefore reflects the importance of the integral social body, not of the integral individual.


Iraq, Kurdistan, and Sweden. Using the Child Behavior Checklist (CBCL), the Harvard-Uppsala Trauma Questionnaire for Children, and Post-traumatic Stress Symptoms for Children (PTSS-C)
administered to care givers, an attempt to measure differences in orphans’ development was made by comparing N= 94 children in traditional foster care, and N= 48 children placed in orphanages. One year after initial administration of the questionnaires the CBCL was re-administered, and at 2 years both the CBCL and the PTSS-C were re-administered consecutively. Improvement in activity scale, externalizing problem scores, and PTSD related symptoms were more significant in the foster care group. Though the activity scale improved in the foster care group, school competence deteriorated in both groups studied, particularly amongst the girls placed in orphanages. Results are further analyzed in the context of gender, age, socio-economic status, cultural values and characteristics of the two care systems.


Global, Iraq, Afghanistan. Socio-political essay attempting to define concept of globalized violence, contextualized within the perceived public stance of general and community psychology networks in response to the violence in Iraq and Afghanistan after the events of 9/11. Essay further probes question of whether networks of Community Psychologists are able and willing to publicly position themselves in regards to the events in Iraq and Afghanistan and to levels of globalized violence in general.


In Jordan, focus groups were conducted in order to measure barriers to both the diagnosis and treatment of depression. This was done through 5 focus groups for a sample of N=50 primary health care practitioners providing services in public health clinics across Jordan. Results indicated that among the most important barriers to diagnosis and treating depression is: social issues, lack of education, lack of appropriate therapies, lack of patient acceptance of the diagnosis, and other pertinent clinical demands. The article concluded by stating that education about depression is a necessary tool in solving this problem in addition to providing services to destigmatize depression, as well as counseling services.


In Denmark, a study was conducted with N=311 refugee children from the Middle East whose families were either able or not able to stay in Denmark as Asylum Seekers. This was done through structured interviews with the children’s parents regarding exposure to violence and mental health. Results indicated that 8 out of 10 children were exposed to violence, and 7 out of 10 had witnessed violence. In both groups of Asylum Seekers, 66% suffered from anxiety, and 30% had sleeping problems.

In Iraq, there was a cross-sectional survey conducted at two primary health care centers in Al-Nisiriyah City using the PHQ and WHOQOL-100, with an N=214 of primary health care patients 16 and older. The results indicated that 10.2% experienced depressive disorders while 8.4% experienced anxiety disorders; 25% of the detected cases had both disorders simultaneously. It was also found that the prevalence of the disorders were more significant among woman (p<.4) and people who were illiterate (p<.3). Results also suggest having one or more of these disorders decreased the quality of life compared to a patient without these disorders.


As part of the WHO World Mental Health Survey Initiative, a nationally representative survey was carried out in Lebanon in September of 2003. The survey found that 17% of the respondents met criteria for a specific DSM-IV psychiatric disorder within the past 12 months. Most commonly diagnosed was specific phobia (88.2% of all conditions), and major depression in 4.9%. Twenty seven percent of those with a diagnosis were classified as having a "serious" degree of impairment. Nearly half of the population studied reported exposure to war related traumatic events.

Sociodemographic correlates of mood and anxiety disorders were female sex, middle age, and never married status. Interestingly, the prevalence of impulse control and substance use disorders was reported to be equal among men and women. Also, no association between socioeconomic status and mental disorders was found in this study.

Those persons reporting exposure to two or more war related traumatic events had an increased likelihood of anxiety or impulse control disorders. Only 11% of persons suffering from a 12 month disorder had ever sought treatment. Of those who had sought treatment, 85% of them sought treatment from the medical sector. The remainder was treated in alternative settings, such as faith- or religious-based healers or fortunetellers. The authors note that the study’s 70% response rate makes it likely that the prevalence of mental disorders is underestimated.


This is a cross-sectional study of a Southern Lebanese town that was occupied by Israeli troops for 20 years. A random sample of N=142 residents were assessed for psychiatric distress carried out using the GHQ 12, and a number of other measures, including reported exposure to war related events. After adjusting for all variables, excess psychiatric distress was found to be associated with older age and lower education. The incidence of psychiatric distress as measured by the GHQ 12 was reported to be 26%. It was noted that certain social and religious groups in
the town had been in collaboration with the occupying forces, and many of these individuals refused to be interviewed.


In Palestine, a study was conducted among a sample living in a city, another in a village, and another in a refugee camp using the Death Obsession Scale with an N=601. The results yielded General Death Obsession among women; however, among men it yielded Death rumination, Death dominance, and Death Idea repetition. That being said, Palestinian men and women yielded lower scores than those from Egypt, Syria, Lebanon, and Kuwait.


In Palestine, a study was conducted on N=65 Palestinian families from the Gaza Strip using Family Military Trauma to measure traumatic events families experienced during the first Intifada, Beck Depression Index to measure depression symptoms and Post Traumatic symptom. Other instruments used were: Resiliency Attitude Scales and Health Related Quality of Life. This was done to measure symmetries and asymmetries between families when exposed to traumatic events. Results indicated four types of families: resilient families, children’s strength families, ordeal families, and parental strength families. The resilient and ordeal families were symmetrical, whereas the parental strength families and the children’s strength families were asymmetrical.


In the Netherlands, a study was conducted to identify risk factors associated with physical and mental health problems. This was done through a population based study of adults N=178, selected randomly from 3 municipalities, from Afghanistan, Iran, and Somali who are refugees and asylum seekers. The measures used were the Harvard Trauma Questionnaire and the Hopkins Symptom Checklist.

Results indicated the following:

- 59.1% of Asylum seekers and 42% of refugees considered their health to be poor.
- In both the refugee and the asylum seekers groups, approximately half of the respondents had one or more chronic conditions.
- More asylum seekers had PTSD than did refugees.
- Those from Iran had higher rates of PTSD, Depression, or Anxiety.
- Being female was associated with higher rates of PTSD, Depression, and Anxiety.
- More post migration stress and less social support was associated with PTSD, Depression, and Anxiety.


This is a report written to identify the following: self-reported trauma, torture prevalence, demographic characteristics, and health and social problems associated with the trauma experience of Somali and Oromo refugee women. This was done using a cross-sectional population based survey with N=1134 of Somali and Oromo women living in USA. Results indicated the following: physical, social, and psychological problems were associated with torture and high trauma exposures, and women with larger families reported: higher trauma, more torture, and more problems than the others.


In Juba, a town in southern Sudan, a cross-sectional random cluster survey was conducted to measure PTSD and Depression in relation to trauma exposure, displacement, and other demographics with an N=1242 of individuals over the age of 18 years. This was done using the Hopkins Symptom Checklist to measure symptoms of Depression and the Harvard Trauma Questionnaire to measure PTSD. Results indicated that 36% met the criteria for PTSD, and 50% met the criteria for Depression. Through multivariate regression analysis it was conveyed that with the outcomes of PTSD and Depression there was strong associations with gender, marital status, forced displacement, and trauma exposure. Those that will experience higher rates of trauma are: IDP's, men, refugees, and those that have been displaced more than once.


A cross-sectional survey of low income married couples in Lebanon. The data was derived from information from N=2797 households. The study reported a strong positive correlation between involvement of the husband in some housekeeping tasks, and the wife's psychosocial health. Several other notable results were higher levels of distress among women in the labor force. This finding is consistent with other regional literature, and attributable to the “double burden” effect of work and social expectations for care at home. Another finding was the association between smoking and distress in women, particularly in relation to marital dissatisfaction. Again this phenomenon has been noted in regional literature and is likely an "externalization" of distress, as smoking among women in Arab countries is relatively taboo behavior.


The aim of this study was to understand the experience of Egyptian families caring for a relative with mental illness in Australia. N=7 participants from Egyptian background, caring for a
relative with mental illness, were included. A hermeneutic phenomenological approach, informed by the work of Heidegger, was used. Qualitative methods used data collection through in-depth audio taped interviews conducted in the Arabic language, which were then translated and transcribed in English. Data analysis revealed five themes: Why did it happen? How do I protect my loved ones? What has it done to me? What has it done to us? How do I survive? Findings of the study have the potential to raise health-care professionals’ awareness of the needs of Egyptian families, their beliefs, values, and coping with mental illness. This study reveals the perspective of addressing the complexity of migration in the way families of non-English speaking origins manage the experience of caring for members with mental illness. It sheds some light on the marginalization and misunderstanding of their needs.


Iraq / United States. A retrospective study of Iraqi immigrants in the United States arriving after the Gulf War (early 1990s) was conducted. Medical charts were examined and compared to American citizen, non-immigrant controls. N=375 Iraqi immigrant clients had their charts examined in a clinic that serves Arab-Americans. There was higher prevalence of PTSD and other co-morbid health problems found in Iraqi refugees than in the control population whose charts were examined. Authors suggest further research on immigrant populations with trauma histories to better facilitate treatment.


Iraq. Eyewitness account of the effect of security failures and prolonged terrorism, armed combat, and social instability in Iraq.

“News of improvement in Iraq’s security situation is sadly exaggerated. While most citizens long for normality, they know that the fragile peace depends on a high-profile military presence.” Z Chehab


In Iraq, there was a study to examine the extent of using the insanity defense to determine the length of detention of offenders in high security units, and to identify types of mental illnesses and offenses committed. The sample was N=65: N=56 participants from Ibn-Alhaithem Secure Detention unit for male offenders and N=9 of participants from Zeinab Secure Detention unit for females. Study was conducted through an interview followed by a ‘semi structured interview questionnaire based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), to determine the types of mental illness. The results indicated 69% of the mentally ill offenders had been detained for duration of less than 5 years, while 4.61 % being detained more than 15 years, and 23% detained in the hospital over the past year. Schizophrenia was the most frequent mental illness affecting 74% of the sample, followed by 12.4% affected by delusional disorder. 70.7% of inmates had murdered someone making it the most common crime, while arson was the least common at 1.53%. Results also indicated the length of stay by mentally ill offenders in a high-security psychiatric hospital is relatively short, and that the insanity defense
is used at a higher frequency in Iraq than that of western societies; which might explain the high rate of repeated crimes by this population.


In Basra, Iraq, a physician was asked to plan and implement a rehabilitation service for torture survivors- the Al-Fuad Center for Rehabilitation of Torture Victims (FRCT). The center worked under the concept of developing its work under health promotions and illness prevention. This was done through the training or professionals that would be able to establish treatment areas in different parts of Iraq. Training will include: trauma symptoms and signs, in order to address these issues in their early stages. In addition to the aforementioned, the reconstruction of civil society will be done alongside an NGO especially because illness, in this case, is directly related to violence.


Gaza, Palestine. A study was conducted with for an N=108 of 17 year old adolescents living in traumatic and stressful events. They were recruited through a community based random sample. Measurements used were: the Saleh Picture IQ Test to measure intelligence, WISC digit span to measure cognitive capacity, Eysenck’s Neuroticism Scale to measure Neuroticism, Reaction Index to measure PTSD, Beck Depressive Index to measure depressive symptoms, and other measures. The results indicated that those exposed to high levels of traumatic events, had poor cognitive capacity, and had high neuroticism in middle childhood would have PTSD symptoms. Low satisfaction with quality of life and depressive symptoms were conveyed among those with high levels of military violence during childhood and stressful life experiences.


Gaza, Palestine. A study was conducted in areas undergoing continuous bombing. The instruments used included the Gaza traumatic checklist to measure experience of traumatic events, Children’s Revised Impact of Events Scale to measure PTSD, and Revised Children’s Manifest Anxiety Scale to measure anxiety. This was done with an N=100 families, 200 parents, and 197 children aged 9-18 years. Both adults and children had anxiety rates above the previous cut-off rates, high rates of PTSD, and a high number of experienced traumatic events.


Iraq, Kurdistan. Author comments on data presented in separate article by Ahmed Abdolbaghi. In the city of Dohuk school children were evaluated and 1/3 were found to have symptoms of PTSD. Kurdish Iraq has been a very violent locale during the regime of Saddam Hussein, but the invasion made things worse. Many parents of the same children studied have similar or
higher rates of PTSD, depression and trauma. Conclusion is that psychological somatoform and psychoform dissociation, PTSD and secondary mental and somatic illness are a major public health problem in Iraq. Author also suggests implementation of complementary and alternative medicine for treating PTSD (abdominal breathing, MBSR, Qi-Gong, EFT-acupressure, etc.).


Iraq and Syria. This is an article exploring the implications of the Iraqi refugee crisis for the country of Syria. Sources of data include United Nations High Commission for Refugees, Dutch Red Cross, Syrian government, and US Department of Homeland Security. Detailed socio-political and historical perspectives that cover: refugee’s social features and humanitarian conditions, Syrian government response (entry and visa policies, economic and financial impact, security response, humanitarian aid and Syria’s relations with foreign donors), potential for conflict spillover (Iraqi political factions and activity in Syria, refugee’s propensity for violence, potential for refugee violence fuelled by socioeconomic destitution), etc.


This article records the proceedings of a regional psychology conference in Amman Jordan in 2007. Issues reviewed included the role of psychology in disasters and crises, psychology of terrorism, cross-cultural issues, and professional issues. Summaries of several studies are presented, however, with few details and no references included.


This study sought to detect the differences in prevalence and intensity of PTSD among three groups of men who served in the Kuwaiti military. The study was carried out by interviews as well as the administration of questionnaires. Comparison was made between individuals in the military who had retired prior to the Gulf War, those who served during the conflict but were uninvolved in battle, those involved in battle, and those who had been held as prisoners of war. A total of N=200 individuals were studied. Subjects were interviewed using the clinician administered PTSD scale, the Hopkins Symptoms Checklist, the Internal/External locus of control, as well as the Self Esteem scale. Rates of PTSD were significantly higher among the “POW” group than the “retired” and “in battle” groups (40% versus 24 and 22% respectively).

The characteristics of PTSD in this population were consistent with populations elsewhere. Self-esteem was the only covariate of PTSD scores. External locus of control was associated with anxiety, depression, and PTSD. Among the groups with PTSD, symptoms of low self-esteem and avoidance were prominent.

In Denmark, a study was conducted with refugee children and adolescents from the Middle East using structured interviews and the Achenback System of Empirically-based assessments (which covers aspects of adolescent psychopathology) with an N=122. This was done to analyze the differences between self and parents ratings of behaviors that are internalized and those externalized, in order to identify predictors of these differences. The results indicated that parents and children differ in self-ratings, and this could be due to aspects other than inter-observer disagreement.


In Palestine, a cross sectional survey was conducted on a convenience sample of N=1185 adolescents drawn from secondary schools in the Western Bank and East Jerusalem using the Conflict Tactic Scales to measure adolescents witnessing and experiencing abuse in their families, and the Youth Self Report to measure psychological symptoms. The results indicated that exposure to violence led to significant amounts of variance in aggressive behavior, withdrawal, somatization, delinquent behaviors, social problems, and thought problems.


In Sweden, a study was conducted to identify the impact of various models of stress on refugees pre and post settlement. N=124 Middle Eastern refugees were sampled using a questionnaire, Symptoms of Common Mental Disorders (GHQ), and Core Symptoms of Post-traumatic Stress (CPTS). Results indicated that pre-settlement trauma exposure had the strongest impact.


In Sweden, a study was conducted on a group of males for symptoms of PTSD or PTSD hypothetical clusters. N= 161 men were included in the study: N=36 Iraqi male refugees who had long lasting torture experience as adults; N=42 Swedish prisoners with early childhood trauma; N=31 Arab refugee men without self-reported torture or violence; and N=52 non-traumatized Swedish males. The results conclude the individuals who suffer prolonged torture experiences or had early childhood trauma exposure showed impaired personality profiles, and enhancement of cognitive, affective, and behavioral vulnerabilities.


Resettled Sudanese refugees in New Zealand and Australia were studied for impact of post-migration trauma, resettlement, and social support on current mental health of N=63 resettled
refugees. Measures included: Hopkins Symptom Checklist, Harvard Trauma Questionnaire, and Post Migration Living Difficulties. Results indicated that 25% high levels of psychological distress, while 5% met the criteria for PTSD. Perceived social support, pre migration trauma, family status, and gender were predictors of mental health outcomes.


This is a population prevalence study of emotional and behavioral disorders among N=1186, 6–12 year old children in Minia, Egypt. Data was collected from teachers and parents using the Strengths and Difficulties Questionnaire (SDQ) with a 98% and 91% response respectively. Prevalence of abnormal symptom scores is reported for both parents and teachers. Prevalence of probable psychiatric diagnoses was measured using the SDQ multi-informant algorithm. The prevalence was then compared to those published in the UK data.

The prevalence of emotional and behavioral symptoms was high as reported by both parents and teachers (Abnormal total difficulties: teachers 34.7% (95% CI 32.0–37.5), parents 20.6% (18.2–23.2). Abnormal pro-social scores: teachers 24.9% (22.5–27.5), parents 11.8% (9.9–13.9)) but prevalence of probable psychiatric diagnoses was much lower (Any psychiatric diagnosis 8.5% (6.9–10.5); Emotional disorder 2.0% (1.2–3.0); Conduct disorder 6.6% (5.1–8.3); Hyperactivity disorder 0.7% (0.3–1.4)).

Comparison with UK data showed higher rates of symptoms but similar rates of probable disorders. Despite public, professional and political underestimation of child mental health problems in Egypt, rates of symptoms are higher than in developed countries, and rates of disorders are comparable. This epidemiological information about prevalence of child mental health problems is essential to inform policy and public health practice. The findings support greater investment in community and primary care prevention and treatment initiatives.


Iraqi-Mandaeans refugees, N=315, in Australia were surveyed to assess post traumatic experiences and resettlement difficulties. Mental health outcomes, including PTSD and depression were also assessed. Instruments used included the Post Migration Living Difficulties Checklist (PMLD), the Harvard Trauma Questionnaire, and the Hopkins Symptom Checklist adapted for refugees (HSCL-25). Fear of cultural extinction was measured by use of five items developed by the researchers. Using a scale of 1=not worried at all, to 4=extremely worried, participants were asked to rate how worried they were that the Mandaeans religion and culture would cease to exist in the future. Four additional items with yes/no responses assessed participants’ beliefs regarding the reason for potential extinction: “The Mandaeans religion is closed to others,” “The Mandaeans community is spread world wide,” “Mandaeans are being persecuted,” and “Mandaeans are the target of genocide.” Results are discussed in pp. 230-231 of the article.

An analysis of nationally representative data of N=560 Jews and N=182 Arabs in Israel was conducted with a prediction that exposure to violence and terrorism would result in psychosocial and economic loss, in addition to the fact that distress related to ethnocentrism and violence would increase posttraumatic growth. The results indicated that psychosocial resource loss, social support, and posttraumatic growth had both direct and indirect effects on psychological distress. Also, political attitudes were not related to posttraumatic or depressive symptoms.


In Palestine, a study was conducted on a national sample of Jews and Arabs undergoing violence using a structured survey instrument and a 17-item PTSD Symptom Scale. Also used was 10-item scale by Norris to measure loss of economic and psychosocial resources due to the second Intifada. This was done on an N=709 of Jews and Arabs. Results indicated that less psychosocial resource loss and majority status were most indicative of resilience and resistance; this is followed by socioeconomic status, support of friends, and posttraumatic growth.


In Palestine, study was conducted among N=7 recruited Israeli families and N=9 recruited Palestinian families with at least one civilian family member was killed during violent attacks. Semi structured interviews were conducted, of which 6 of the questions asked were about the experience and long-term consequences. The narratives conveyed similarities between the Palestinian and Israeli families in relation to coping, influence on family interaction, and the perception of death.


In Saudi Arabia, using stratified random sampling techniques for N=1552 adolescents were screened for mental health disorders using the SCL-90-R. Results indicated that phobic anxiety, interpersonal sensitivity, and obsessive compulsive disorder (in that respective order) were the most frequent mental symptoms. The biggest factor affecting mental health was sociodemographic characteristics.

Africa, the Americas, Asia, Europe, Middle East, and the Pacific. N = 72,933 community dwelling adults were interviewed using face-to-face household surveys to study cohort-country variables in gender differences in lifetime DSM-IV mental disorders, across 15 countries in the WHO-World Mental Health Survey Initiative, seeking to determine variable correlations to female gender roles (as measured by aggregate patterns of female education, employment, marital timing, and use of birth control). In all cohorts and countries women had more anxiety and mood disorders than men, and men had more externalizing and substance abuse disorders than women.


Arab region – author is from UAE. A general overview of Arab-female Mental Health, through reviewing the literature and WHO statistic. A thorough review of treatment of all aspects of mental health, risk factors, co-morbidities, trends in seeking care and health care delivery, with recommendations for improving the recognition of mental illness, and the delivery of mental health care in the Arab region.


Contrasts data from Egypt, Kuwait, Lebanon and Syria with data from Spain, UK, and USA. Study focused on sex/gender related differences in data gathered with the Arabic Scale of Death Anxiety (ASDA). N = 2,978 undergraduate volunteers participated while residing in their countries of origin and survey was administered in their native tongue. Sex-related differences on the ASDA were found statistically significant in all countries except the UK, with women having higher mean scores than their male peers. Except for Lebanon, all Arabs had significantly higher mean ASDA scores than their Western counterparts. Explanations include difference in socio-economic status of most Arabs v. Westerners, higher emotional responsiveness of Arab personae, and differences in individualism, collectivism, and secularism in the respective countries sampled.


In Palestine and Israel, two groups of students, N=1,235 Palestinians and N=1,016 Israeli’s ages 14 to 17, were assessed for rates of exposure to conflict, relationship of exposure and posttraumatic symptoms, functional impairments, somatic complaints, and coping strategies. This was done through measuring: Posttraumatic stress symptoms using UCLA PTSD Reaction
Index, functional impairment questionnaire, Somatic complaints checklist, and Brief COPE to measure coping strategies.

Results indicated that females relayed more distress than males and greater exposure was associated with more posttraumatic symptoms and somatic complaints. There was a significantly higher rate of PTSD with Palestinian adolescents than there was with the Israeli adolescents. Those with higher rates of PTSD also had higher rates of functional impairments and somatic complaints. This article concludes with an emphasis on the need for school-based programs to aid children in coping and to help intervene in regards to their mental wellbeing.


Middle East - (Bahrain, Cyprus, Egypt, Gaza Strip, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Turkey, UAE, West Bank and Yemen). Review of growing body of literature on trauma and PTSD with the goal of bringing to light literature that may be relevant and timely for those researchers, clinicians and policy makers who are concerned with addressing the mental health care needs of affected Middle East populations. Data from Israel, Palestine and Iran is plentiful, while few to no studies exist for the populations affected in Cyprus, Egypt, UAE, Bahrain, Oman, Qatar, Jordan, and Syria.


This study aimed to assess the attributional style among Egyptians with schizophrenia. The attributional style is one domain of social cognition that involves perceiving, interpreting, and generating responses to others’ intentions and behaviors in different situations. The study took place in a psychiatric hospital in Egypt. N=150 from eight psychiatric wards were randomly selected. Data was collected using the Ambiguous Intention Hostility Questionnaire (AIHQ), the attributional style interview schedule, and the sociodemographic/clinical data sheet. The attributional style of the studied participants with schizophrenia, regarding their perceived social problems, tended to be external, unstable, and specific. It tended to be related to specific causes, which were mostly externally attributed to other people and to circumstances, and were perceived not to persist in the future. Subjects tend to blame other people for negative events if these events are perceived to cause intentional harm. In this study, the authors acknowledged the limitations including the lack of standardization of the used tools for the Egyptian culture. In addition, no comparative groups were included and no transcultural discussion was provided.


The aim of this study was to assess consanguinity as a risk factor for psychoses among a subset of Egyptian patients. The authors extended their earlier analyses of parental consanguinity rates among patients with bipolar I disorder (BP1), to schizophrenia (SZ) in the same population.
Methods used a case–control study conducted at Mansoura University Hospital, in Mansoura, Egypt (SZ, n=75; controls, n=126, and their available parents). The prevalence of consanguinity was estimated from family history data (‘self report’), followed by DNA analysis using short and repeat polymorphisms (STRPs, n=63) (‘DNA-based’ rates). Results show self-reported consanguinity was significantly elevated among the patients (SZ: 46.6%, controls: 19.8%, OR 3.53, 95% CI 1.88, 6.64; \( p=0.000058 \), 1 d.f). These differences were confirmed using DNA-based estimates for coefficients of inbreeding (inbreeding coefficients as means ± standard error, cases: 0.058±0.007, controls: 0.022±0.003).

The authors concluded that consanguinity rates are significantly elevated among Egyptian SZ patients in the Nile delta region. The associations are similar to those observed with BP1 in their earlier study. This raises public health concerns to the substantial risk associated with consanguinity. The study also paves the way for gene mapping studies.


This study assessed the prevalence of depressive symptoms and antidepressant medication use among elderly with and without type 2 diabetes, and the association between depression and diabetes complications. Research design and methods: In 2004–2006, the Primary Health Care research in Type 2 Diabetes Study applied the Beck Depression Inventory II (BDI-II) to N=458 participants with Type 2 Diabetes (47% male, aged 65±8.9 years, type 2 diabetes duration 19±8.7 years) and N=546 participants without diabetes (non diabetic group) (51% male, aged 59±8.7 years). Use of antidepressant medication was self-reported. Depressive disorder was defined as a BDI-II score>14 and/or use of antidepressant medication. Occurrence of diabetes complications (retinopathy, blindness, neuropathy, diabetes-related amputation, and kidney or pancreas transplantation) was self-reported.

Results revealed that Mean BDI-II score, adjusted for age and sex, was significantly higher in participants with Type 2 Diabetes than in non-diabetic participants (least-squares mean ± SE: 7.4±0.3 vs.5.0±0.3; \( P<0.0001 \)). The prevalence of depressive disorder (as defined by BDI-II>14 and/or antidepressant use) in participants with Type 2 Diabetes was significantly higher than that of age- and sex-adjusted non-diabetic participants (32.1 vs. 16.0%, \( P<0.0001 \)). Type 2 diabetic participants reported using more antidepressant medications (20.7 vs. 12.1%, \( P=0.0003 \)). More type 2 diabetic than non-diabetic participants were classified as depressed by BDI-II cut score (17.5 vs. 5.7%, \( P<0.0001 \)) or by either BDI-II cut score or antidepressant use (32.1 vs. 16.0%, \( P<0.0001 \)). Participants reporting diabetes complications (n=209) had higher mean BDI-II scores than those without complications (10.7±9.3 vs. 6.4±6.3, \( P<0.0001 \)).


Iraq: The focus on trauma alone, has led to the inadequate attention to factors associated with resilience. The study focused on concept of resilience in the children affected by the Iraqi war, and to their learning processes. School age students 10-18 years old were administered a Likert scale (0-3) based questionnaire composed of several sections; a) social demographic, b) depression, c) PTSD, d) GAD. A 75% of an N=48, (26 female, 22 male) responding were found
to manifest the majority of symptoms associated with GAD and PTSD. Further analysis explores related rates of school attendance, school participation and rates of reported depression symptoms.


Iraq, Baghdad. During Jan–Feb 2006 N=600 school children aged 6-15 years were interviewed using the PTSD Module 1 of the Mini International Neuropsychiatric Interview with the goal of determining the prevalence of PTSD. During the previous 2 years, 47% of those surveyed had experienced major traumatic events. The prevalence of PTSD was 14% with a male/female ratio of 1\3. The prevalence of PTSD was lower than expected suggesting that there is some form of stress-hardy adaptive response or behavior that has been learned by the Iraqi population over the last 3 decades of stressful traumatic events on a local and national level.


In Syria, a cross-sectional study was conducted to measure the prevalence of obesity among adolescents, and to measure its associated factors. The sample was randomly selected from 6 different schools in Damascus, and contained N=776 adolescents ages 15-18 years. This study used a two stage sampling method; the first was a probability sample of the student population size, and the second was a random sample of sections of various grades in the school. The measures utilized were measurement of dietary intake through a 24 hour recall; subjects were weighed, height was measured, BMI registered, and waist circumference noted. Results indicated that 8.6% were estimated as obese or overweight. Those that were obese had higher carbohydrate and fatty acid intake than those that were of normal weight. Through regression analysis it was apparent that more boys were obese than were girls, and the higher the parents’ education was, the more likely the adolescent is to be obese.


In Syria, a cross-sectional population based survey was conducted to examine physical impairment's association with Depression, gender, and other socio-demographic characteristics on an N=2038 of adults ages 18-65 years. Computer-based questionnaires were used, including the12-item World Health Organization adapted version used to measure physical impairment. Also obtained were self-reported physician diagnosed Depression and chronic disease. Results indicated that high physical impairment was associated with being female, low socioeconomic status, and depression. In addition, depression was viewed as being mediated by co-existing chronic disease when associated with physical impairment.


Diabetes is associated with increased risk of depression and anxiety. UAE has one of the highest rates of diabetes in the world, second only to Nauru. The objectives of this study were to
estimate the prevalence of psychiatric distress and to identify associated risk factors in a cross-sectional study of diabetic persons in Sharjah UAE (N=347). Results indicated that persons with higher scores on a mental health scale (i.e. k-6) had poorer diabetic control and were more likely to have eye and vascular/neurological complications from their diabetes. Authors claim that their results highlight the importance of assessing and treating co-morbid mental health problems in diabetic patients. Authors discuss the impact of traditional beliefs of diabetic management.


In the UAE, articles on mental health were researched from 1989-2008 with the purpose of finding gaps and making suggestions for future research. A total of 192 articles were found from the past 20 years. Most of the studies were epidemiologic or psychometric written in the United Arab Emirates University; there were no studies found addressing systems research. A few of the topics that were underrepresented in the research were: ethnic, gender, interdisciplinary, health promotions, and cross-cultural research. Concluding remarks states the need for international collaboration in order provide collaboration in addressing issues of early prevention intervention.
8. Research/Teaching/Evaluation

Raundalen, M., & Melton, G. B. (1994). Children in war and its aftermath: Mental health issues in the development of international law. *Behavioral Sciences & the Law, 12*(1), 21-34. This article presents clinical personal impressions of children from the following countries: Uganda, Sudan, Mozambique, Palestine, Iraq, and the former Yugoslavia. In addition, discussion of steps that need to be taken, are presented, in regards to mitigating the effects of war on children's wellbeing.

Harrison, A. (1996). Patients' evaluations of their consultations with primary health clinic doctors in the United Arab Emirates. *Family Practice, 13*(1), 59-66. Most of the N=152 patients interviewed rated their consultations positively; but less than a tenth was completely satisfied. Components associated with patient satisfaction in developed countries (such as taking a history and advising how to deal with the conditions) also had the same impact in the United Arab Emirates. The doctor’s decision about whether or not to include a component was usually perceived as appropriate by the patients. Nonetheless, patients tended to give higher ratings to doctors who discussed issues with them and whom they perceived as empathic.

Mothers consulting the doctor about their children’s health were especially sensitive to such factors. Among the issues discussed is whether doctors should more routinely be addressing social, family and affective issues; so shaping patients’ expectations that such components are appropriate and sometimes vital. Although difficult, given the lack of continuity of care in primary health clinics, the present study suggest that Emirati patients would be comfortable with, and many would value, inclusion of such components.

Okasha, A., (2004) Focus on psychiatry in Egypt. *The British Journal of Psychiatry, 185*: 266-272. The aim of this article was to summarize the status of Psychiatric education, mental health services, mental health policy and profiling of psychiatric disorders and therapies in Egypt. Mental disorders have been recognized in Egypt for millennia; 5000 years ago, and were considered to be physical ailments of the heart or uterus, as described in the Ebers and Kahun papyri. These disorders carried no stigma, as there was no demarcation then between psyche and soma. In the 14th century – 600 years before similar institutions were founded in Europe – the first psychiatric unit was established, in Kalaoon Hospital in Cairo. Egypt is central to the Arab world, which, despite its wealth and its natural and human resources, has fared poorly in many aspects of development. Important problems include illiteracy (especially among women), lack of job opportunities (especially for young people) and slow economic growth because of loss of traditional economies, low productivity, and lack of innovation and competitiveness. High military spending, rapid expansion of the populations threatens progress in light of limited resources. The author recommended that mental health policies and legislation in Egypt should develop partnerships with other agents such as non-governmental organizations and consumer groups in order to enhance the care for psychiatric patients.

Women are often the key to improving a population’s health, and this is especially true in the Eastern Mediterranean region. Projects that empower women and provide basic needs are transforming poor communities.

Basic development needs programs are community-based initiatives that can tackle poverty, ill health, and social determinants of health. Enhancing the status of women is of special relevance for programs in the Eastern Mediterranean region. Programs enable women to earn money and improve their access to basic physical, health, and social needs. National and local government commitment and collaboration with civil society are essential to scaling up these programs.


In Kuwait, a study was conducted to examine the test-retest, concurrent, and factorial validity of a single self-rating scale to assess religiosity. The Self-Rating of Religiosity, the Self-Rating of Strength of Religious Belief, and the Hoge scale of IRM was used with an N=277 of Kuwaiti Muslim undergraduate men and N=304 undergraduate woman (Total=531). The results indicated a SRR of (0.89), which had strong correlations with both SRSRB (.577) and IRM(.498). A striking component was extracted in which the SRR had a high loading of (0.84). Therefore, the study was concluded that assessing religiosity with a single item scale is reliable, valid, and viable in community surveys.


In Kuwait, the Sahin-Francis Scale of Attitude and the Sahin Index of Islamic Moral values were tested on a sample of N=1,199 of that 603 were males and 596 were females all from secondary schools in six different educational districts in Kuwait. The data collected supported the internal consistency reliability and construct validity of both instruments.


Questionnaire study of N=386 randomly selected physicians working in hospitals in Jordan. The questionnaire sought to assess physician’s knowledge, attitudes, and practices related to the implementation of evidence-based medicine. Barriers to the implementation of research based clinical practice included perceived threats to physician autonomy, limited technological resources, and clinical overload. In addition, there were significant variations in knowledge among physicians regarding the accessing of research information and clinical guidelines.

The physician sample was very heterogeneous and included residents, attendings, and other physicians working in both academic and government settings. In addition, the physicians surveyed had done their medical training in many different countries. It is likely that previous
training and exposure would influence attitudes and skills related to evidence-based medicine, however, the relationships between these variables were not assessed.


In Yemen, focus group discussions were carried out in N=4 different health centers and hospitals in an urban, semi-urban, and two rural areas. All participants in the focus group had at least one child. An Arabic speaking female facilitator used a guide to introduce Malaria related topics to be discussed among the participants. Those included: perceptions, transmission, prevention, symptoms, treatment, and so on. These discussions were translated, transcribed, and then used to develop a questionnaire. This questionnaire was used with parents or guardians of patients with severe malaria. The questionnaire included demographic information and beliefs of transmission and severity of Malaria.

Results indicated that 78% of patients delayed treatment after symptom onset. Delays were due to financial constraints, and the lack of male presence for females presenting with symptoms. Differences were present between male and female knowledge of Malaria. Post hospital admission, 29% were inappropriate for treatment, and it was ineffective in 57%. Article concluded that some beliefs present in Yemen were barriers to Malaria treatment and improvement.


Africa, the Americas, Asia, Europe, Middle East, and the Pacific. N = 72,933 community dwelling adults were interviewed using face-to-face household surveys to study cohort-country variables in gender differences in lifetime DSM-IV mental disorders, across 15 countries in the WHO-World Mental Health Survey Initiative, seeking to determine variable correlations to female gender roles (as measured by aggregate patterns of female education, employment, marital timing, and use of birth control). In all cohorts and countries women had more anxiety and mood disorders than men, and men had more externalizing and substance abuse disorders than women.


Contrasts data from Egypt, Kuwait, Lebanon and Syria with data from Spain, UK, and USA. Study focused on sex/gender related differences in data gathered with the Arabic Scale of Death Anxiety (ASDA). N = 2,978 undergraduate volunteers participated while residing in their countries of origin and survey was administered in their native tongue. Sex-related differences on the ASDA were found statistically significant in all countries except the UK, with women having higher mean scores than their male peers. Except for Lebanon, all Arabs had significantly higher mean ASDA scores than their Western counterparts. Explanations include difference in socio-economic status of most Arabs v. Westerners, higher emotional responsiveness of Arab personae, and differences in individualism, collectivism, and secularism.
in the respective countries sampled.


This manuscript focuses on the development of undergraduate medical education in the six Gulf Cooperation Council (GCC) countries. The development of medical education is relatively new dating from the 1960s. N=14 senior medical faculty from the GCC's medical colleges were interviewed on 7 topics related to undergraduate medical education. The survey respondents provided information on 27 medical colleges. In the article medical colleges in Saudi Arabia, UAE, and Oman are reviewed. Evaluation of the actual implementation of well-designed medical curriculum doesn't exist and still needs to be conducted.


In the UAE, articles on mental health were researched from 1989-2008 with the purpose of finding gaps and making suggestions for future research. A total of 192 articles were found from the past 20 years. Most of the studies were epidemiologic or psychometric written in the United Arab Emirates University; there were no studies found addressing systems research. A few of the topics that were underrepresented in the research were: ethnic, gender, interdisciplinary, health promotions, and cross-cultural research. Concluding remarks states the need for international collaboration in order provide collaboration in addressing issues of early prevention intervention.


In a new country such as the UAE, which was established in 1971, a strong infrastructure for population research is yet to be established. These authors address the challenges to establishing such as effort in the UAE. The authors review the many cultural, demographic, and methodological barriers for conducting survey research and/or qualitative interviews in the UAE.


In the Aseer region in Saudi Arabia, a study was conducted to evaluate the experience of health promotion clinic. Records of N=429 individuals attending health promotion clinics were reviewed, and statistical analysis was carried out on SPSS. Results indicated that 90% had an imbalanced diet and did not perform any physical activity, 25% were obese, 14% were diagnosed with depression, and 8% were smokers. In addition, pre-hypertension was detected for 44%,
hypertension was detected for 12%, and 3% were diabetic. Those that suffer from depression, obesity, high blood sugar, and abnormal lipid profile were referred to suitable clinics for further treatment. The article concluded that health promotion clinics can be a good tool for early detection and management in primary care settings.


To assess the Knowledge Attitude and Practice (KAP) of MOH primary health care physician in the management of Type 2 Diabetes Mellitus (DM). A cross sectional survey was conducted between April and October 2010 on MOH Primary Health Care physicians working in Al Hassa district of Saudi Arabia by filling up of pre-tested specially designed questionnaires focus on Knowledge, Attitude and practice towards Type 2 DM patients. This study explored several aspects of diabetes related KAP of Ministry of Health appointed GPs and identified the need for improvement in their knowledge, attitude and practices for treating Type 2 DM patients. It is recommended that awareness and education program is necessary to update the GPs (especially those working in urban areas, females and Saudi physicians) on epidemiology, diagnostic criteria of type 2 diabetes, DSME, effective treatment of diabetes, practice of insulin injection, adherence to the Clinical Practice Guidelines (CPG) and prevention of the complications of type 2 diabetes. It is of paramount importance that CPG be made available to each physician.


This paper summarizes the current state of mental health services in the Arab world (i.e. 22 members in the Arab league). Data was obtained through Arab Country Ministries of Health Eastern Mediterranean Region Office (EMRO) of the WHO, National Psychiatric Societies, and National Psychiatric Leaders. Mental expenditures and Mental Health surveys of mental illnesses were not available. Six out of 20 countries do not have mental health legislation and two do not have a mental health policy. Three countries (Lebanon, Kuwait, and Bahrain) had in 2007 more than 30 psychiatric beds per 100,000 population. Sudan and Somalia had less than 5 per 100,000. The highest number of psychiatrists is in Qatar, Bahrain, and Kuwait while seven countries (Iraq, Libya, Morocco, Somalia, Sudan, Syria, and Yemen) have less than 0.5 psychiatrists per 100,000. Djibouti has no psychiatrists.

Although many Arab countries have in theory agreed to integrate mental health services into primary health care, the authors concluded implementation has been limited. The authors believe that in the Arab world the health education buffets, especially the mental health buffet is grossly inadequate.


Globally there is a huge gap in research between industrialized countries and emerging countries. The USA, the UK, some western European countries, and Japan contribute the majority of
papers published in high impact journals. Arab countries do not fare well in comparisons of biomedical research. The aims of this study was to (1) ascertain e numbers of biomedical publications from the GCC in the period of 1970 to 2010, (2) calculate the rate of Publication Per Million of the Population (PPMP), (3) and to examine the relationship between number of publications (PPMP) and the number of physicians per 1000 and GDP per capita. The study revealed 25,561 publications between 1970 and 2010. Saudi Arabia has the highest number of publications. Kuwait had the highest number per PPMP and Qatar had the highest number of physicians per 100 of the population. Authors indicate the need for GCC countries to increase their National Medical Research budgets.
9. Substance Abuse


This article is a review of studies conducted by Palestinians, Jordanians, and Israelis on the current state of substance abuse of Muslims, Christians, and Druze in the three regions. All in all there were 12 Israeli studies on Arabs, 11 Jordanian studies, and 4 Palestinian studies. The Israeli research in the region was regarding alcohol use, the Jordanian research was focused on illicit drug use, and the Palestinian research was still new. The results indicate that Israeli Arabs have higher rates of drug abuse than Israeli Jews, the Jordanian drug user has a higher level of education than the Palestinian drug addict, and the Palestinian is more likely to use multiple drugs.


This study is one of the very few in the Middle Eastern literature that looks at patients with a dual diagnosis. A retrospective chart review of N=1643 available charts of admissions to a Lebanese inpatient psychiatric unit. The charts of patients admitted for substance abuse were reviewed, and the presence of a co-morbid psychiatric history was assessed.

The male to female ratio of the sample was two to one, and 65% of the patients were judged to have a present or past history of coexisting psychiatric diagnosis and substance use. 35% of the sample was shown to suffer from substance abuse alone with no past or present history of psychiatric disorder. Alcohol was found to be the substance most abused overall, but females were more likely to abuse tranquilizers and stimulants than men. Males were more likely to have abused illicit substances such as cannabis or heroin.

In the co-morbid population, depression was the most common diagnosis, followed by bipolar disorder, anxiety disorder, and then schizophrenia. Polydrug abuse was found in 44.9% of the total sample, and the rate of polydrug use did not differ by gender. Personality disorders, particularly antisocial personality disorder was found in 48% of the sample.


At the Behman hospital in Egypt, adult inpatient clients were assessed for substance abuse using EBASS with an N=324 of inpatients with mental disorders due to drug/alcohol abuse. Demographics of the patients were 91.4% male and 91.9% Muslim. Families supported 48.9%. Results indicated the most common substances used were cannabis (93.4%), alcohol (89.7%), psychotropic medications (80.9%) and heroin (78.4%). Anxiety (80.1%) and depression (77.4%) were found common in the patients.

In Egypt, a study investigated the association of substance use with daily hassles and coping strategies using questionnaires that included DHI, CSF and Soueif’s Drug Abuse Patterns Inventory with an of N= 300 male Egyptian manufacturing workers. Results indicated that 20.7% drank alcohol, 16% used psychotropic medications and 17% used illegal drugs. Of those using multiple substances 8.7% used psychotropic medication and illegal drugs, 8% used both psychotropic drugs and alcohol, and 12% used both alcohol and illegal drugs. Daily hassles were associated with substance abuse. However positive coping strategies reduced the likelihood of using substances, while negative coping strategies increased the probability of using some sort of substance.


Iraq, Erbil City. Using the Mini International Neuropsychiatric Interview 5.0 (M.I.N.I.), an N=200 journalists, and N=486 other professionals were interviewed between Sept and Nov 2008 with the goal of assessing rates of EtOH and substance abuse. Amongst journalists, 34.5% were EtOH dependent, and 7.5% were abusers, another 1% were substance dependent, and 1% were substance abusers. Amongst the non-journalists 7.6% were EtOH dependent, and 2.26% were abusers, 1.44 were substance dependent and 1.02% were substance abusers. 50% of journalists and 75% of non-journalists who were either substance dependents or abusers, were EtOH dependents or abusers at the same time. Male gender and higher levels of education were associated with higher dependency and abuse rates in both groups surveyed.
10. Human Rights


This study conducted a large-scale epidemiologic survey in Southern Iraq to determine the (1) extent of human right abuses and (2) local attitudes towards women's health and human rights. A cross-sectional randomized survey of Iraqi men and women was conducted in 2003 after the 1991 Gulf War’s Shiite uprising in the south. A semi-structured interview developed by the authors was used. Results (N=1991 respondents) represented 16520 household members. Overall 47% of those interviewed had experienced one or two episodes of extreme violence. Local men and women did not support a full range of human rights aimed for women; 50% of the men and women agreed that a husband has the right to beat his wife.


This article presents clinical personal impressions of children from the following countries: Uganda, Sudan, Mozambique, Palestine, Iraq, and the former Yugoslavia. In addition, discussion of steps that need to be taken, are presented, in regards to mitigating the effects of war on children's wellbeing.


In Iraq, self-administered surveys and semi-structured interviews were administered to N=98 physicians and hospital directors in order to assess physicians human rights abuses, identify the factors that facilitate abuse, and find methods of creating accountability in order to achieve prevention of the abuses. Results indicated that 71% of the respondents reported that torture was an extreme problem in Iraq. The majority of the respondents reported on peers conducting various forms of torture, with the minority admitting to torture themselves. 52% reported that these abuses were not willful; rather they were forced to do so by Saddams military. Physicians that refused to conduct torture would face anything from torture themselves to imprisonment. Respondents also advised increasing education, enforcing stricter laws, and increasing human rights in order to prevent future involvement of physicians in human rights abuses.


Iraq. Socio-political analysis of the historical and documentary evidence, as well as the data generated from field work and interviews with proponents of truth and reconciliation in post-war Iraq, focused on the efforts that existed to create a truth and reconciliation committee aimed at settling differences and tensions between former Ba’th party members and Iraqi communities that had been affected by it’s policies. Puts forth assertion that the Coalition Provisional
Authority failed to endorse plans based on the South African model, instead choosing to pursue the policy of “de-Ba’athification,” and that this policy lies at the overall failure of the pacification and reconciliation efforts carried out to the date of publication.
11. Social/Environmental Issues


In Khartoum, N=224 ages 22-35 years were assessed using Eysenck Personality Inventory, Self-Rating Questionnaire, and Sudanese rating scale of Anxiety and Depression, in order to estimate psychiatric morbidity in a Suburban area of Sudan. Results indicated no sex difference with the following: 40.3% had a psychiatric disorder, and only 16.6% had a diagnosis. The most common diagnosis was Depression 8.4%, followed by anxiety 3.4%, and, although rare, alcohol abuse was 0.4%.


In Qatar, a study was conducted regarding top morbid fears conveyed by women in Qatar who are seeking therapy on an outpatient basis with an N=64 using clinical interviews. Results indicated that social phobic symptoms appeared in encounters with Qatari nationals who were scrutinizing the patient’s behaviors. Only 8% of women had Agoraphobia, and Coitophobia was present in newly wed women.


This article presents findings from a study that previously looked at divorce in Israeli-Arab societies from the perspective of Arab professionals and Israeli-Arab women living in Jaffa. Based on the experiences of N=9 divorced Muslim women, and N=6 professionals engaged in therapeutic work, this article explored the causes of divorce, coping, and adjustment post-divorce. Some factors leading to the divorce were: husband’s mental state, violence, and substance abuse.


In Palestine, study was conducted on a national systemic random sample of N=2410 women from the West Bank using the First Palestinian National Survey on Violence Against Women. Results indicated that during the 12 months preceding the study, women had experienced physical, sexual, and economic abuse. In addition, results indicated that with higher levels of psychological distress, anger, or fear the rates and patterns of abuse increased.

In Palestine, a study was conducted on a systemic random sample of N=1334 women in the west bank and the Gaza strip, using the Second Palestinian National Survey on Violence Against Women. The results indicated that 87.2%, 54%, 40%, and 44% conveyed that 12 months preceding the survey they have experienced one of more acts of psychological, physical, sexual, economic abuse once or more by their husbands. In addition, low self esteem was explained by their experiences of abuse.


In Palestine, a cross sectional survey was conducted to examine the rates of sexual abuse in Palestinian society, and psychological implications of sexual victimization. This was done with an N=652 Palestinian undergraduate college students, using Finkelhor’s scale to measure sexual abuse and the Brief Symptom Inventory to measure psychological effects. The results indicated that similar rates of abuse were found among males and females. In addition, sexually abused participants had higher levels of psychoticism, hostility, anxiety, paranoid ideation, depression, and psychological distress.


In Syria, a study was conducted to determine the socio-demographic correlates of mental health for women with a low-income background. A randomly selected sample of N=412 from primary care centers in Aleppo, Syria ages 20-37 years were studied using a specially constructed questions that utilized SRQ-20 non-psychotic items and other questions relevant to the women's mental health. Results indicated that 55.6% were undergoing psychiatric distress. In addition, the following were predictors of mental health: physical abuse, education, polygamy, residence, age, age of marriage. Predictors of the worst outcomes were: illiteracy, polygamy, and physical abuse.


This paper is a review of Jordanian court records from 1995. Of N=89 cases of homicide reviewed, N=38 were homicides involving women, and N=23 of these were classified as "honor crimes"; defined as killing due to actual or perceived violation of social norms. Sexual misconduct or perception of such misconduct was reported to be the most common reason given for the murder. Most often, a male relative (usually the brother) was the perpetrator.

In Aleppo, Syria a randomly selected study of N=411 women ages 20-36 years old was conducted to determine physical abuse and its sociodemographic characteristics in regards to low-income women. A specially constructed survey was used that utilized SRQ-20 and other questions regarding physical abuse, and demographic information. Results indicated that 23% were physically abused at least 3 times during the past year, and 26% of those were married women. Meanwhile, those abused at least once weekly were 3.3% of married women. Although women's education was the most modifiable factor, other factors included age, marital status, religion, and mental distress.


In Palestine, a quasi-experimental design was set up to compare abused elders with non-abused elders from the same population, in an effort to understand elder abuse and neglect. The study was conducted using community types to measure Urbanization and five measures of a social network to measure social isolation with an N=120 of abused elders and N=120 of non-abused elders. The results indicated that Arab-Israeli elders who were abused were more socially isolated than those that had not been abused. In addition, those abused elders that resided in cities had lower social networks than those that resided in rural or semi urban areas.


In Egypt, Palestine, Israel, and Tunisia research on domestic violence provided considerable evidence that it affected a large percentage of the women. In Egypt N= 14,779 women were sampled. In Palestine two national surveys were taken N1= 2,410 and N2= 1,334, in Tunisia N=500 women sampled. The article concludes domestic abuse and acceptance cannot be attributed solely to religion but mainly to patriarchal ideas.


In Palestine, study was conducted with previously married Muslim men and woman that had been divorced through the Shariya court. This was done with an N=147 woman and N=165 of men using the Fisher Divorce adjustment Scale to measure the degree of adjustment post-divorce, and the Mental Health Inventory to measure general mental health. The results indicated that both universal and culture specific variables contributed to post-divorce adjustment for both men and women.

Examines changes in incidence and prevalence of road traffic fatalities in different regions of the world for the time period 1987-1995. Notes that traffic fatalities have risen steadily in the Middle East and North Africa since the late 1980s.


In Palestine, a study was conducted in randomly chosen cities, refugee camps and resettled areas. This was done using an adapted version of Life Events and Social History Questionnaire to measure both PTSD and trauma events, and Peritraumatic Dissociative Experiences Questionnaire to measure Peritraumatic Dissociation. N=311 of women and N=276 of men ages 16-60 participated in the study. The results indicated that between both genders exposure to trauma was associated with PTSD, however, women reported a lower level of lifetime trauma than men. In regards to pertitraumatic dissociation, both men and women were made more vulnerable to hostility, yet men were more vulnerable to depressive symptoms.


Like drugs and arms trafficking, illegal trade in stolen cultural property thrives during periods of warfare. Author is Director of Archaeological Conservation of the World Monuments Fund. Presents a detailed chronicle of the sack and looting of Iraqi sites, citing agencies, military interventions, positives and negatives in wake of invasion.


In Jordan, focus groups were conducted in order to measure barriers to both the diagnosis and treatment of depression. This was done through 5 focus groups for a sample of N=50 primary health care practitioners providing services in public health clinics across Jordan. Results indicated that among the most important barriers to diagnosis and treating depression is: social issues, lack of education, lack of appropriate therapies, lack of patient acceptance of the diagnosis, and other pertinent clinical demands. The article concluded by stating that education about depression is a necessary tool in solving this problem in addition to providing services to destigmatize depression, as well as counseling services.

Jordan. N=395 married individuals (262 women and 133 men) were included in the study. The investigators asked women whether they had ever experienced specific acts of violence, and separately asked the men whether they had committed the same acts of violence against their wives. The lifetime prevalence rate of beating reported by women was 44.7% with 48.9% of men reporting the perpetration of such violence. Prevalence estimates of beating in the past year were lower at about 17%. Women were slightly more likely to report more serious forms of assault than men were to report carrying out these acts.


In Iraq an N=2,700 were surveyed using a single-item measure of national pride. It was found that the only common factor linked to national pride for Sunnis, Shi’is, and Kurds is their attitude towards foreign Muslim militants. For Shi’is national pride was inversely related to their attitudes towards American moral values. For Kurds, national pride is linked to attitudes towards which Sunnis and Shi’is have consensus – attitudes versus foreign presence and disbanding the former Iraqi army, and a rejection of American moral values.


In Iraq a study attempted to assess the risk of aggression on resident physicians using a 15-item questionnaire with an N=80 of resident physicians working at Al Yarmook and Al Kendi hospitals. The results indicated 87.5% reported being the target of some patient aggression during their residency, of those 95% reported verbal attacks with 9% reported being on the receiving end of both physical and verbal attacks. Only 59% of participants informed the hospital administration about the incidents and of those only 34% were satisfied with the response by administration.


In Palestine, a study was conducted on polygamous families residing in a Bedion Arab town in the south of Israel using in-depth structured interviews with an N=10 families consisting of 1 husband, two wives, and children. Results indicated that polygamy is painful for the wife in both well functioning and poorly functioning families. Factors contributing to that are mentioned in the article.


In Juba, a town in southern Sudan, a cross-sectional random cluster survey was conducted to measure PTSD and Depression in relation to trauma exposure, displacement, and other demographics with an N=1242 of individuals over the age of 18 years. This was done using the Hopkins Symptom Checklist to measure symptoms of Depression, and the Harvard Trauma Questionnaire to measure PTSD. Results indicated that 36% met the criteria for PTSD, and 50%
met the criteria for Depression. Through multivariate regression analysis it was conveyed that with the outcomes of PTSD and Depression there was strong associations with gender, marital status, forced displacement, and trauma exposure. Those that will experience higher rates of trauma are: IDP’s, men, refugees, and those that have been displaced more than once.


Women are often the key to improving a population’s health, and this is especially true in the Eastern Mediterranean region. Projects that empower women and provide basic needs are transforming poor communities. Basic development needs programs are community-based initiatives that can tackle poverty, ill health, and social determents of health. Enhancing the status of women is of special relevance for programs in the Eastern Mediterranean region. Programs enable women to earn money and improve their access to basic physical, health, and social needs. National and local government commitment and collaboration with civil society are essential to scaling up these programs.


Iraq. Eyewitness account of the effect of security failures and prolonged terrorism, armed combat, and social instability in Iraq. “News of improvement in Iraq’s security situation is sadly exaggerated. While most citizens long for normality, they know that the fragile peace depends on a high-profile military presence.” Z Chehab


Iraq. A study was undertaken to assess the incidence and nature of violence against women in Iraq, with the goal of identifying possible solutions to prevent gender based violence and to change accepted norms of gender-based social roles and social tolerance. N=1,000 women and N=100 men were interviewed using a questionnaire administered by trained interviewers, that included questions covering general information about husbands and wives, exposure to violence and factors related to that exposure (type, frequency and source, reasons for it, consequences, reactions and measures to ensure protection, and possible solutions). Of the N=1,000 women interviewed 61.6% had been exposed to different forms of violence (physical, psychological and verbal). The principal source of violence was from husbands (30.7%), brothers (11.2%), and more than 12% of women surveyed reported violence from more than one source. Reasons given to rationalize violence were; life stress (43.5%), psychological (18.5%), social and financial (13.9% and 12.7% respectively). 23.4% of women identified more than one perceived cause for the violence directed to them.


Iraq and Syria. This is an article exploring the implications of the Iraqi refugee crisis for the country of Syria. Sources of data include United Nations High Commission for Refugees, Dutch Red Cross, Syrian government, and US Department of Homeland Security. Detailed socio-political and historical perspectives that cover: refugee’s social features and humanitarian conditions, Syrian government response (entry and visa policies, economic and financial impact,
security response, humanitarian aid and Syria’s relations with foreign donors), potential for conflict spillover (Iraqi political factions and activity in Syria, refugee’s propensity for violence, potential for refugee violence fuelled by socioeconomic destitution), etc.


Iraq. Socio-political analysis of the historical and documentary evidence, as well as the data generated from field work and interviews with proponents of truth and reconciliation in post-war Iraq, focused on the efforts that existed to create a truth and reconciliation committee aimed at settling differences and tensions between former Ba’th party members and Iraqi communities that had been affected by it’s policies. Puts forth assertion that the Coalition Provisional Authority failed to endorse plans based on the South African model, instead choosing to pursue the policy of “de-Ba’athification,” and that this policy lies at the overall failure of the pacification and reconciliation efforts carried out to the date of publication.


In Palestine, a cross sectional survey was conducted on a convenience sample of N=1185 adolescents drawn from secondary schools in the Western Bank and East Jerusalem using the Conflict Tactic Scales to measure adolescents witnessing and experiencing abuse in their families, and the Youth Self Report to measure psychological symptoms. The results indicated that exposure to violence led to significant amounts of variance in aggressive behavior, withdrawal, somatization, delinquent behaviors, social problems, and thought problems.


In Saudi Arabia, a study was conducted measuring the patients’ beliefs about causes of their physical symptoms, and whether or not having a psychological problem affects those beliefs. N=224 of patients completed a questionnaire developed to measure the aforementioned factors. Results indicated that patient’s religious and supernatural aspects of their culture had an impact on their beliefs in regards to their physical and psychological symptoms.


This is an article that explores a number of encounters between older Libyan patients and younger Libyan physicians using linguistic analysis and semi structured interviews. This study highlights the formalized, stylized, and highly social interactions that persist between these actors despite the introduction of a new hierarchy (the physician-patient relationship) into their interaction.

A convenience sample of N=206 male and female undergraduate students at the American University Beirut completed questionnaires that explored patriarchal attitudes, beliefs about wife beating, religion as a social identity, as well as childhood experiences with family violence. A total of 10 separate scales, some adjusted for cultural context, and others not, were administered.

Among the findings reported were that younger students were less likely to endorse wife beating than older students, students from more affluent families were likely to have more benevolent attitudes towards women, and that over 75% of the sample had never witnessed violence between their parents.

Over 50% of the sample strongly opposed wife beating except in the situation where the wife was sexually unfaithful. Of the sample, 81% agreed that the husband was always responsible for his violent behavior. However, male students were less likely than females to hold husbands accountable. Further, those endorsing a more traditional view of women's roles were more likely to justify wife beating. There was also suggestion that students took into account the context of violence with fewer students willing to harshly punish the perpetrator, less willing to consider stereotyped legal and policy remedies for the situation, and more likely to endorse family and community interventions.


A random sample of N=1035 Lebanese children between the ages of eight and 17 years presenting to primary care clinics and attending summer camps were surveyed. Refusal rates were not documented, and therefore it is unclear how representative the sample was. The survey sought to determine the rates of child sexual abuse experienced by these children before, during and after the 33 day Israeli -Hezbollah war in 2006.

The study reported lifetime prevalence in child sexual abuse of 17.3%, which is similar to rates reported in studies from other parts of the world. Rates were reported to be equal for males and females before and after the war, but higher among boys during the war. It is unclear whether this higher rate among boys is due to underreporting, but the few other studies done in Arab countries report similar findings. The study also reported higher rates of child sexual abuse after the war in families of low social economic status, the father’s low educational level, large family size and poor family functioning.


A convenience sample of N=300 male and female university students at the American University of Beirut completed several surveys that explored their attitudes towards rape victims, attitudes towards the opposite sex, as well as an assessment of their degree of self reported religiosity.
In general, participants were inclined to believe all rape victims regardless of the scenario presented. Predictors that individuals would endorse myths about rape were reported to be negative attitudes towards rape victims and hostile sexism. The study highlights the need for development of culturally appropriate scales and surveys assessing issues around sexuality, and also the problems associated with carrying out studies on sensitive topics in a representative population.


In Syria, a cross-sectional study was conducted to measure the prevalence of obesity among adolescents, and to measure its associated factors. The sample was randomly selected from 6 different schools in Damascus, and contained N=776 adolescents ages 15-18 years. This study used a two stage sampling method; the first was a probability sample of the student population size, and the second was a random sample of sections of various grades in the school. The measures utilized were measurement of dietary intake through a 24 hour recall; subjects were weighed, height was measured, BMI registered, and waist circumference noted. Results indicated that 8.6% were estimated as obese or overweight. Those that were obese had higher carbohydrate and fatty acid intake than those that were of normal weight. Through regression analysis it was apparent that more boys were obese than were girls, and the higher the parents’ education was, the more likely the adolescent is to be obese.


This article strongly assesses the pattern of use of Dokha (Iranian tobacco with aromatic leaves and herbs) among UAE medical students. A total of N=104 students between 17-27 years of age participated (78 females). A self-administered questionnaire was used. Dokha use was higher among males; 11.5% reported being lifetime users and 25% had smoked continuously in over the past month. The study brings to light the dangers of smoking in the next generation of medical practitioners.


In Kuwait, there was a study to evaluate the correlation between religiosity, social support and health using trained nurses to collect data with an N= 1,472 of adults over the age of 60 from six different home care units. Data indicated that individuals that responded with high religiosity had strong social support from their relatives and friends and more frequency of contact. Data also indicated that respondents with a high degree of self-reported religiosity had a lower blood pressure than respondents who indicated they had a low degree of religiosity.

This study aimed to determine if lack of seatbelt compliance was a major risk factor associated with high mortality rates for road traffic collisions in the Gulf co-operation council countries (GCC). For all the GCC countries (N=6) compared to high-income countries (N=34). The median road traffic death rates, occupant death rates, and seatbelt non-compliance were significantly higher in the GCC countries. Seatbelt non-compliance was the most significant factor associated with mortality. Authors recommend that enforcement of seatbelt to be mandatory in the GCC.
12. War


A descriptive epidemiologic survey that studied N=5,788 displaced and non-displaced civilians during a period of active warfare in Beirut in 1982. The information was gathered by interviews and questionnaires of key informants in each family. The study reports that young children, older adults, females and those in poor health and having experienced losses in income were the groups most prone to be suffering from psychological distress. The authors suggest that social integration tended to protect individuals against psychological distress.

Further, the study suggests that the expression of psychological distress is diminished during times of active warfare, and is modulated by social integration or isolation after the conflict. Inconsistent results on the impact of loss, and the type of displacement on individuals were found in this study.


A cross-sectional survey carried out in 1987 studied N=540 families in Beirut, Lebanon. The study sought to correlate several measures of personal and family distress with exposure to war related events. It was reported that violence, daily life disruptions and deterioration of economic conditions all contributed to stress within the families studied.

There was a high prevalence of physical symptoms reported in the study population, such as headache, back pain, faintness and dizziness. These were attributed to somatization; however this was not independently verified. There was also a high prevalence of mental health symptoms, although specific diagnoses could not be confirmed, given the study design. Problems with interpersonal relations were also reported by many of the subjects. On the other hand, the overwhelming majority of married couples rated their marital relationship as average or better. This may represent a reluctance to report personal matters to strangers. The study reported correlations between exposure to war related events and physical symptoms, as well as the attenuation of social relationships due to associated stress.


This article presents clinical personal impressions of children from the following countries: Uganda, Sudan, Mozambique, Palestine, Iraq, and the former Yugoslavia. In addition, discussion of steps that need to be taken, are presented, in regards to mitigating the effects of war on children's wellbeing.

A cross correlational study assessed N=224 Lebanese children from different areas of Beirut, Lebanon between the ages of 10 -16. The study was done in an attempt to relate specific types of war trauma to PTSD symptoms, and to explore developmental and adaptational outcomes. The number and types of war trauma experienced by the children were related to both PTSD symptoms and adaptation outcomes. Children separated from their parents displayed more depressive symptoms, meanwhile children witnessing violent acts showed increases in pro-social behavior. Perhaps one of the most significant finding is that only a small percentage of variance in children's developmental outcomes could be attributed to war related traumatic experiences.


Iraq, Kurdistan. Two months after the mass escape tragedy (MET) a sample of displaced Kurdish children on the Iraq-Turkey border reported a high level of PTSD based on DSM-II-R criteria. After a decrease in symptoms at the 4 month follow-up, the 14 month follow-up showed a significant increase in PTSD-related symptoms, and they were found to persist even at the 26 month follow-up. Further discussion by the authors analysis of PTSD symptoms course over time and socio-cultural aspects affecting measurement of PTSD symptomology will be found in this article.


A group of N=268 students completed questionnaires inquiring about their experience of war events. The groups were divided according to whether they had experienced many events (N=125 subjects) or few events (N=143 subjects). The Beck Depression Inventory, State- Trait anxiety inventory, and the civilian Mississippi PTSD Scale were administered. Although female students as a group consistently scored higher than males on measures of anxiety, students in the “many war experiences” group scored higher on all three measures of psychopathology than the students reporting low exposure.

Gender differences among the groups reporting war experiences were significant. The group reporting “few wartime experiences” was two thirds female, while the group with many wartime experiences was only one third female. This may reflect recall bias or a real difference between the groups, possibly due to the strong social imperative protecting women from danger during times of conflict.


In Palestine, families of those that were affected during the Hebron massacre were interviewed and were administered the PTSD scale by two mental health professionals. This was done for
N=23 wives, N=12 daughters, and N=26 sons of the heads of households that were massacred. The results indicated that 50% of daughters, 23% of wives, 23% of sons met the criteria for PTSD.


In Palestine, a study was conducted on children (n=239 ages 6-11 years) who were randomly chosen from 97 elementary schools in the Gaza strip. The study was conducted using the following instruments: the Rutter A2 (parent) and B2 (teacher) Scales, the Gaza traumatic checklist to measure experience of traumatic events, and the Child Post-Traumatic Stress Reaction Index. Results indicated that the total number of ‘experienced trauma’ was the best predictor of presence and severity of PTSD.


In Palestine, a study was conducted with a random sample of children in refugee camps and, other urban areas. A few instruments were used, those including: the Traumatic experience checklist to describe the experiences of the children during the Intifada, the Eysenck neuroticism scale (JEPQ) to measure psychological adjustment, Saleh Picture IQ test to measure IQ, and mental flexibility was also measured. This was done to an N=108 children, and also to an N=86 in a follow-up sample. The results conveyed that if children indicated a perception of mental flexibility then they were protected from negative long-term consequences of trauma. Also, the more intelligent and less exposed to violence the children were, the more mentally flexible they had.


In Palestine, two mental health professionals visited homes or tents of victims who had suffered due to bombings or shellings, to assess the prevalence and determinants of PTSD using the checklist for military violence, a 15 question scale to measure PTSD for the parents, and Pynoos-Nader version of the Reaction Index to measure PTSD in children. This was done with N=121 Palestinian children ages 6-16 and their mothers ages 21-55. The results indicated that 54% suffered from severe PTSD with girls being more vulnerable. Gender, mothers’ education, and exposure to traumatic experiences were significant factors that influenced PTSD symptoms.


Like drugs and arms trafficking, illegal trade in stolen cultural property thrives during periods of warfare. Author is Director of Archaeological Conservation of the World Monuments Fund. Presents a detailed chronicle of the sack and looting of Iraqi sites, citing agencies, military interventions, positives and negatives in wake of invasion.

Global, Iraq, Afghanistan. Socio-political essay attempting to define concept of globalized violence, contextualized within the perceived public stance of general and community psychology networks in response to the violence in Iraq and Afghanistan after the events of 9/11. Essay further probes question of whether networks of Community Psychologists are able and willing to publicly position themselves in regards to the events in Iraq and Afghanistan and to levels of globalized violence in general.


In Denmark, a study was conducted with N=311 refugee children from the Middle East whose families were either able or not able to stay in Denmark as Asylum Seekers. This was done through structured interviews with the children’s parents regarding exposure to violence and mental health. Results indicated that 8 out of 10 children were exposed to violence, and 7 out of 10 had witnessed violence. In both groups of Asylum Seekers, 66% suffered from anxiety, and 30% had sleeping problems.


This study sought to detect the differences in prevalence and intensity of PTSD among three groups of men who served in the Kuwaiti military. The study was carried out by interviews as well as the administration of questionnaires. Comparison was made between individuals in the military who had retired prior to the Gulf War, those who served during the conflict but were uninvolved in battle, those involved in battle, and those who had been held as prisoners of war. A total of N=200 individuals were studied. Subjects were interviewed using the clinician administered PTSD scale, the Hopkins Symptoms Checklist, the Internal/External locus of control, as well as the Self Esteem scale. Rates of PTSD were significantly higher among the “POW” group than the “retired” and “in battle” groups (40% versus 24 and 22% respectively).

The characteristics of PTSD in this population were consistent with populations elsewhere. Self-esteem was the only covariate of PTSD scores. External locus of control was associated with anxiety, depression, and PTSD. Among the groups with PTSD, symptoms of low self-esteem and avoidance were prominent.


Gaza, Palestine. A study was conducted in areas undergoing continuous bombing. The instruments used included the Gaza traumatic checklist to measure experience of traumatic events, Children’s Revised Impact of Events Scale to measure PTSD, and Revised Children’s
Manifest Anxiety Scale to measure anxiety. This was done with an N=100 families, 200 parents, and 197 children aged 9-18 years. Both adults and children had anxiety rates above the previous cut-off rates, high rates of PTSD, and a high number of experienced traumatic events.


An analysis of nationally representative data of N=560 Jews and N=182 Arabs in Israel was conducted with a prediction that exposure to violence and terrorism would result in psychosocial and economic loss, in addition to the fact that distress related to ethnocentrism and violence would increase posttraumatic growth. The results indicated that psychosocial resource loss, social support, and posttraumatic growth had both direct and indirect effects on psychological distress. Also, political attitudes were not related to posttraumatic or depressive symptoms.


In Palestine, a study was conducted on a national sample of Jews and Arabs undergoing violence using a structured survey instrument and a 17-item PTSD Symptom Scale. Also used was 10-item scale by Norris to measure loss of economic and psychosocial resources due to the second Intifada. This was done on an N=709 of Jews and Arabs. Results indicated that less psychosocial resource loss and majority status were most indicative of resilience and resistance; this is followed by socioeconomic status, support of friends, and posttraumatic growth.


In Palestine, study was conducted among N=7 recruited Israeli families and N=9 recruited Palestinian families with at least one civilian family member was killed during violent attacks. Semi structured interviews were conducted, of which 6 of the questions asked were about the experience and long-term consequences. The narratives conveyed similarities between the Palestinian and Israeli families in relation to coping, influence on family interaction, and the perception of death.


In Palestine and Israel, two groups of students, N=1,235 Palestinians and N=1,016 Israeli’s ages 14 to 17, were assessed for rates of exposure to conflict, relationship of exposure and posttraumatic symptoms, functional impairments, somatic complaints, and coping strategies.
This was done through measuring: Posttraumatic stress symptoms using UCLA PTSD Reaction Index, functional impairment questionnaire, Somatic complaints checklist, and Brief COPE to measure coping strategies.

Results indicated that females relayed more distress than males and greater exposure was associated with more posttraumatic symptoms and somatic complaints. There was a significantly higher rate of PTSD with Palestinian adolescents than there was with the Israeli adolescents. Those with higher rates of PTSD also had higher rates of functional impairments and somatic complaints. This article concludes with an emphasis on the need for school-based programs to aid children in coping and to help intervene in regards to their mental wellbeing.


Iraq: The focus on trauma alone, has led to the inadequate attention to factors associated with resilience. The study focused on concept of resilience in the children affected by the Iraqi war, and to their learning processes. School age students 10-18 years old were administered a Likert scale (0-3) based questionnaire composed of several sections; a) social demographic, b) depression, c) PTSD, d) GAD. A 75% of an N=48, (26 female, 22 male) responding were found to manifest the majority of symptoms associated with GAD and PTSD. Further analysis explores related rates of school attendance, school participation and rates of reported depression symptoms.


A random sample of N=1035 Lebanese children between the ages of eight and 17 years presenting to primary care clinics and attending summer camps were surveyed. Refusal rates were not documented, and therefore it is unclear how representative the sample was. The survey sought to determine the rates of child sexual abuse experienced by these children before, during and after the 33 day Israeli -Hezbollah war in 2006.

The study reported lifetime prevalence in child sexual abuse of 17.3%, which is similar to rates reported in studies from other parts of the world. Rates were reported to be equal for males and females before and after the war, but higher among boys during the war. It is unclear whether this higher rate among boys is due to underreporting, but the few other studies done in Arab countries report similar findings. The study also reported higher rates of child sexual abuse after the war in families of low social economic status, the fathers low educational level, large family size and poor family functioning.
13. Refugees


In Denmark, a study was conducted with N=311 refugee children ages 3-15 from the Middle East using structured interviews involving the children’s parents, to inquire about children’s health and their exposure to war and violence. Results indicated that the strongest sleep disturbance in children is history of violence and stressful present family situation. The mediating factor, however, was the presence of both parents and the effect of trauma.


In Denmark, a study was conducted with N=311 refugee children from the Middle East whose families were either able or not able to stay in Denmark as Asylum Seekers. This was done through structured interviews with the children’s parents regarding exposure to violence and mental health. Results indicated that 8 out of 10 children were exposed to violence, and 7 out of 10 had witnessed violence. In both groups of Asylum Seekers, 66% suffered from anxiety, and 30% had sleeping problems.


In the Netherlands, a study was conducted to identify risk factors associated with physical and mental health problems. This was done through a population based study of adults N=178, selected randomly from 3 municipalities, from Afghanistan, Iran, and Somali who are refugees and asylum seekers. The measures used were the Harvard Trauma Questionnaire and the Hopkins Symptom Checklist.

Results indicated the following:

- 59.1% of Asylum seekers and 42% of refugees considered their health to be poor.
- In both the refugee and the asylum seekers groups, approximately half of the respondents had one or more chronic conditions.
- More asylum seekers had PTSD than did refugees.
- Those from Iran had higher rates of PTSD, Depression, or Anxiety.
- Being female was associated with higher rates of PTSD, Depression, and Anxiety.
- More post migration stress and less social support were associated with PTSD, Depression, and Anxiety.

In Juba, a town in southern Sudan, a cross-sectional random cluster survey was conducted to measure PTSD and Depression in relation to trauma exposure, displacement, and other demographics with an N=1242 of individuals over the age of 18 years. This was done using the Hopkins Symptom Checklist to measure symptoms of Depression and the Harvard Trauma Questionnaire to measure PTSD. Results indicated that 36% met the criteria for PTSD, and 50% met the criteria for Depression. Through multivariate regression analysis it was conveyed that with the outcomes of PTSD and Depression there was strong associations with gender, marital status, forced displacement, and trauma exposure. Those that will experience higher rates of trauma are: IDP’s, men, refugees, and those that have been displaced more than once.


This is a report written to identify the following: self-reported trauma, torture prevalence, demographic characteristics, and health and social problems associated with the trauma experience of Somali and Oromo refugee women. This was done using a cross-sectional population based survey with N=1134 of Somali and Oromo women living in USA. Results indicated the following: physical, social, and psychological problems were associated with torture and high trauma exposures, and women with larger families reported: higher trauma, more torture, and more problems than the others.


Iraq / United States. A retrospective study of Iraqi immigrants in the United States arriving after the Gulf War (early 1990s) was conducted. Medical charts were examined and compared to American citizen, non-immigrant controls. N=375 Iraqi immigrant clients had their charts examined in a clinic that serves Arab-Americans. There was higher prevalence of PTSD and other co-morbid health problems found in Iraqi refugees than in the control population whose charts were examined. Authors suggest further research on immigrant populations with trauma histories to better facilitate treatment.


Iraq and Syria. This is an article exploring the implications of the Iraqi refugee crisis for the country of Syria. Sources of data include United Nations High Commission for Refugees, Dutch Red Cross, Syrian government, and US Department of Homeland Security. Detailed socio-political and historical perspectives that cover: refugee’s social features and humanitarian conditions, Syrian government response (entry and visa policies, economic and financial impact, security response, humanitarian aid and Syria’s relations with foreign donors), potential for conflict spillover (Iraqi political factions and activity in Syria, refugee’s propensity for violence, potential for refugee violence fuelled by socioeconomic destitution), etc.

In Denmark, a study was conducted with refugee children and adolescents from the Middle East using structured interviews and the Achenback System of Empirically-based assessments (which covers aspects of adolescent psychopathology) with an N=122. This was done to analyze the differences between self and parents ratings of behaviors that are internalized and those externalized, in order to identify predictors of these differences. The results indicated that parents and children differ in self-ratings, and this could be due to aspects other than inter-observer disagreement.


In Sweden, a study was conducted to identify the impact of various models of stress on refugees pre and post settlement. N=124 Middle Eastern refugees were sampled using a questionnaire, Symptoms of Common Mental Disorders (GHQ), and Core Symptoms of Post-traumatic Stress (CPTS). Results indicated that pre-settlement trauma exposure had the strongest impact.


Iraqi-Mandaean refugees, N=315, in Australia were surveyed to assess posttraumatic experiences and resettlement difficulties. Mental health outcomes, including PTSD and depression were also assessed. Instruments used included the Post Migration Living Difficulties Checklist (PMLD), the Harvard Trauma Questionnaire, and the Hopkins Symptom Checklist adapted for refugees (HSCL-25). Fear of cultural extinction was measured by use of five items developed by the researchers. Using a scale of 1=not worried at all, to 4=extremely worried, participants were asked to rate how worried they were that the Mandaeans religion and culture would cease to exist in the future. Four additional items with yes/no responses assessed participants’ beliefs regarding the reason for potential extinction: “The Mandaeans religion is closed to others,” “The Mandaeans community is spread world wide,” “Mandaeans are being persecuted,” and “Mandaeans are the target of genocide.” Results are discussed in pp. 230-231 of the article.
14. Law/ Policy


In the UAE, a study was conducted to assess the factors related to health care in the UAE, specifically primary health care. Other factors taken into account were: population per bed, physician, dentist, nurse, and pharmacists. Results indicated the numbers served by the aforementioned factors. Although this article is dated, it seems that the government had planned to adopt the Primary Health Care model by the year 2000. Recommendations were made for improving health care, specifically for those that need specialized medical care.


The aim of this article was to summarize the status of Psychiatric education, mental health services, mental health policy and profiling of psychiatric disorders and therapies in Egypt. Mental disorders have been recognized in Egypt for millennia; 5000 years ago, and were considered to be physical ailments of the heart or uterus, as described in the Ebers and Kahun papyri. These disorders carried no stigma, as there was no demarcation then between psyche and soma. In the 14th century – 600 years before similar institutions were founded in Europe – the first psychiatric unit was established, in Kalaoon Hospital in Cairo. Egypt is central to the Arab world, which, despite its wealth and its natural and human resources, has fared poorly in many aspects of development. Important problems include illiteracy (especially among women), lack of job opportunities (especially for young people) and slow economic growth because of loss of traditional economies, low productivity, and lack of innovation and competitiveness. High military spending, rapid expansion of the populations threatens progress in light of limited resources. The author recommended that mental health policies and legislation in Egypt should develop partnerships with other agents such as non-governmental organizations and consumer groups in order to enhance the care for psychiatric patients.


In Basra, Iraq, a physician was asked to plan and implement a rehabilitation service for torture survivors- the Al-Fuad Center for Rehabilitation of Torture Victims (FRCT). The center worked under the concept of developing its work under health promotions and illness prevention. This was done through the training or professionals that would be able to establish treatment areas in different parts of Iraq. Training will include: trauma symptoms and signs, in order to address these issues in their early stages. In addition to the aforementioned, the reconstruction of civil society will be done alongside an NGO especially because illness, in this case, is directly related to violence.
In Iraq, there was a study to examine the extent of using the insanity defense to determine the length of detention of offenders in high security units, and to identify types of mental illnesses and offenses committed. The sample was N=65: N=56 participants from Ibn-Alhaithem Secure Detention unit for male offenders and N=9 of participants from Zeinab Secure Detention unit for females. Study was conducted through an interview followed by a ‘semi structured interview questionnaire based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), to determine the types of mental illness. The results indicated 69% of the mentally ill offenders had been detained for duration of less than 5 years, while 4.61% being detained more than 15 years, and 23% detained in the hospital over the past year. Schizophrenia was the most frequent mental illness affecting 74% of the sample, followed by 12.4% affected by delusional disorder. 70.7% of inmates had murdered someone making it the most common crime, while arson was the least common at 1.53%. Results also indicated the length of stay by mentally ill offenders in a high-security psychiatric hospital is relatively short, and that the insanity defense is used at a higher frequency in Iraq than that of western societies; which might explain the high rate of repeated crimes by this population.


This study sought to detect the differences in prevalence and intensity of PTSD among three groups of men who served in the Kuwaiti military. The study was carried out by interviews as well as the administration of questionnaires. Comparison was made between individuals in the military who had retired prior to the Gulf War, those who served during the conflict but were uninvolved in battle, those involved in battle, and those who had been held as prisoners of war. A total of N=200 individuals were studied. Subjects were interviewed using the clinician administered PTSD scale, the Hopkins Symptoms Checklist, the Internal/ External locus of control, as well as the Self Esteem scale. Rates of PTSD were significantly higher among the “POW” group than the “retired” and “in battle” groups (40% versus 24 and 22% respectively).
The characteristics of PTSD in this population were consistent with populations elsewhere. Self-esteem was the only covariate of PTSD scores. External locus of control was associated with anxiety, depression, and PTSD. Among the groups with PTSD, symptoms of low self-esteem and avoidance were prominent.


A convenience sample of N=1082 students (mean age 17) from 10 high schools in five Libyan cities answered a questionnaire that explored knowledge about, and attitudes towards, people suffering from HIV. Although the students expressed a very high level of perceived stigma towards people with HIV, 91% supported the provision of free care to HIV-positive individuals.


In Qatar, data was used from the Annual Health Report of the National Health Authority and various other sources in order to calculate the populations in hospital related settings such as: physicians, nurses, beds, etc. Results indicated that due to the fact that the population of Qatar has doubled in the last decade, so have the numbers of health care providers. This has improved the quality of health care services, yet there remains the need for primary health care workers.


This paper summarizes the current state of mental health services in the Arab world (i.e. 22 members in the Arab league). Data was obtained through Arab Country Ministries of Health Eastern Mediterranean Region Office (EMRO) of the WHO, National Psychiatric Societies, and National Psychiatric Leaders. Mental expenditures and Mental Health surveys of mental illnesses were not available. Six out of 20 countries do not have mental health legislation and two do not have a mental health policy. Three countries (Lebanon, Kuwait, and Bahrain) had in 2007 more than 30 psychiatric beds per 100,000 population. Sudan and Somalia had less than 5 per 100,000. The highest number of psychiatrists is in Qatar, Bahrain, and Kuwait while seven countries (Iraq, Libya, Morocco, Somalia, Sudan, Syria, and Yemen) have less than 0.5 psychiatrists per 100,000. Djibouti has no psychiatrists. Although many Arab countries have in theory agreed to integrate mental health services into primary health care, the authors concluded implementation has been limited. The authors believe that in the Arab world the health education buffets, especially the mental health buffet is grossly inadequate.
15. Other Topics


Egypt, Lebanon, Syria, Iraq and Persian Gulf Region. This is dated 1955, it is a brief overview of what kinds of people are involved in psychology, their education, current research, or practices, geographic distribution of psychologists by city in their respective countries, the higher institutions that were then furthering academic and clinical training in psychology, etc. - report was written at the American University of Beirut.


Egypt, Angola, Mozambique, Namibia, South Africa and Zimbabwe. Political science essay citing Nasser’s military coup in Egypt 1952 as a point of departure for shifting attitudes and perceptions regarding socio-political struggles and liberation movements in the sub-Saharan Africa. Author also examines UN voting records of Arab states on issues relating to southern African states.


Book review – Pan-Arab. Work reviewed ranges from medieval accounts of cultural perceptions of madness and insanity, to current cultural paradigms and biases governing the definition of status as clinical psychologist, psychologist. Also examines training and educational opportunities available to those who seek professional certification in the field of psychology in Arab speaking countries. (8 pages).


In summary, Operation Lifeline Sudan (OLS) is a UN “umbrella” organization, providing the diplomatic cover and operational support to allow long-term humanitarian and emergency food aid to both sides in the long-running south Sudanese civil war.

Non-governmental organizations and UN agencies have been cooperating under OLS auspices to provide a cohesive aid program to the country. Operation Lifeline Sudan provides an air-bridge for emergency relief supplies in regions where road access is impossible, either because of landmines or simply because the roads do no exist.

The political situation is fluid and at present threatens continued aid efforts to this part of Africa. In any humanitarian disaster caused by war, medical aid workers should be aware that their presence, however well intentioned, can prolong political conflicts, either because the negotiations that allow NGOs to operate can legitimize warring factions, or more nefariously, because aid money can become misappropriated into non-civilian channels. An even handed approach to aid distribution to all sides in a civil war is warranted, both in terms of emergency response and with respect to longer term aid. It is important before rushing headlong into
humanitarian aid distribution, for individual medical aid workers to understand the cultural, political, social, and religious tensions that lead to war in different parts of the world. It is important for doctors to be aware of the right mix of aid required, and to have sensitivities to local cultural expectations. Longer term aid in the form of the provision of agricultural techniques, the supply of clean water, and the teaching of basic hygiene may be more important than direct medical aid in many instances.


Israel, Syria, Egypt and Jordan. Political science essay cautioning adoption of single theories for the explanation of changes in foreign states’ (Syria, Egypt and Jordan) views of Israel and Zionism over the time period spanning the 1973 October war to the Oslo peace process. Examines literature on subject of Israel and Zionism from official Army journals of the three Arab states. Egypt has seen Israel as a formidable foe to be restrained, Syria engaged in denying the legitimacy of state of Israel, and Jordan transitioned from demonization to recognition.
## INDEX- PAGE NUMBERS BY COUNTY

<table>
<thead>
<tr>
<th>Country</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>8, 19</td>
</tr>
<tr>
<td>Bahrain</td>
<td>30, 32, 49, 54, 81</td>
</tr>
<tr>
<td>Djibouti</td>
<td>16, 47</td>
</tr>
<tr>
<td>Egypt</td>
<td>7, 9-10, 12, 17, 19-20, 25, 28, 30, 31-32, 40-43, 50, 52-53, 56, 64, 68-69, 73, 78, 80-81, 85, 87, 91-92, 97, 114, 117-118</td>
</tr>
<tr>
<td>Jordan</td>
<td>15, 18-21, 30, 32, 39, 41, 48-49, 53-54, 66, 70, 76, 81, 86, 91, 98, 118</td>
</tr>
<tr>
<td>Kuwait</td>
<td>2-3, 19-20, 26, 30-32, 37, 45, 54, 56, 60, 68, 76, 80-81, 86-87, 103, 108, 115</td>
</tr>
<tr>
<td>Lebanon</td>
<td>2, 11, 13-14, 18-20, 22, 25, 31-33, 41, 43-44, 46, 58, 61, 64, 68, 71, 73, 80-81, 87, 91, 102, 105-106, 110, 117</td>
</tr>
<tr>
<td>Libya</td>
<td>30, 36, 51, 53-54, 101, 116</td>
</tr>
<tr>
<td>Morocco</td>
<td>19</td>
</tr>
<tr>
<td>Oman</td>
<td>5, 18-20, 32-33, 40, 64-65, 68, 81</td>
</tr>
<tr>
<td>Qatar</td>
<td>14, 19, 30, 32, 38, 54-55, 59, 81, 95, 116</td>
</tr>
<tr>
<td>Somalia</td>
<td>20, 23-24, 41, 50, 67, 72, 111, 112, 115</td>
</tr>
<tr>
<td>Sudan</td>
<td>2, 13, 16, 19, 24, 28, 30, 47, 54, 58-59, 73, 77, 85, 93, 95, 99, 105, 112, 115, 117</td>
</tr>
<tr>
<td>Syria</td>
<td>12, 19-20, 26, 31, 34, 40, 65, 68, 76, 80, 81, 83, 87, 96, 97, 100, 103, 112, 117, 118</td>
</tr>
<tr>
<td>Tunisia</td>
<td>30, 40, 97</td>
</tr>
</tbody>
</table>
United Arab Emirates 6, 14, 16-17, 19-20, 30, 32-34, 36, 43, 46-49, 54-55, 62-63, 67-68, 80-81, 83-85, 88, 103, 114

Yemen 19, 32, 54, 81, 87