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A Retrospective Study of Arab American Mental Health Clients: Trauma and the Iraqi Refugees

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The purpose of this study was to clarify the mental health needs of Iraqi immigrants who arrived in the United States in the 1990s after the Persian Gulf War. The records of 375 clients were examined at a clinic that serves Arab Americans. More posttraumatic stress disorder and health problems were found in Iraqi refugees than in other clients. Results suggest the need for further research on immigrants with traumatic histories to facilitate effective treatments.

During and following the Persian Gulf War of the early 1990s, the United States and other countries around the world experienced several waves of immigrants from Iraq. Because the largest settlement of people from the Middle East in the United States was and still is in the metropolitan Detroit area of southeastern Michigan (Shabbas & Al-Qazzaz, 1989), a large influx of these immigrants from Iraq arrived in Michigan starting in about 1993. Other Arab settlement regions in North America, such as Ohio, have also experienced a similar increase in Iraqi immigrants (Via, Callahan, Barry, Jackson, & Gerber, 1997). This influx of immigrants included a large proportion of refugees and has presented a public health care challenge, because many refugees have suffered the various traumas of wartime, first from the Iraq–Iran war in the 1980s and then from the Persian Gulf War (Kira, 1999). For example, many of these new immigrants have experienced multiple relocations, temporary settlement in unsanitary refugee camps, and the lack of clean water and proper nutrition. In addition, many have been traumatized by witnessing the death or torture of loved ones or friends (see Via et al., 1997). Kira (1999) noted that for many of these refugees, the impact of the trauma is not limited to a single event but instead includes a complex series of both direct and indirect traumatic events involving multiple separations and losses over a long period of the person's past.

It is not surprising then that depression, anxiety, and posttraumatic stress disorder (PTSD) are highly prevalent in this new group of immigrants to the United States (e.g., Farrag, 1999; Gorman, 2001; Gorst-Unsworth & Goldenberg, 1998; Takeda, 2000). Furthermore, the rate of substance abuse, which is usually rare in individuals of Arab descent, has at

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times been found to be relatively high in this subgroup (Jamil, Ajo, & Jamil, 2000). The somatization of symptoms due to the stigma and shame often associated with admitting to a mental health problem has also been noted by many clinicians who work with Arabs and Arab Americans (e.g., Nassar-McMillan & Hakim-Larson, in press).

In the present study, we compared the mental health records of such recent Iraqi immigrants with a subsample of the records of other Arab Americans who sought treatment at the same mental health clinic in 1998 and 1999. We were interested in comparing the symptoms and medical conditions that were endorsed, the psychiatric diagnoses, and the outcome of treatment in these Arab Americans. Past research on refugees has found evidence that they face both premigration stressors that are unique (e.g., torture, war trauma) and postmigration adaptational stressors that are faced by immigrants more generally (Keyes, 2000). We expected to find more evidence of health problems and PTSD in the Iraqi refugees than in other Arab immigrant subgroups because of the accumulation of wartime stresses leading to their refugee status. The main purpose of this study was to clarify the mental health needs of Iraqi immigrants so that they may be better served within the community mental health system.

Method

Clearance from the ethical review boards of Wayne State University and Wayne County Community Mental Health was obtained to review the medical charts of clients who sought mental health services at the Arab Community Center for Economic and Social Services (ACCESS) in Dearborn, Michigan, from 1998 to 1999. The mental health professionals who conducted the assessment, diagnosis, and treatment of clients at ACCESS were bilingual in both Arabic and English. The medical records of all immigrants from Iraq, as well as an approximately equal number of charts of immigrants from other Arab countries, were targeted for review. Three mental health professionals (two licensed doctoral-level psychologists and one master's-level psychologist) employed at ACCESS reviewed the charts and completed a data sheet identified by a code to maintain confidentiality. Demographic background information recorded on the data sheet included the year the client entered the United States, whether the client was referred to a psychiatrist, presence or absence of substance abuse, symptoms, medical conditions, diagnoses, and outcome of the treatment received.

Demographic information for 375 clients whose records were reviewed is reported in Table 1 which gives a breakdown of the sample by country of origin, age, gender, education, marital status, employment, disability status, and reason for coming to the United States. The majority of clients were adults over the age of 30, male, and literate. More than half were married and not currently employed. Over one third were currently receiving disability income.

As shown in Table 1, whereas most of the individuals from Iraq entered the United States as refugees, the vast majority of clients from other Arabic-speaking countries (e.g., Lebanon, Yemen, Egypt) entered the United States for other immigration reasons (e.g., to attend school, to join family, or for better employment opportunities). In addition, the number of years since immigration to the United States was significantly related to country of origin ($r = .57, p < .01$). The clients from Iraq, as expected, were more recent immigrants and were thus settled in the United States for less time ($M = 5.75$ years; $SD = 3.28$) than the other Arab immigrants ($M = 16.80$ years; $SD = 10.20$). Referrals to a psychiatrist were made for 81.4% ($n = 127$) of the Iraqi clients and for 74% ($n = 162$) of the other Arab clients.

Results

Overall Health: Number of Medical Conditions and Symptoms

Table 2 displays the frequency and percentage of 13 medical conditions by clients' countries of origin. The number of medical conditions for each client was totaled and a summary score was obtained (range = 0 to 7 medical conditions). Table 3 displays the frequency and percentage of 11 symptoms by country of origin. The number of symptoms was totaled for each client, and a summary score was obtained (range = 0 to 11 symptoms). The summary of medical conditions and the summary of symptoms were significantly correlated with each other even after controlling for the effect of number of years in the United States, $pr(323) = .62, p < .0001$. Therefore, these two summary scores were combined into an overall health score for the remaining analyses and were recoded into five groups, each composed of approximately 20% of the sample (0, 1 or 2, 3 or 4, 5 to 7 or 8 to 18 conditions and symptoms). Although age group showed a significant positive correlation with health problem group ($r_s = .26, p < .0001$), gender did not ($r = .08$, *ns*).

To test the hypothesis that the Iraqi subgroup had more health problems than the other Arab subgroups, we performed a Mann–Whitney test, which was found to be significant. The mean rank for the Iraqi subgroup was 202.71 ($n = 156$) and for the other Arab subgroup was 177.53 ($n = 219$), $z = -2.26$, $p = .024$ (two-tailed test). An examination of the frequencies of participants in each of the five health groups revealed that nearly half of the Iraqi subgroup (47.4%) fell into the two highest health problem groups, whereas only one

Table 1
Demographic Frequencies and Percentages by Country of Origin

Variable	Iraq (N = 156)		Other Arab (N = 219)		Total (N = 375)	
	n	%	*n*	%	*n*	%
Gender						
Male	94	60.3	139	63.5	233	62.1
Female	62	39.7	80	36.5	142	37.9
Age (years)						
<17	11	7.1	21	9.6	32	8.5
18–29	24	15.4	22	10.0	46	12.3
30–39	61	39.1	50	22.8	111	29.6
40+	60	38.5	126	57.5	186	49.6
Education[a]						
Illiterate	27	17.4	71	32.9	98	26.4
High school degree or less	91	58.7	81	37.5	172	46.4
More than high school degree	37	23.9	64	29.6	101	27.2
Marital status[a]						
Single	30	19.2	48	22.1	78	20.9
Married	111	71.2	120	55.3	231	61.9
Other	15	9.6	49	22.6	64	17.2
Current employment[a]						
Currently employed	32	21.2	92	42.4	124	33.7
Not employed	119	78.8	125	57.6	244	66.3
Disability (SSI)						
Receiving SSI	59	37.8	82	37.4	141	37.6
Not receiving SSI	97	62.2	137	62.6	234	62.4
Reason for entering United States[a]						
General immigration	18	11.5	203	92.7	221	58.9
Refugees	137	87.8	3	1.4	140	37.3
Other	1	0.6	13	5.9	14	3.7

Note. SSI = supplemental security income.
[a]The total does not add up to 375 cases because of missing data.

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third of the other Arab subgroups (32.9%) did so. A partial correlation controlling for years since entering the United States and for age group also reached significance, $pr(322) = -.18$, $p = .002$.

Substance Abuse and Psychiatric Diagnoses

As shown in Table 4, although alcohol and drug abuse and dependence were rare, smoking was more widely reported. Whereas less than 1% of the sample had a problem with drugs and less than 3% had a problem with alcohol, nearly 20% of the sample reported being smokers. Table 5 displays the frequency and percentage of primary and secondary psychiatric diagnoses by country of origin. PTSD was found to be a primary or secondary diagnosis in 47 of the immigrants from Iraq (30.2%) and in only 10 of the immigrants from other Arab countries (4.5%). The results of a Pearson chi-square test revealed a significant association between country of origin and the presence or absence of PTSD, $\chi^2(1, N = 375) = 46.18$, $p < .0001$; $\phi = .351$, $p < .0001$.

As shown in Table 6, the outcome of treatment was available for 293 of the clients. The results of a Pearson chi-square test revealed a significant association between country of origin and the outcome of treatment, $\chi^2(2, N = 293) = 26.34$, $p < .0001$; Cramer's $V = .30$, $p < .0001$. Seventy-five percent of the Iraqi clients in comparison with 59% of the other Arab clients showed either a partial response or full remission upon completion of their treatment.

Discussion

The results of the present study supported our expectation that Iraqi-born clients would show a different pattern of medical and psychiatric morbidity than other

Table 2
Frequency and Percentage of Medical Conditions Reported by Country of Origin

Variable	Iraq (*N* = 156)		Other Arab (*N* = 219)		Total (*N* = 375)	
	n	%	*n*	%	*n*	%
High blood pressure	27	17.3	31	14.2	58	15.5
Heart disease	18	11.5	18	8.2	36	9.6
Diabetes	18	11.5	17	7.8	35	9.3
Cancer	3	1.9	3	1.4	6	1.6
Arthritis	21	13.5	25	11.4	46	12.3
Asthma	25	16.0	16	7.3	41	10.9
Allergies	20	12.8	18	8.2	38	10.1
Gastrointestinal problems	35	22.4	27	12.3	62	16.5
Pneumonia	13	8.3	10	4.6	23	6.1
Rheumatic fever	9	5.8	4	1.8	13	3.5
Seizures	12	7.7	4	1.8	16	4.3
Epilepsy	4	2.6	4	1.8	8	2.1
Skin conditions	23	14.7	20	9.1	43	11.5

Note: column headers are grouped under "Country of origin".

Arab American clients. As expected within this clinical sample, the Iraqi-born clients in comparison with the other Arab subgroups were more likely to be refugees, to have overall health problems, and to have a diagnosis of PTSD. This finding is consistent with other studies of refugees from Europe, the Middle East, and southeast Asia, which have typically found evidence for psychiatric symptoms and a negative mental health status for people in exile from their countries of origin. For example, Keyes (2000) reviewed studies between 1987 and 1998 on the mental health status of a general population of refugees from these regions and found that the mental health outcomes often included PTSD, depression, anxiety, psychosis, and dissociation. Few clients in the present study were noted as having a substance abuse problem, but many reported being smokers, a finding that has been corroborated in other literature on the Arab and Arab American population (e.g., Rice & Kulwicki, 1992).

It is unclear from the finding of greater health problems in the Iraqi refugees whether the greater number of problems are due to premigration stressors, postmigration stressors, or some interaction of the two. Watters (2001) reviewed studies on refugees that suggest that those who experienced more hardships prior to immigration are more vulnerable to stresses after they migrate. Many of the clients served by ACCESS reside in a relatively economically disadvantaged and

Table 3
Frequency and Percentage of Symptoms Reported by Country of Origin

Variable	Iraq (*N* = 156)		Other Arab (*N* = 219)		Total (*N* = 375)	
	n	%	*n*	%	*n*	%
Difficulty sleeping	93	59.6	122	55.7	215	57.3
Fatigue	78	50.0	101	46.1	179	47.7
Difficulty remembering	75	48.1	98	44.7	173	46.1
Headaches	79	50.6	97	44.3	176	46.9
Dizziness	54	34.6	49	22.4	103	27.5
Aching muscles or joints	51	32.7	44	20.1	95	25.3
Numbness	35	22.4	23	10.5	58	15.5
Leg cramps	36	23.1	30	13.7	66	17.6
Impotence	12	7.7	15	6.8	27	7.2
Daytime urinary frequency	19	12.2	17	7.8	36	9.6
Nighttime urinary frequency	22	14.1	24	11.0	46	12.3

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Table 4
Frequency and Percentage of Substance Abuse by Country of Origin

Variable	Iraq (N = 156)		Other Arab (N = 219)		Total (N = 375)	
	n	%	*n*	%	*n*	%
Smoker	24	15.4	45	20.5	69	18.4
Drug abuse/dependence	1	0.6	1	0.5	2	0.5
Alcohol abuse/dependence	3	1.9	8	3.7	11	2.9

environmentally compromised geographic region of southeastern Michigan where air pollution from nearby factories is a well-known medical hazard (e.g., Savoie, 1998). However, some Iraqi refugees, including those with wealthy, well-educated backgrounds, have also been victims of torture and political imprisonment and have histories of severe economic loss before immigration (Psychosocial Rehabilitation Center, 2001). Thus, additional research is needed to tease out the past and current factors influencing the current functioning of this group of refugees.

This study is an important first step and only one of a few attempts worldwide thus far to address mental health issues in the Iraqi refugees (e.g., Gorst-Unsworth & Goldenberg, 1998; Takeda, 2000; Via et al., 1997). However, it has several limitations that will need to be addressed in the prospective follow-up research currently being planned at ACCESS. Future research will need to control and adequately account for age, gender, and number of years since immigration, because acculturation is likely to also play a role in overall adaptation and health.

Table 5
Frequency and Percentage of Psychiatric Diagnoses by Country of Origin

Variable	Iraq (N = 156)		Other Arab (N = 219)		Total (N = 375)	
	n	%	*n*	%	*n*	%
Depressive disorder (primary)	87	55.8	100	45.7	187	49.9
Bipolar disorder (primary)	2	1.3	6	2.7	8	2.1
Adjustment disorder						
Primary	5	3.2	19	8.7	24	6.4
Secondary	3	1.9	2	0.9		
Anxiety disorder						
Primary	16	10.3	31	14.2	47	12.5
Secondary	1	0.6	7	3.2		
PTSD						
Primary	26	16.7	7	3.2	33	8.8
Secondary	21	13.5	3	1.3		
Schizophrenia						
Primary	10	6.4	36	16.4	46	12.3
Secondary			2	0.9		
Personality disorder						
Primary	2	1.3	2	0.9	4	1.1
Secondary	1	0.6	1	0.5		
ADHD (primary)	2	1.3	5	2.3	7	1.9
Conduct disorder (primary)	0		1	0.5	1	0.3
Other/unspecified						
Primary	6	3.8	12	5.5	18	4.8
Secondary	1	0.6	7	3.2		

Note. PTSD = posttraumatic stress disorder; ADHD = attention deficit/hyperactivity disorder.

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Table 6
Outcome of Treatment by Country of Origin

	Country of origin					
	Iraq (N = 122)		Other Arab (N = 171)		Total[a] (N = 293)	
Outcome of treatment	n	%	n	%	n	%
Discontinued	29	23.8	70	40.9	99	33.8
Partial response	81	66.4	62	36.3	143	48.8
Full remission	12	9.8	39	22.8	51	17.4

[a]The total does not add up to 375 cases because of missing data.

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Because of the retrospective nature of the current study, the mental health professionals who reviewed the records used a nonstandardized checklist. Future studies will need to incorporate standardized measures completed by the clients themselves. The two barriers here that will need to be addressed are language and literacy. The standardized measures will need to be translated into Arabic, and the client may need assistance completing them if he or she is not literate. Finally, cultural considerations will need to be taken into consideration. Keyes (2000) noted that the majority of recently published studies on refugees do not take into consideration cultural factors in the assessment, diagnosis, and treatment of the refugees. Especially important here are the cultural interpretation of symptoms and their personal meaning to the clients.

Although the majority of the mental health clients in the present sample showed a partial response to treatment or full remission, a significant number discontinued treatment. Research efforts need to address how best to assess, diagnose, and treat these clients with cultural sensitivity according to the professional guidelines put forth by the American Psychological Association and the American Psychiatric Association (e.g., *Diagnostic and Statistical Manual of Mental Disorders;* American Psychiatric Association, 1994). Perhaps in doing so, more clients in need of treatment will be reached and more will complete the treatment regimens that they begin. Recently, Nieves-Grafals (2001) outlined a four-stage short-term psychotherapy approach (consisting of 10–20 sessions) appropriate for refugees with good premorbid emotional health who have been exposed to violence or torture. She cautions, however, that such a time-limited approach is contraindicated in individuals with comorbid conditions or a history of psychological difficulties; such cases are likely to be better suited for long-term therapy and follow-up. Thus, another important issue for consideration during assessments of refugees and treatment planning for refugees is the person's premigration functioning.

Estimates of the number of Iraqi refugees in southeastern Michigan range from about 5,000 (Weinstein, 2001) to about 13,000 (ACCESS), with variations probably due to refugees moving from state to state. Immigrants from the Middle East continue to resettle in this community of approximately 300,000 Arab Americans (Shabbas & Al-Qazzaz, 1989), where Middle Eastern grocery stores, restaurants, small businesses, churches, mosques, and community radio and TV all reflect an Arab American presence. The first two Arab American health conferences were held in southeastern Michigan in 1999 and 2001, and health professionals have begun to specify some unique treatment needs of Arab Americans (e.g., Nassar-McMillan & Hakim-Larson, in press). Further research into the health status of Arab Americans is likely to be vital to our ability to effectively plan for health service delivery in this large and growing community.

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