





### MENTAL HEALTH LITERACY OF RESETTLED IRAQI

REFUGEES IN NEW SOUTH WALES: Paving the way for mental health education and promotion in vulnerable communities



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### Table of Contents

1. Introduction	5
1.1 Refugees and Posttraumatic Stress Disorder (PTSD) within the Australian New South Wales Context	5
1.2 Mental Health and Wellbeing of Refugees	6
1.3 Utilisation of Mental Health Services amongst Refugees	7
1.4 Mental Health Literacy	8
1.5 Summary and Study Aims	9
1.6 Study Design and Method	10
1.7 Statistical Analysis	12
2.Results	13
2.1 Demographic Characteristics of Sample Population	13
2.1.1 Demographic Information Regarding Immigration to Australia	14
2.1.2 Demographic Information Regarding Location of Family Members of Respondent	15
2.2 Attitudes and Beliefs about a Health Problem – Responses to PTSD Mental Health Literacy Vignette	16
2.2.1 Recognition of Disorders	16
2.2.2 Best Method of Help	19
2.2.3 Beliefs about Specific Interventions	21
2.2.4 Beliefs about Causes and Risk Factors of Mental Illness	23
2.2.5 Beliefs about Mental Health Problem Severity and Prevalence	25
2.2.6 Beliefs about Likely Outcomes for Those with Mental Disorders	27
2.2.7 Stigmatising Attitudes	29
2.3 Personal Experiences Related to Vignette	29
2.3.1 Experiences Similar to Vignette	30
2.3.2 Help-Seeking Behaviours	31
2.4 Mental Health of Respondents	33
2.4.1 Experience of Trauma Events	33
2.4.2 Trauma Symptoms	33
2.4.3 Psychological Distress	34
2.5 Associations between Participants Characteristics and Specific Aspects of Mental Health Literacy	35
2.5.1 Recognition of Problem	35
2.5.2 Treatment Preferences	35
2.5.3 Causes	37
2.5.4 Risk Factors	37
3. Discussion	37
3.1 Mental Health Literacy	38
3.2 Mental Health of Iraqi Refugees	43
4. Conclusion	44
References	47
Appendix	50

#### 1. Introduction

## 1.1 Refugees and Posttraumatic Stress Disorder within the Australian New South Wales Context

The plight of refugees is a growing international concern, with the United Nations High Commissioner for Refugees (UNHCR) estimated that at the end of 2012, there were 15.4 million refugees and 973,000 asylum seekers worldwide (United Nations High Comissioner for Refugees, 2013). Few countries worldwide participate in the UNHCR third country resettlement program, with Australia accepting approximately 13,500 refugees annually, making it the third leading resettlement nation (United Nations High Commissioner for Refugees, 2011). In 2012-13, the humanitarian program was increased to 20,000 places. In addition to offering legal and physical protection, a key goal of resettlement is to facilitate integration within the host community and ensure the health and well-being of resettled refugees in the longer term. The mental health of resettled refugees is of particular concern, given the high prevalence of exposure to traumatic events in this population and the known links between such exposure and mental health impairment (Fazel, 2005).

New South Wales (NSW) is home to the largest number of resettled refugees in Australia, with 24,319 humanitarian entrants resettling in the state between 2008 and 2013 (Department of Immigration and Border Protection , 2013). Amongst the largest growing community of resettled refugees in NSW are those from Iraq. At the 2006 Census, there were 20,530 Iraq born persons in NSW, accounting for 63.1% of the total Iraq born population in Australia (Australian Bureau of Statistics, 2006). Factors associated with poorer mental health in refugees are exposure to prolonged conflict, continuing hostilities in country of origin and exposure to cumulative potentially traumatic events (PTEs) (Steel et al., 2009).

For over 40 years, Iraqi citizens have been exposed to violence and human rights violations, with the Political Terror Scale (Wood & Gibney, 2010) indicating that tortures, murders and disappearances have become a common part of Iraqi life. Indeed, 1 in 5 Iraqi refugees report having been tortured in Iraq, often suffering the effects of multiple, severe cumulative trauma (Slewa-Younan et al., 2012; United Nations High Commissioner for Refugees, 2007).

#### 1.2 Mental Health and Wellbeing of Refugees

Research has indicated that refugees are one of the most vulnerable groups in our society in terms of risk for poor mental health (Fazel, 2005). This is because of their increased risk of exposure to PTE's both prior and subsequent to their displacement from their homelands (Hollifield et al., 2002). Common pre-displacement experiences include torture, war or civil unrest, the loss of family and friends, and prolonged periods of deprivation (Steel, et al., 2009). Following flight from their homelands, refugees often experience events that can be characterised by a sense of loss, including the loss of family and social connections, lack of employment, possessions and wealth, and loss of the ability to communicate, integrate and form a sense of identify due to language barriers (Murray, Davidson, & Schweitzer, 2008).

As might be expected, posttraumatic stress disorder (PTSD) is highly prevalent among refugees arriving from countries of high conflict. PTSD is an anxiety disorder that develops following exposure to extremely traumatic events (American Psychiatric Association, 2002). It is characterised by symptoms of re-experiencing the traumatic event(s), avoiding reminders of the event, feeling emotionally numb and/ or experiencing hyper-arousal. Response to the triggering event may involve intense fear, helplessness, or horror (Slewa-Younan, et al., 2012).

In a meta-analysis of 181 studies of refugee and conflict-affected populations, Steel and colleagues (Steel, et al., 2009) found an average prevalence of PTSD of 40% immediately following conflict exposure, decreasing to 22% six or more years following conflict/resettlement. This figure is substantially greater than the lifetime prevalence rate of PTSD in the general Australian community, which is reported to be approximately 2.6% (Forbes et al., 2007). Currently, there are no long-term investigations of the outcomes of resettled refugees with PTSD, however data from the general community suggests the impact on social, interpersonal and occupational functioning for those who develop PTSD and subthreshold variants of this disorder can be significant across their life span (Litz & Gray, 2004). Hence, concerted efforts are needed to prevent the development of chronic PTSD in resettled refugees.

#### 1.3 Utilisation of Mental Health Services amongst Refugees

Despite consistent findings of high levels of psychological distress amongst refugees resettled in Western countries, there is evidence suggesting a lack of equity with respect to access to health services (Boufous, Silove, Bauman, & Steel, 2005). Both international and Australian data have demonstrated that people from minor ethnic groups are less likely to use mental health services than those who were born in the host nation (Boufous, et al., 2005; Klimidis et al., 1999). In a recent study comparing annual, age-standardised hospital admission rates in Victoria for people born in refugee-source countries and Australian-born people, Correa-Velez et al (Correa-Velez, Sundararajan, Brown, & Gillford, 2006, 2007) found that participants from a refugee background were 30% less likely to have mental or behavioural admissions than those born in Australia (Correa-Velez, et al., 2007). Moreover, and despite some refugee groups demonstrating a gradual increase in parity of psychiatric admissions, admissions among Iraq-born patients remained consistently lower than those for other groups over a 6-year period (Correa-Velez, et al., 2006).

Although poorly understood, factors such as cultural beliefs regarding the nature and treatment of mental illness, lack of insight, limited understanding of treatment options, and a lack of knowledge regarding risk factors for and causes of mental disorders have all been postulated to impede mental health service use (Klimidis, et al., 1999). Increased research is needed addressing the role of these factors in low or inappropriate help-seeking in refugee populations. More generally, research is needed to elucidate the factors and processes likely to be associated with continued vulnerability in resettled refugees and to thereby inform health promotion programs designed to reduce this vulnerability.

#### 1.4 Mental Health Literacy

The term 'mental health literacy' (MHL) was introduced by Jorm and colleagues (Jorm et al., 1997) as an extension of the concept of 'health literacy'. It may be defined as 'knowledge and beliefs about mental disorders which aid their recognition, management or prevention' (Jorm, et al., 1997, p.182) and includes: the ability to recognise specific disorders; knowing how to seek mental health information; knowledge of risk factors and causes, of self-treatments and of professional help available; and attitudes that promote recognition and appropriate help-seeking. Australia is a world leader in MHL research and this research has been used, with encouraging results, to inform the conduct of community-based health promotion programs designed to improve public awareness and understanding of mental health issues and facilitate early, appropriate help-seeking among individuals with mental health problems (Francis, Pirkis, Dunt, Blood, & Davis, 2002; Jorm, 2012).

Given the greater prevalence of mental health problems among refugees and low uptake of mental health services, culturally appropriate, evidence-based mental health promotion programs are needed to improve resettled refugees' ability to recognise and manage their symptoms. Indeed, a recent panel of experts identified MHL and ultimately mental health promotion as key priorities for refugee mental health research (Colucci, Minas, Szwarc, Paxton, & Guerra, 2011). Moreover, there is good reason to believe that research of this kind is both feasible and beneficial. Thus, findings from a study of MHL in rural India have been used to inform culturally-specific mental health training program for community workers (Armstrong, 2011; Kermode, Bowen, Arole, Pathare, & Jorm, 2009; Kermode, Bowen, Arole, Pathare, & Jorm, 2010). There is good evidence that poor MHL is conductive to low or inappropriate treatment seeking among individuals with the more common mental disorders, such as anxiety and affective disorders (Jorm, 2000). To date, however, virtually nothing is known about MHL among refugee populations in Australia or anywhere else.

#### 1.5 Summary and Study Aims

Resettled refugees are a particularly vulnerable group. They have very high levels of mental health problems, in particular, trauma-related disorders, but very low uptake of mental health care. Evidence suggests that poor 'MHL', namely, poor knowledge and understanding of the nature and treatment of mental health problems is a major factor in low or inappropriate treatment-seeking among individuals with mental health problems. Hence, efforts are needed to identify specific aspects of mental health literacy likely to be problematic in different demographic subgroups and to use this information to develop health promotion programs.

Currently, virtually nothing is known about the mental health literacy of resettled refugees in Australia and this lack of information is hindering the development of health promotion programs. The goal of this study is to redress this situation. Specifically, we aim to:

- 1) Determine levels of mental health literacy relating to PTSD among resettled refugees in the Western Sydney area of NSW, Australia.
- 2) Identify specific aspects of MHL, such as problem recognition, beliefs about the helpfulness of specific treatments and treatment providers, and perceived barriers to treatment, most likely to be problematic in terms of being associated with low or inappropriate help-seeking.
- 3) Examine associations between specific aspects of individuals' MHL and their socio-demographic characteristics and symptom levels and thereby identify specific subgroups of the refugee population most likely to be at risk of poor outcomes.

Information gathered from the current research will lay the foundation for future, larger-scale funding applications in which funding will be sought for the development of targeted, culturally appropriate health promotion programs modelled along the lines of the successful Mental Health First Aid program (Francis, et al., 2002; Jorm, 2012).

#### 1.6 Study Design and Method

Data for the present report were collected during the period March – November 2013 from resettled Iraqi refugees attending the Adult Migrant English Program (AMEP) at a number of different colleges across the Western Sydney region of Australia. The study was advertised at these colleges through flyers distributed by two bilingual (fluent in both English and Arabic) investigators.

The flyers detailed the aims and nature of the research, and specified that all participants who completed the survey would be compensated for their time by a food gift voucher to the value of AUD\$25.00. Individuals who indicated an interest in participating in the survey were given a more detailed description of the survey content, and written consent was obtained prior to the commencement of each 90-minute interview. The interview consisted of questions regarding demographic information, a mental health literacy survey and psychometric assessments of psychological functioning including the Kessler Psychological Distress Scale (K-10) and the Harvard Trauma Questionnaire (HTQ). Data was collected from participants using pen-and-paper surveys, administered in person by a bilingual investigator. Inclusion criteria for participation were having been born in Iraq, having left Iraq no earlier than 1991, being fluent in Arabic and/or English, and being between 18 and 70 years of age. This study had been approved by the University of Western Sydney Human Research Ethics Committee (H10035). A total of 225 complete interviews were conducted, with each survey matched to the gender of the participant.

#### 1.7 Statistical Analysis

Statistical analysis was carried out using IBM Statistics version 22.0. Data for continuous variables are presented as means and standard deviations (SD), and categorical variables are presented as frequencies and percentages. Analyses examined the association of socio-demographic characteristics (age, gender, length of time in Australia, religion and education) and symptom levels on the K10 and HTQ Part IV (number of trauma events experienced) on responses regarding problem recognition and beliefs about treatments, causes and risk factors. Associations were examined using Kruskal-Walls tests, Mann-Whitney U tests, Chi-square tests and Spearman's rank correlations, as appropriate. Pairwise post-hoc comparisons of significant socio-demographic characteristics were performed using Dunn's procedure (Dunn, 1964) with a Bonferroni correction for multiple comparisons, with adjusted p-values reported. The missing data rate was low, in the order of 7.2%, and was handled by listwise deletion. Where appropriate, data for levels of general psychological distress and PTSD symptomatology derived from the second Australian National Survey of Mental Health and Wellbeing (NSMHWB; Australian Bureau of Statistics, 2007) were used for comparative purposes. Additionally responses from the 2011 National Survey of Mental Health Literacy and Stigma (NSMHLS; Reavley & Jorm, 2011) and the views of health professionals reported in Morgan, Reavley and Jorm (2014) study were compared with the refugee participants responses on the MHL survey. However, it is important to note that the methodology of the current report differs slightly from that of the NSMHLS and Morgan et al. (2014) study. This report discusses the responses of participants who were asked to select the 'most helpful' or 'most likely' response out of the options provided, whereas in the NSMHLS report and Morgan et al. (2014) ratings of helpfulness and likelihood for each response option are presented.

Nevertheless, the NSMHLS are useful sources of comparison for the current report as they highlight a number of differences between respondents from the general Australian population, and the sample of Iraqi refugees examined in this report.

#### 2. Results

#### 2.1 Demographic Characteristics of Sample Population

From the total sample of 225, 98 males and 127 females were interviewed. The country of origin for all participants was Iraq. The mean age of participants was 37.9 years (SD = 14.16), and participants had obtained a mean of 10.68 years of education (SD = 3.90). Table 1 shows the socio-demographic characteristics of the surveyed population.

Table 1

Religion, Language Spoken and Marital Status of respondents

Sociodemographic Characteristic	N	Percentage
Religion		
Christian	102	45.3
Muslim	86	38.2
Mandean	37	16.4
Language		
Arabic	149	66.2
Arabic & Assyrian	33	14.7
Arabic & Other	22	9.8
Assyrian	13	5.8
Other	8	3.6
Marital Status		
Married/De facto	151	67.1
Never married	52	23.1
Widowed	12	5.3
Divorced	5	2.2
Not indicated	5	2.2

#### 2.1.1 Demographic Information Regarding Immigration to Australia

Table 2 shows the demographic information of respondents regarding their immigration to Australia. Respondents reported having spent on average 59.11 months in Australia since immigration (SD = 64.54), and reported having spent on average 49.86 months (SD = 70.42) displaced while on route to Australia.

Table 2

Demographic Information of Respondents Related to their Immigration to Australia

Demographic Data Related to Immigration	n	Percentage
Country in which most time spent on route to Australia		
Syria	108	48
Jordan	33	14.7
Lebanon	21	9.3
Gulf/ Middle East Region	16	7.1
Turkey	13	5.8
Iraq	12	5.3
Iran	8	3.6
Indonesia	7	3.1
Malaysia	4	1.8
Not Indicated	3	1.3
Method of Travel to Australia		
Plane	208	92.4
Boat	15	6.7
Not Indicated	2	.9
Current Status in Australia		
Permanent Resident	155	68.6
Australian Citizen	65	28.9
Not indicated	5	2.2
Arrival Status in Australia		
Refugee	116	51.6
Asylum seeker	71	31.6
Immigrant	36	16.0
Other	1	.4
Not Indicated	1	.4
Temporary Protection Visa		
No	191	84.9
3 year TPV	21	9.3
5 year TPV	10	4.4
Not Indicated	3	1.3

#### 2.1.2 Demographic Information Regarding Location of Family Members of Respondent

Participants were asked to provide information on the location of their family members. Participants were asked to select all response options that apply to them. It should be noted that the following figures display only the data from respondents for whom the response options were applicable. Figure 1 shows the location of the family members of respondents.

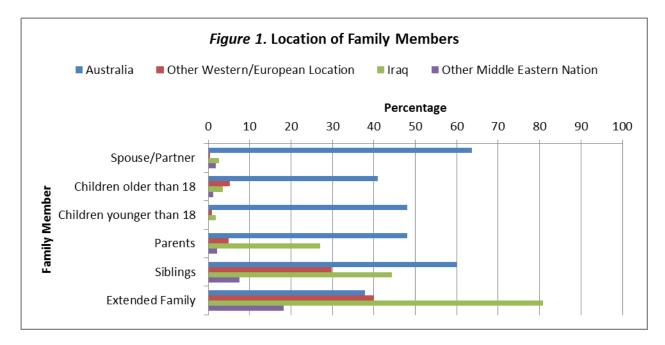
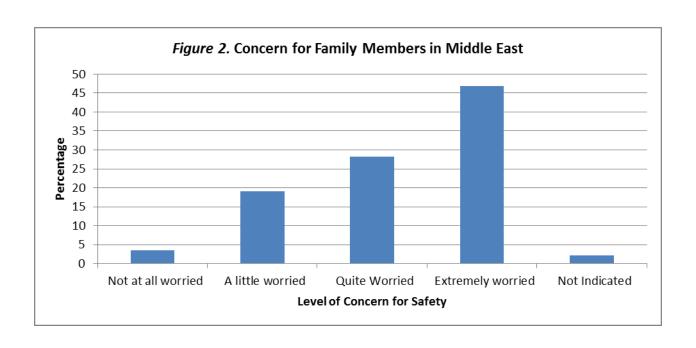


Figure 2 shows the level of concern respondents expressed for the safety of their family members who are currently in Iraq or other parts of the Middle East.



## 2.2 Attitudes and Beliefs about a Health Problem – Responses to Posttraumatic Stress Disorder Mental Health Literacy Vignette

To examine MHL and recognition of mental health disorders in Australian Iraqi refugees, respondents completed a MHL survey. The MHL survey was modelled on the protocol of Jorm et al. (1997), with adjustments made by the authors (SSY, JM, YM and AFJ) for the study of PTSD MHL in an Iraqi refugee population and for the study of additional questions of interest, such as perceptions of the prevalence and severity of PTSD symptomatology. In particular the clinical vignette was based on the consensus of several authors (SSY, YM and HD), who are experienced in the assessment and clinical treatment of PTSD in Iraqi refugees. Care was taken to ensure the cultural relevance of the MHL survey to an Iraqi refugee population. The final survey was translated into Arabic and independently back-translated into English, using the services of a nationally accredited translation and interpretation service. All discrepancies were rectified by both the translators and the research team. The vignette used in the MHL survey described a fictional Iraqi refugee 'Miriam/Dawood', who had experienced trauma prior to leaving Iraq and was currently suffering symptoms of PTSD, according to PTSD criteria outlined in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2002). The gender of the character in the vignette was matched to the gender of the participant completing the MHL survey, and the vignette was read aloud by the interviewer (Appendix A).

#### 2.2.1 Recognition of Disorders

To examine MHL and recognition of mental health disorder in the sample of Australian Iraqi refugees, participants were asked two questions to assess their understanding of the problem suffered by the person in the vignette. Participants were first asked what they thought the person in the vignette's 'main problem' was.

Table 3 shows the frequency and percentage of respondents mentioning the categories to describe the nature of the problem described in the vignette. 'Fear' was the term used most often (41.8%) to describe the problem in the vignette, followed by 'depression' (19.6%). 'Posttraumatic Stress Disorder' was the third most common category for problem recognition, with 14.2 percent of respondents accurately describing the problem presented in the vignette as PTSD. By way of comparison, 34.3% of the general Australian public surveyed in the 2011 NSMHLS were able to correctly identify a PTSD vignette (Reavley & Jorm, 2011).

Table 3

Number and percentage of respondents mentioning each category to describe the problem in the vignette

Problem	Number	Percentage
Fear	94	41.8
Depression	44	19.6
Posttraumatic Stress Disorder	32	14.2
Nervous Breakdown	26	11.6
Stress	10	4.4
No real problem, just a phase	6	2.7
Weak Character	6	2.7
Not integrating well in Australia/Homesickness	4	1.8
Physical Condition	2	0.9
Serious Medical Condition	1	0.4

Additionally, recognition of disorders was assessed by asking respondents what they thought a doctor would consider the person in the vignette's main problem to be. Table 4 shows the frequency and percentage of respondents mentioning the categories to describe a doctor's diagnosis of the problem in the vignette. 'Nervous breakdown' was the response considered to be the most likely diagnosis by a doctor (25.8%), followed by 'depression' (19.1%). PTSD was the third most likely diagnosis, with 15.6% of respondents suggesting that this would be the doctor's diagnosis.

Table 4

Number and percentage of respondents mentioning each category to describe a doctor's diagnosis of the problem in the vignette

Problem	Number	Percentage
Nervous Breakdown	58	25.8
Depression	43	19.1
Posttraumatic Stress Disorder	35	15.6
Fear	34	15.1
Stress	13	5.8
Physical Condition	9	4
Weak Character	7	3.1
No real problem, just a phase	6	2.7
Not integrating in well in Australia/Homesickness	6	2.7
Other	5	2.2
Serious Medical Condition	3	1.3

#### 2.2.2 Best Method of Help

Participants were asked to select from a range of sixteen response options, what they considered to be the most helpful type of treatment for the person in the vignette. Table 5 shows the frequency and percentage of treatments considered to be helpful by respondents. Reading the Koran or Bible was the highest rated treatment option, with 19.1 percent of respondents rating it as the most helpful. Psychotherapy focusing on changing thoughts and behaviours was the second-most frequently endorsed option, with 17.3% of respondents considering this treatment to be the most helpful option. Psychotherapy focusing on the past was the third-most frequently endorsed response option; 9.8% of respondents considered this option to be most helpful. By way of comparison, the top three helpful interventions selected by participants in the NSMHLS were 'physical activity' (93.5%), 'get out more' (88.0%) and 'learn relaxation' (87.9 %) (Reavley & Jorm, 2011). Referring to the health professionals views in Morgan et al. (2014) the top intervention selected by 89.8% of health professionals as helpful in the treatment of PTSD was 'Cognitive behavioural therapy'. This was followed by 'becoming more physically active' (82.7%) and 'reading about people with similar problems and how they have dealt with them' (82.0%).

Table 5

Number and percentage of respondents who considered each treatment activity to be the most helpful in treating the person in the vignette

Treatment Activity	Number	Percentage
Reading Koran/Bible	43	19.1
Psychotherapy Focusing on Changing Thoughts/Behaviours	39	17.3
Psychotherapy Focusing on the Past	22	9.8
Finding New Hobbies	19	8.4
Talking about Problem	16	7.1
Trying to Deal with Problem Alone	14	6.2
Psychotherapy Focusing on Relationships	12	5.3
Getting Information	11	4.9
Not Indicated	11	4.9
Admission to Psychiatric Hospital	10	4.4
Prayer Session	10	4.4
Improving Diet/Exercise	6	2.7
Relaxation	5	2.2
Reading a Self-help Book	2	0.9
Hypnosis	2	0.9
Traditional Therapies	2	0.9
Drinking Alcohol	1	0.4

#### 2.2.3 Beliefs about Specific Interventions

#### 2.2.3.1 Medications

Participants were asked to consider if medication would be helpful in treating the problem described in the vignette. Table 6 presents the frequency and percentage of respondents who endorsed the various medical treatments as 'most helpful' in treating the problem described in the vignette. 51.6 percent of participants considered vitamins and minerals to be the most helpful medical treatment, followed by 25.3% who indicated that antidepressants would be most helpful and 12.4% of people who endorsed medication to aid relaxation (e.g. Xanax and Valium). In comparison, data from the NSMHLS indicate that a majority (50.2%) of the general Australian population consider antidepressant medication to be a helpful treatment for PTSD, followed by 38.1% who consider vitamins and minerals to be a helpful medical treatment option (Reavley & Jorm, 2011). 61.7% of health professionals endorsed antidepressants as being helpful followed by tranquillizers (12.9%) and sedatives/ hypnotics (12.1%) (Morgan, Reavley & Jorm, 2014). A marked difference with regards to vitamins and minerals was noted, with only 3.1% of health professionals endorsing their helpfulness (Morgan et al., 2014).

Table 6

Number and percentage of respondents who considered each medical treatment to be the most helpful in treating the person in the vignette

Medication	Number	Percentage
Vitamins and Minerals	116	51.6
Antidepressant Medication	57	25.3
Medication to help Relaxation	28	12.4
Not Indicated	19	8.4
Don't Know	5	2.2

#### 2.2.3.2 People/services viewed as helpful

Participants were asked to consider which people or services would be helpful in treating the problem described in the vignette. Table 7 presents the frequency and percentage of respondents who endorsed the various people/services as the 'most helpful' in treating the problem described in the vignette. The person/service rated by the highest percentage of respondents as most helpful was a psychiatrist, with 35.1% of respondents endorsing this option. A family member was the second most frequently rated helpful person (12.0%), followed by a religious leader or priest (10.7%). In comparison, 91.3% of respondents in the NSMHLS given a PTSD vignette considered a counsellor to be helpful, followed by a general practitioner (GP) (85.6%) and a psychiatrist (84.2%) (Reavley & Jorm, 2011). 92.2% of health professionals believed that psychologist were the most helpful people to treat PTSD, followed by psychiatrists (87.5%) and GP(80.5%) (Morgan et al., 2014).

Table 7

Number and percentage of respondents who considered each person/service to be the most helpful in treating the person in the vignette

Treatment Provider	Number	Percentage
Psychiatrist	79	35.1
Family member	27	12.0
Religious leader or priest	24	10.7
GP or family doctor	23	10.2
Psychologist	19	8.4
Iraqi social group/club	16	7.1
Close female friend	14	6.2
Community mental health worker/team	11	4.9
Close male friend	6	2.7
Not Indicated	4	1.8
Community religious organisation	2	0.9

#### 2.2.4 Beliefs about Causes and Risk Factors of Mental Illness

#### 2.2.4.1 Beliefs about the causes of the problem described in the vignette

Respondents were asked to consider the likely causes of the problem described in the vignette.

Table 8 presents the frequency and percentage of respondents who endorsed the various causes as 'most likely' in having caused the problem described in the vignette. The option considered most likely in having caused the problem by a majority of respondents was the experience of a traumatic event (52.9%), followed by having come from a war torn country (16.0%). In comparison, 96.5% of the general Australian population assessed by the NSMHLS considered a traumatic event to be a likely or very likely cause of the problem described in a PTSD vignette (Reavley & Jorm, 2011).

Table 8

Number and percentage of respondents who considered each cause to be the most likely to result in the problem described in the vignette

Cause	Number	Percentage
Experiencing a traumatic event	119	52.9
Coming from war torn country	36	16
Parent/Parents with psychological problems	13	5.8
Having weak character	11	4.9
Problem is destiny	10	4.4
Having a bad childhood	9	4
Not Indicated	7	3.1
Moving to a new country	6	2.7
Punishment from God	5	2.2
Poor physical health	5	2.2
Problem is genetic	3	1.3
Family problems	1	0.4

### 2.2.4.2 Beliefs about risk factors perceived to make a person vulnerable to the problem described in the vignette

Respondents were asked to consider the likely risk factors associated with vulnerability to the type of problem described in the vignette. Table 9 presents the frequency and percentage of respondents who endorsed the various risk factors as 'most likely' to make a person vulnerable. Having been born in Iraq was considered by one third of respondents (33.3%) as the most likely risk factor in making a person vulnerable, while being rich was the second most frequently endorsed risk factor (18.2%). 9.3% of respondents considered coming from a Christian background to be the most likely risk factor in making a person vulnerable.

Table 9

Number and percentage of respondents who considered each risk factor to be the most likely to make a person vulnerable to the problem described in the vignette

Risk Factors	Number	Percentage
Born in Iraq	75	33.3
Rich people	41	18.2
Christian background	21	9.3
Female	13	5.8
Poor people	9	4
Left Iraq following 2003	9	4
Not Indicated	9	4
People who have families	8	3.6
Left Iraq prior to 2003	7	3.1
Young people	5	2.2
Very religious people	5	2.2
Served in Army	5	2.2
Not very religious people	5	2.2
Unemployed	4	1.8
Muslim background	4	1.8
Single people	3	1.3
Employed	1	0.4
Male	1	0.4

#### 2.2.5 Beliefs about Mental Health Problem Severity and Prevalence

Table 10 presents respondent beliefs about the levels of distress caused by having a problem such as that described in the vignette. The largest number of respondents suggested that having this problem to be moderately distressing (32.9%).

Table 10

Level of distress experienced if experiencing the problem described in the vignette

Perceived Distress	Number	Percentage
Not at all distressing	16	7.1
A little distressing	27	12
Moderately Distressing	74	32.9
Very Distressing	61	27.1
Extremely Distressing	45	20
Not Indicated	2	0.9

Table 11 presents respondent beliefs regarding the seriousness of having the problem described in the vignette. 36.0% of participants considered the problem to be moderately serious.

Table 11

Perceived seriousness of the problem described in the vignette

Level of Seriousness	Number	Percentage
Not at all serious	16	7.1
A little serious	34	15.1
Moderately serious	81	36
Very serious	58	25.8
Extremely serious	36	16

Table 12 presents respondent beliefs about the prevalence of the problem in their own community. The most commonly endorsed estimate of prevalence was between 30 and 50% (endorsed by 23.6% of respondents). Of particular interest is the high percentage (54.7%) of respondents who estimated the prevalence of this problem in their community at 50% and over.

Table 12

Respondents' estimated prevalence rates of problem in their community

Prevalence	Number	Percentage
Very few women/men, less than 10%	21	9.3
More than 10%, less than 30%	27	12
More than 30%, less than 50%	53	23.6
More than 50%, less than 70%	41	18.2
More than 70%, less than 90%	40	17.8
Most women/men, more than 90%	42	18.7
Not Indicated	1	0.4

#### 2.2.6 Beliefs about Likely Outcomes for Those with Mental Disorders

Table 13 shows respondents' views regarding the difficulty of treating the problem described in the vignette. 'Moderately difficult' was the highest endorsed (36.9%) difficulty rating for treating the problem in the vignette.

Table 13

Number and percentage of respondents mentioning each difficulty category in treating the problem in the vignette

Perceived Difficulty	Number	Percentage
Not at all	17	7.6
A little	30	13.3
Moderately Difficult	83	36.9
Very Difficult	59	26.2
Extremely Difficult	36	16

Table 14 shows respondents' views about the likely result if the person described in the vignette received the help the respondent considered to be most appropriate. 31.6% of respondents considered full recovery to be the most likely outcome if the individual received appropriate help. In comparison, 80.2% of the Australian public and 89.6% of health professionals believed that full recovery was likely with professional health (Morgan et al., 2014).

Table 14

Number and percentage of respondents mentioning each outcome category if appropriate help is obtained by the individual described in the vignette

Outcome	Number	Percentage
Full recovery with no further problems	71	31.6
Full recovery, but problems will probably re-occur	52	23.1
Partial recovery, but problems will probably re-occur	49	21.8
Partial recovery	36	16
Get worse	9	4
No improvement	6	2.7
Not indicated	2	0.9

#### 2.2.7 Stigmatising Attitudes

Table 15 presents reported respondent attitudes to a person experiencing a problem similar to that described in the vignette. Respondents were asked how sympathetic they would feel towards this person. 37.8% of respondents reported that they would feel extremely sympathetic, and another 32.4% said they would feel very sympathetic towards a person experiencing this problem.

Table 15

Level of sympathy expressed toward someone experiencing the problem described in the vignette

Level of Sympathy	Number	Percentage
Extremely sympathetic	85	37.8
Very sympathetic	73	32.4
Moderately sympathetic	48	21.3
A little sympathetic	17	7.6
Not at all sympathetic	2	0.9

Participants were also asked whether they believed a person experiencing this problem would be discriminated against by others in the community. 20.4% of respondents thought that the individual would be discriminated against, 78.7% did not think the individual would be discriminated against.

#### 2.3 Personal Experiences Related to Vignette

Respondents were asked a number of questions relating to their own experiences which could potentially be associated with mental health problem recognition and awareness and utilisation of treatments available.

#### 2.3.1 Experiences Similar to Vignette

Respondents were asked if they thought they currently had the same problem as that described in the vignette. 70.7% of respondents indicated that they did not think they had this problem, while 28.4% indicated that they thought they did currently have this problem. While these ratings parallel the true rate of PTSD symptomatology in this sample (31.1%), only 50.0% of the respondents who did have PTSD responded affirmatively that they currently have the problem described in the vignette. A further question was asked to assess prior history of experiencing this problem. 64.0% of respondents indicated that they had never suffered from this problem, while 34.7% of respondents indicated that they have had this problem at some point during their lives. In contrast, the lifetime prevalence of PTSD in Australia is 12.2% (Australian Bureau of Statistics, 2007), significantly lower than the current sample. To further understand these experiences, respondents were asked if they had ever been told by a health professional that they had a problem like that described in the vignette; 20.0% indicated that they had received such a diagnosis.

Furthermore, participants were asked if they knew someone who had suffered a problem similar to that described in the vignette. 51.1% of respondents indicated that they did not know anyone who had suffered from this problem, while 48.9% of respondents indicated that they did know someone who had had this problem.

#### 2.3.2 Help-Seeking Behaviours

Respondents were asked who they would first seek help from if they were to experience a problem like that described in the vignette. Table 16 presents the number and percentage of respondents who rated each source of help as the person/service they would approach first for assistance. A psychiatrist was rated most highly (24.0%) to be the first person respondents would approach for help with this problem. 21.8% of respondents indicated that they would first seek support from a family member, followed by 19.1% of respondents who indicated that they would first seek help from a psychologist.

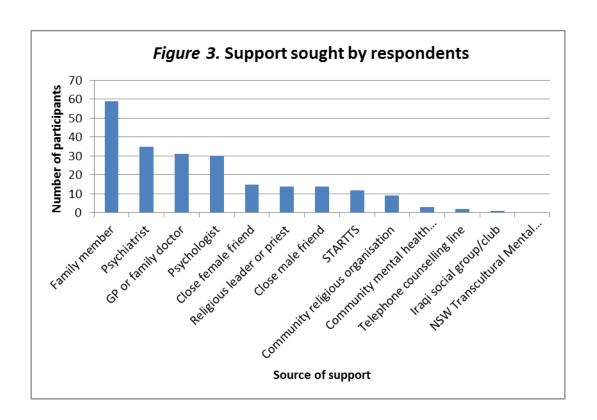
Table 16

Number and percentage of respondents who rated a particular person/service as the source they would first approach for help

Person/Service	Number	Percentage
Psychiatrist	54	24
Family member	49	21.8
Psychologist	43	19.1
Religious leader	20	8.9
GP	9	4
Iraqi social club	9	4
None of above/nobody – I wouldn't want anyone to know	9	4
Close female friend	8	3.6
Close male friend	8	3.6
Not Indicated	5	2.2
Community mental health worker	4	1.8
Community religious organisation	3	1.3
Other	3	1.3
Telephone counselling line	1	0.4

Respondents were also asked if they had ever sought help for a problem like the one described in the vignette. 19.6% of respondents indicated that they had, while 80.0% indicated that they had not sought help for a problem like that in the vignette.

Respondents who indicated that they had sought help for a similar problem were asked when they had sought help for this problem. Of 54 respondents who had sought help, 24.07% had sought help in the last 3 months, 9.26% between 6 and 12 months ago, 18% over 12 months ago, and 18% before having come to Australia. Respondents who had indicated that they had sought help were also asked who they had sought help from. Figure 3 presents the number of respondents who indicated they had sought help from the various categories of support provided in the survey.



#### 2.4 Mental Health of Respondents

#### 2.4.1 Experience of Traumatic Events

Respondents completed an Arabic translation of the HTQ to assess the number of PTEs the respondents had been exposed to. The average number of PTEs experienced by respondents was 14.19 (SD = 8.60).

#### 2.4.2 Trauma Symptoms

In addition to measuring the number of potentially traumatic events each respondent has experienced, the HTQ assesses the experience of trauma symptoms in relation to a DSM-IV diagnosis of PTSD. Approximately one third (31.1%) of participants in this study had an average trauma symptom score that indicated that they were likely to be suffering from PTSD. This figure is significantly higher than the reported rates of PTSD in the general population (Australian Bureau of Statistics, 2007), which are approximately a 6.4% 12-month prevalence for PTSD and a 12.2% lifetime prevalence of PTSD in the general Australian population.

#### 2.4.3 Psychological Distress

The K-10 was used to measure symptoms of anxiety and depression experienced by the respondent over the past four weeks. K-10 scores are presented in Table 17. While the largest percentage (39.1%) of respondents have a low-mild level of psychological distress, the second highest percentage of respondents (37.8%) are suffering from severe levels of psychological distress. In comparison, according to the second NSMHWB only 2.6% of the general population was thought to be experiencing severe psychological distress (Australian Bureau of Statistics, 2007).

Table 17

Level of psychological distress reported by respondents

Psychological Distress	Number	Percentage
Low – mild	88	39.1
Moderate	42	18.7
Severe	85	37.8
Not Indicated	10	4.4

# 2.5 Associations between Participants Characteristics and Specific Aspects of Mental Health Literacy

Statistical comparisons were used to investigate any association between participant characteristics and responses on survey items assessing problem recognition, treatment options, causes and risk factors. Chi-square tests were used for the categorical variables of gender, religion and PTSD, with z-tests used to follow up any significant findings for religion. Kruskal-Wallis tests were used to examine the continuous variables of age, years of education, length of time in Australia and number of trauma events experienced; pairwise comparisons with a Bonferroni correction were conducted to follow up any significant statistical findings.

#### 2.5.1 Recognition of Problem

Although 'fear' was considered by 41.8% of respondents to be the main problem suffered by the individual described in the vignette, more Christians than Mandeans selected depression as the main problem. Of the respondents who rated 'nervous breakdown' as the main problem, those who did not have PTSD were more likely to select this option than respondents who did have PTSD. Furthermore, respondents who had been in Australia for a shorter period of time were more likely to say the problem was "just a phase".

#### 2.5.2 Treatment Preferences

#### 2.5.2.1 Most helpful treatment

Religious background had a significant impact upon ratings of most helpful treatment. The Mandeans were more likely than Christians to consider talking about the problem as helpful, Christians were less likely than both Muslims and Mandeans to consider dealing with the problem alone as helpful, and Christians were more likely than Muslims to consider psychotherapy focusing on the past as helpful.

Furthermore, males were more likely than females to select 'admission to psychiatric hospital' as the most helpful treatment, and respondents who had been in Australia for a shorter period of time were more likely to consider 'dealing with the problem alone' as helpful.

#### 2.5.2.2 Most helpful medicine

Christians were more likely than both Muslims and Mandeans to rate antidepressant medication as helpful, and Muslims were more likely than Christians to rate vitamins and minerals as helpful. Individuals who had experienced a larger number of traumatic events were less likely to rate antidepressant medication as helpful compared to both vitamins/minerals and medication to help relaxation.

#### 2.5.2.3 Most helpful person/service

There were a number of significant associations between religion and the selection of a person/service as most helpful. Mandeans were more likely than Muslims to consider the 'Iraqi social club' as most helpful, Muslims were more likely than Christians to consider a GP as most helpful, Muslims were more likely than Christians to consider a family member to be most helpful, and Christians were less likely to consider a close female friend as most helpful compared to both Muslims and Mandeans. Additionally, respondents who had PTSD were less likely to rate a psychiatrist as most helpful and more likely to consider a close female friend as helpful, compared to respondents who did not have PTSD. Respondents who had more years of education were more likely to rate the Iraqi social group as most helpful.

#### **2.5.3 Causes**

Christians were more likely than Muslims to rate a traumatic event as the most likely cause of the problem described in the vignette.

#### 2.5.4 Risk Factors

Males were more likely than females to consider being poor as the most likely risk factor. Christians were more likely than Muslims to consider being from a Christian background as the most likely risk factor.

#### 3. Discussion

The current study was undertaken to address the dearth of information around MHL in resettled refugees in Australia, which is hindering the development of health promotion programs to target this vulnerable population. Data from this study may be used to develop mental health promotion programs which address specific aspects of MHL idiosyncratic to an Iraqi refugee population, and to encourage the uptake of mental health care in this subgroup of the Australian population. Resettled refugees have been shown to have very high levels of mental health problems, particularly trauma-related disorders, but very low uptake of mental health care (Boufous, et al., 2005). Low MHL, that is poor knowledge of mental health problems and their treatment, is a significant factor in low or inappropriate treatment-seeking among individuals with mental health problems (Jorm, 2000).

The current study found that Iraqi refugees have significantly lower levels of recognition of PTSD symptomatology compared to the general Australian population. When asked about treatment options, respondents endorsed treatment options that were representative of a complex multi-layered model of illness that combines both a traditional and religious perception and a Western, medical-model perception of mental health problems. Lastly, participant responses on preferences and perceptions of the vignette presented were impacted by the length of resettlement time and the religious background of the respondent.

### 3.1 Mental Health Literacy

Our survey indicated that a very small proportion (14.2%) of Iraqi respondents were able to correctly identify the problem described in the vignette as PTSD. This figure represents less than half the number of respondents from the general Australian population who were able to recognise PTSD (34.4%) in the 2011 NSMHLS (Reavley & Jorm, 2011). This low level of problem recognition is of particular concern given that just under one third (31.1%) of the Iraqi refugees surveyed in this study were likely to have PTSD themselves. Given that previous research has indicated that poor problem recognition is directly related to impaired help-seeking behaviour(Jorm, 2000), future mental health promotion programs for refugees should have a specific and targeted aim at increasing recognition of mental health concerns in this population and rising awareness about the importance of seeking help. Furthermore, resettlement time was found to influence respondent recognition of the problem, wherein respondents who had been in Australia for a shorter period of time were more likely to consider the problem to be 'just a phase'.

This poor problem recognition in newly arrived refugees may be addressed by the provision of a brief, culturally adapted, translated educational flyer on common symptoms reported after experiencing traumatic events, mental health disorders, self-help strategies and treatment pathways, as part of a refugee's orientation and resettlement on arrival to Australia.

Participant responses to questions examining treatment preferences reveal an interesting duality between responses that endorse interventions that can be seen as more traditional or involving religious belief (e.g. consulting religious texts, taking vitamin and mineral medicinal treatments), and responses that reflect mental health treatment based more on a Western medical model (e.g. seeing a psychiatrist). This dualism is an issue often discussed in transcultural psychiatry. It is debated as to whether a westernbased medical model is able to fully meet the needs of refugee populations, given the different sociocultural influences these groups have been exposed to and the impact these influences have on the beliefs around mental health and treatment of mental health issues (May, Rapee, Coello, Momartin, & Aroche, 2013). The findings of this study are in line with those of May et al. (2013) who also found evidence for complex multi-layered belief systems where both mental health professionals and religious leaders are considered helpful in addressing mental health problems. As such, the recommendations of May et al. are appropriate to the current study findings, wherein we suggest that transcultural mental health services in Australia should consider collaboration with traditional and religious leaders in the Iraqi community to better service the needs of refugee populations. The religious background of respondents in this study had an influence of treatment preferences, wherein Christian participants had a more Westernised view of mental health compared to the Muslim and Mandean participants.

Cognitive Behavioural Therapy (CBT) is considered best practice in the treatment of PTSD (National Institute for Health and Care Excellence, 2005; Ursano et al., 2004). Its popularity amongst Western-based clinicians is supported by the fact that it was the highest endorsed treatment activity selected by health professionals in Morgan et al. (2014). Similarly, medication for mental health problems is a treatment option regularly used among Western health practitioners, and anti-depressant medication may be used as an adjunct or alternative to psychotherapy in treating PTSD (National Institute for Health and Care Excellence, 2005; Ursano, et al., 2004). Clinicians who treat PTSD in refugee populations should be aware of the possibility of differing client reactions to CBT and medication according to religious background. Culturally-competent practitioners should also consider the treatment benefits that may result from collaboration between community and religious leaders for patients endorsing more traditional and religious orientations towards mental health treatments. Distribution of relevant literature, seminars and workshops for health practitioners working with refugees may be a way of encouraging cultural competency and encouraging client uptake of treatment.

Of note is that 14 respondents (6.2%) considered the most helpful treatment to be 'trying to deal with the problem alone'. Respondents who endorsed this option were more likely to have been in Australia for a short period of time. Previous research on depression has revealed that individuals who endorse dealing with a mental health problem alone are more likely to be male and to hold the belief that mental illness is self-limiting and due to personal weakness (Jorm et al., 2006). Additionally, the current study found that respondents who had PTSD were less likely to rate a psychiatrist as most helpful and were more in favour of a close female friend, compared to respondents who did not have PTSD.

These findings are worrying, as they suggest that the individuals who are most vulnerable and who need treatment most are the least likely to seek treatment from a qualified mental health professional. These individuals are an important target for MHL programs, and may be addressed through the provision of translated and culturally adapted psychoeducational materials (such as flyers) to refugees on arrival to Australia, which detail common mental health problems (with an emphasis on those that arise from traumatic experiences), their symptoms, the best method of treatment and how to access this treatment. These materials should emphasise that dealing with a problem alone or waiting for it to resolve itself is not an effective method of managing a mental health problem, and in fact delaying treatment may increase the likelihood of having a more severe, frequent, spontaneous or treatment-resistant period of mental illness (Post & Weiss, 1998).

The relatively low endorsement of a GP as a source of help (10.2%) in this study is concerning given that under the current Australian health care system, access to a psychiatrist may only be gained via a referral from a GP. A reason for the relatively lower endorsement of GPs compared to psychiatrists may be explained by the difference between Australian and Iraqi health care systems. In Iraq, individuals may access psychiatrists directly (World Health Organisation 2006), rather than via the gate-keeping system in place in Australia. Accordingly, there is some apprehension that there is a disparity between the individuals who recognise the value of psychiatric help in dealing with a mental health problem, and their knowledge of how to access this help. Psychoeducational material targeted at refugees that details mental health problems and their treatment should specifically outline the steps an individual must take to access treatment, starting with making an appointment with a GP to obtain a referral. GPs themselves should be aware of the high prevalence of mental health concerns in refugee patients, and discuss the referral process with patients they consider to be at risk of mental health problems.

A majority of respondents (52.9%) considered 'experiencing a traumatic event' as the most likely cause of the problem described in the vignette. This belief corresponds with current empirical understanding of the causes of PTSD. However, the knowledge of the surveyed population as to the causes of PTSD is still significantly lower than the general Australian population, where 96.5% of those surveyed in the NSMHLS considered a traumatic event to be a likely or very likely cause of the problem described in a PTSD vignette (Reavley & Jorm, 2011). Of note is the 11 participants (4.9%) who considered 'having weak character' to be the most likely cause of the problem described in the vignette. As previously mentioned, individuals who hold the belief that mental illness is due to a personal deficiency or weakness of character are more likely to consider handling the problem alone as a desirable treatment option (Jorm, et al., 2006). Therefore, education through the use of flyers and posters about the causes of mental illness may be an appropriate way to encourage individuals to seek help and reduce stigma towards those who suffer from mental health problems.

Participant responses to items that addressed likely risk factors reflect current empirical evidence and the complex political, cultural and religious factors involved in the conflict in that region. Having been born in Iraq was considered by the majority number of respondents (33.3%) to be the most likely risk factor for the problem in the vignette. This response option acknowledges the cumulative exposure of many Iraqis to the ongoing violence and conflict in that region, which dramatically increases an individual's likelihood of experiencing a trauma event and subsequently developing PTSD. Recent studies have found that 1 in 5 Iraqi refugees report having been tortured in Iraq (Slewa-Younan, et al., 2012; United Nations High Commissioner for Refugees, 2007) and approximately 47% of Iraqis surveyed in 2003 in Southern Iraq reported the experience of one or more human rights abuses such as torture, murder and kidnap among members of their household between 1991 and 2003 (Amowitz, Kim, Reis, Asher, & Iacopino, 2004).

The next most common risk factors were being rich (18.2%), Christian (9.3%) or female (5.8%). After 2003, insurgent activity in Iraq was often focussed on the kidnap, torture and ransom of rich individuals and their family members (United Nations High Comissioner for Refugees, 2007). Similarly, the torture and prosecution of minority groups in Iraq was common. Religious conflict meant that Christians were often a targeted minority group (United Nations High Comissioner for Refugees, 2007); and political, cultural and religious factors in Iraq post 2003 placed women at a heightened risk of violence and abuse (United Nations High Comissioner for Refugees, 2007). Unsurprisingly, the Christian respondents in this study were more likely to label being Christian as the most likely risk factor, compared to Muslim respondents.

#### 3.2 Mental Health of Iraqi Refugees

As previously mentioned, approximately one third (31.1%) of participants in this study were likely to be suffering from PTSD. This figure is significantly higher than the 6.4% of individuals with PTSD in the general Australian population (Australian Bureau of Statistics, 2007). Insight into respondents' own PTSD symptomology was low, with only 50.0% of the respondents who did have PTSD (as assessed by the HTQ) indicating that they currently have the problem described in the vignette. This is of concern, given that low recognition of psychiatric illness is associated with low rates of help-seeking behaviour (Jorm, 2000; Wright, Jorm, Harris, & McGorry, 2007). As previously mentioned, education regarding recognition of mental health disorders in oneself and loved ones is a key recommendation of this report. 37.8% of respondents were suffering from severe levels of psychological distress. In comparison, according to the second NSMHWB only 2.6% of the general population is thought to be experiencing severe psychological distress (Australian Bureau of Statistics, 2007).

The high prevalence of severe psychological distress in this population is of particular concern, as psychological distress is associated with a number of adverse mental health outcomes such as a higher incidence and severity of mental illness, and higher rates of disability (Andrews & Slade, 2001). In a study examining posttraumatic stress in Tamil refugees in Australia, Steel et al. (1999) found that adaptation difficulties, sociocultural loss and dislocation contributed to 14% of the variance associated with the development of posttraumatic stress conditions. In comparison, pre-migration traumatic events such as significant human rights abuses accounted for 20% of the variance associated with posttraumatic stress. It is hypothesised that post-migration living difficulties increase the likelihood of the development of PTSD in refugees who have been exposed to traumatic events prior to migration (Steel, et al., 1999). Accordingly, the current study recommends that measures to reduce psychological distress in this refugee population be implemented. Specific recommendations are an increase of community-based social groups and activities to reduce social isolation and the dissemination of informational leaflets detailing self-care practices and coping techniques for daily stress (Slewa-Younan, Radulovic, Lujic, Hasan, & Raphael, in press).

## 4. Conclusion

In summary, the current findings suggest that resettled Iraqi refugees in Australia have low levels of problem recognition with regard to PTSD, despite significantly higher prevalence of PTSD in this population, compared to the general Australian population. Additionally, resettled Iraqi refugees hold complex beliefs regarding treatment for mental health problems, which incorporate both traditional and religious beliefs of mental health and a Western, medical-model perception of mental health problems. Length of resettlement time and religious background also influence problem recognition, treatment preferences and understanding of risk factors.

The current study was the first to date to use a culturally-validated vignette-based survey to assess mental health literacy for PTSD in Iraqi refugees, one of the largest refugee groups worldwide. Inperson interviews and the recruitment of participants from a non-clinical setting allow a better understanding of mental health literacy in a typical Iraqi refugee population. Although participants were recruited from English language classes on a volunteer basis, an attempt was made to increase representativeness by sampling from the Western Sydney area, which has the highest concentration of resettling Iraqi refugees in Australia (Department of Immigration and Border Protection, 2013). Future studies should seek to recruit participants using probability sampling studies in order to establish truly representative data, although it is acknowledged that refugee populations are a very difficult population to access through random sampling techniques (Sulaiman-Hill & Thompson, 2011). Indeed, the large sample size and representativeness of the sampled population exemplify a significant strength of the current study. Limitations of this study include the use of self-report measures of mental health and the inclusion of a general measure of psychological distress, rather than separate, more specific, measures of anxiety and mood disorders. A major strength of this study was the large sample size which allowed an analysis of associations between demographic variables and measure of mental health literacy. Future research should examine the generalizability of these findings with a larger randomised sample.

Results of this study suggest the need for a two-pronged approach to increasing mental health literacy and treatment uptake in an Iraqi refugee population. Firstly, refugees themselves should be targeted with educational material regarding mental health. Secondly, health professionals should be made aware of transcultural issues regarding religion, resettlement time, treatment preferences and knowledge concerning access to mental health care services in this population.

While Iraqi refugees as a whole have low levels of mental health literacy, individuals who have been in Australia for a shorter period of time and those who have unrecognised PTSD have particularly low rates of problem recognition or endorse treatment options that are harmful or ineffective (such as trying to deal with the problem alone). Firstly, recognition of mental health problems and appropriate treatments should be addressed through the use of culturally adapted and translated psychoeducational material as part of a refugee's orientation upon arrival to Australia. Flyers and posters should address common mental health problems, their symptoms and causes, with a particular focus on common problems associated with experiencing traumatic events. Treatment uptake may be encouraged with the provision of material that details self-help and self-care strategies, information about services and their referral criteria, and appropriate treatment options. Specific emphasis should be made on the role of a GP in the Australian health care and their further upskilling around refugee trauma and mental health, given their role of a gate-keeper to specialist mental health care providers.

Effort needs to be made by mental health services attempt to bridge the gap between Western mental health services and traditional cultural and religious practices, thereby allowing the provision of culturally acceptable and empirically based care. Transcultural mental health services in Australia should consider collaboration with traditional and religious leaders in the Iraqi community to better address the unique needs of refugee populations. Clinicians who treat mental health problems in refugee populations should be made aware of the possibility of differing client reactions to best-practice mental health care options, such as CBT and antidepressants, according to the religious background of the client. GPs should be made aware of the potential knowledge gap of Iraqi refugees regarding the referral process to a specialist mental health care provider, and encouraged to be particularly alert for the possibility of mental health concerns in their Iraqi refugee patients. Distribution of relevant literature, seminars and workshops for health practitioners working with refugees may be a way of encouraging cultural competency and transcultural mental health care for this population.

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# **Appendix**

Appendix A: The vignette used in the mental health literacy survey

Miriam\* is a 37 year old married woman with 3 children, a daughter aged 7, and two sons, aged 5 and 3. Miriam has been living in Australia for the past year and has attended her local GP on several occasions with the primary complaint of an inability to sleep. The problem with her sleep started just before she left her homeland, Iraq, four years ago. Prior to leaving Iraq, Miriam was kidnapped by insurgents and held captive until her husband paid the demanded ransom. During her kidnapping, Miriam was beaten and threatened with death. She reports that during the kidnapping she felt intense fear and helplessness. She reports constant nightmares in which images of death, killing and being kidnapped by masked me disturb her sleep. She avoids talking about her attack and watching Iraqi news channels in case there is a story about people being kidnapped and murdered. She is easily startled when she hears loud sounds such as a car backfiring or fireworks. She has very little interest in things around her, including her children's lives and feels little affection towards them. Finally, when questioned on how she views her future and plans for her life, Miriam replies that she does not have a future and doesn't believe she will live a long life.

<sup>\*</sup> Replaced with Dawood in the case of male participants.