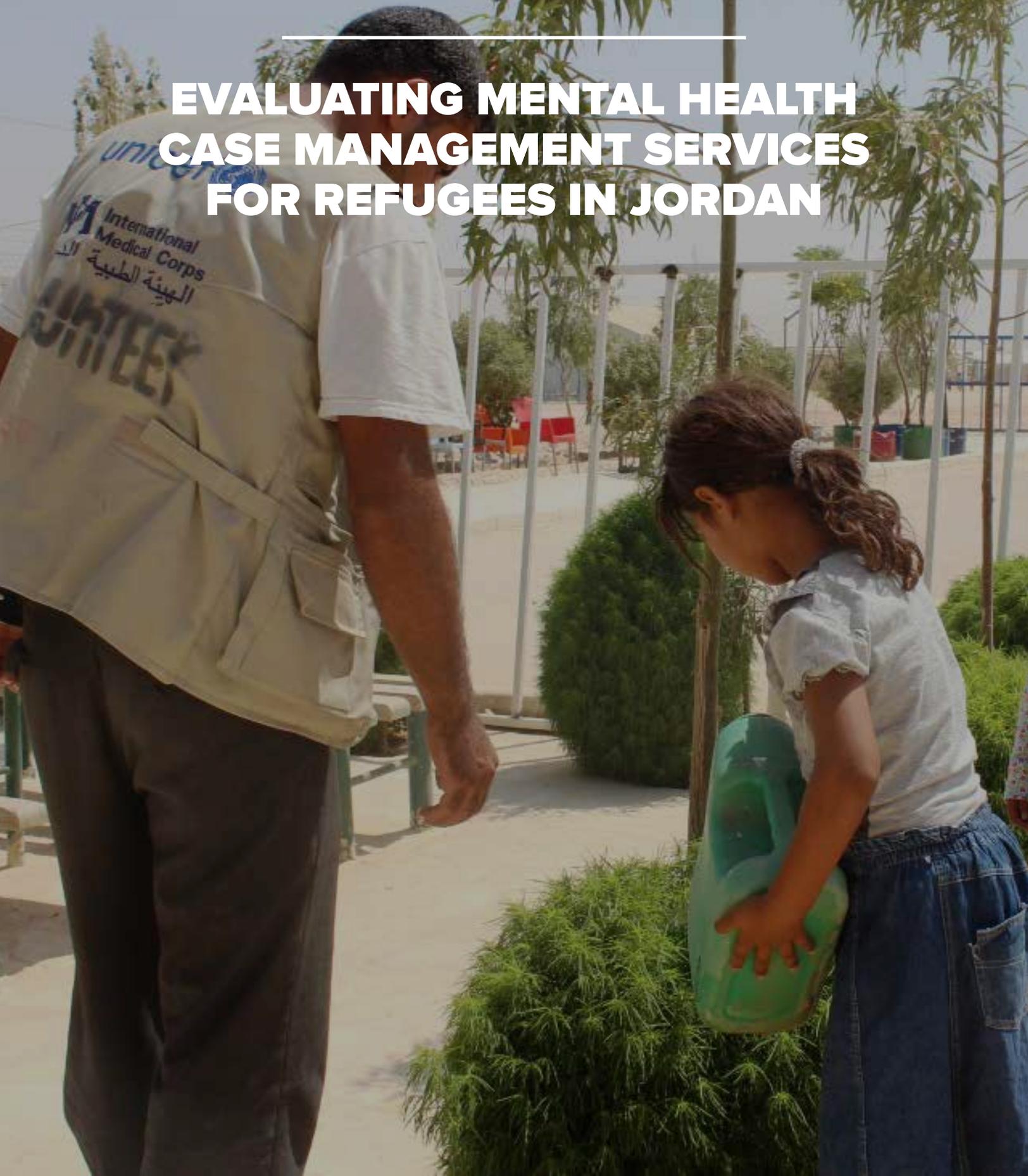


# EVALUATING MENTAL HEALTH CASE MANAGEMENT SERVICES FOR REFUGEES IN JORDAN







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## ABBREVIATIONS

<b>UNHCR</b>	United Nations High Commissioner for Refugees	<b>CM</b>	Case Management
<b>IMC</b>	International Medical Corps	<b>CFS</b>	Client Functioning Scale
<b>MHCM</b>	Mental Health Case Management	<b>HESPER</b>	Humanitarian Emergency Settings Perceived Needs Scale
<b>IASC</b>	Inter-Agency Standing Committee	<b>RCT</b>	Randomized controlled trial
<b>WHO</b>	World Health Organization	<b>MoH</b>	Ministry of Health
<b>JHU</b>	Johns Hopkins University	<b>EMPHNET</b>	Eastern Mediterranean Public Health Network
<b>CDC</b>	Center for Disease Control and Prevention	<b>IRB</b>	Institutional Review Board
<b>PRM</b>	Bureau of Population, Refugees and Migration	<b>GBV</b>	Gender Based Violence
<b>WASS</b>	Tool 8 WHOS' UNHCR Assessment Schedule of Serious Symptoms	<b>MH-SET</b>	Mental Health and Psychosocial Support in Humanitarian Settings - Research Priority Setting
<b>HoNOS</b>	Health of the Nations Outcome Scales	<b>FU</b>	Follow Up
<b>CFT</b>	Client Functioning Tool	<b>SPSS</b>	Statistical Package for Social Sciences Predictive Analysis Software
<b>PTSD</b>	Post-Traumatic Stress Disorder	<b>SCL-90</b>	The Symptom Checklist 90 Revised
<b>MH</b>	Mental Health		

# INTRODUCTION

The conflict in Syria has frequently been described as the “worst humanitarian crisis of our time”<sup>1</sup>. Five years of continuous and increased armed conflict have caused massive loss of life and devastation to the culture and social structure of the country. Caught in this crisis, Syrian civilians are now displaced both within the country and in neighboring countries. As of July 2015, there are 7.6 million people displaced within Syria, while four million more have risked their lives to escape into surrounding countries<sup>2</sup>. In Jordan, a country of about 6.5 million people, there are currently over 629,000 Syrian refugees registered with the United Nations High Commissioner for Refugees (UNHCR)<sup>3</sup>. They are living in both camps and urban environments, the majority in the latter.

Countries adjacent to Syria, where most refugees escape to, are often functioning with under-resourced mental health care and a lack of psychosocial services<sup>4</sup>. While many organizations have stepped in to fill those gaps, access to such critical services can be difficult for Syrian refugees. The difficult experiences and ongoing challenges can have a significant impact on the mental health and functioning among refugees. Findings of the “Assessment of Mental Health Needs” completed by the World Health Organization (WHO) in collaboration with International Medical Corps found that mental health symptoms were pervasive and disruptive for refugees in Jordan<sup>5</sup>. Indeed, WHO estimates that the number of people experiencing common mental disorders such as depression can double in humanitarian emergencies from 10 to 20% while people with pre-existing disorders are especially vulnerable<sup>6</sup>. The IASC Guidelines for Mental Health and Psychosocial Support highlight the need for multi-sectorial and inter-agency frameworks, creating a cohesive response to mental health and psychosocial concerns in humanitarian contexts<sup>7</sup>.

With an informed understanding of the best practices for providing mental health services as well as the specific needs of the refugee population, International Medical Corps (IMC) has developed a multi layered and comprehensive approach of mental health service provision based on a mental health case management (MHCM) model. MHCM is a multidisciplinary, client-centered and strength based approach, with the goal of responding holistically and thoroughly to each refugee’s unique set of needs.

1 Amnesty International, (2015). Syria: the Worst Humanitarian Crisis of Our Time. Available at <https://www.amnesty.org.nz/syria-worst-humanitarian-crisis-our-time>

2 UNOCHA, (2015).

3 UNHCR, (2015) Syria Regional Refugee Response

4 IMC, (2014). Syria Crisis: Addressing Regional Mental Health Needs and Gaps in the Context of the Syria Crisis.

5 World Health Organization, International Medical Corps, Jordanian Ministry of Health and Eastern Mediterranean Public Health Network, (2013).

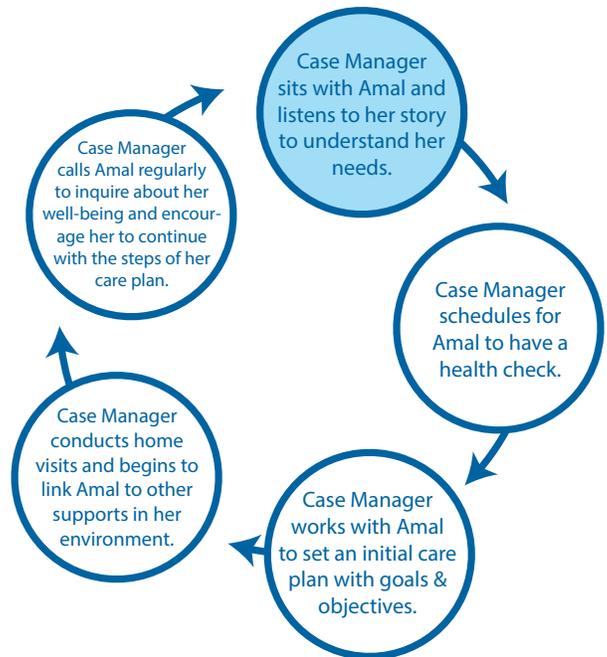
6 World Health Organization & United Nations High Commissioner for Refugees. Assessing Mental Health and Psychosocial Needs and Resources: Toolkit for Major Humanitarian Settings. Geneva: WHO, 2012.

7 IASC, (2007). IASC Guidelines for Mental Health and Psychosocial Support in Emergency Settings. Available at [http://www.who.int/mental\\_health/emergencies/guidelines\\_iasc\\_mental\\_health\\_psychosocial\\_june\\_2007.pdf](http://www.who.int/mental_health/emergencies/guidelines_iasc_mental_health_psychosocial_june_2007.pdf)

# MENTAL HEALTH CASE MANAGEMENT MODEL

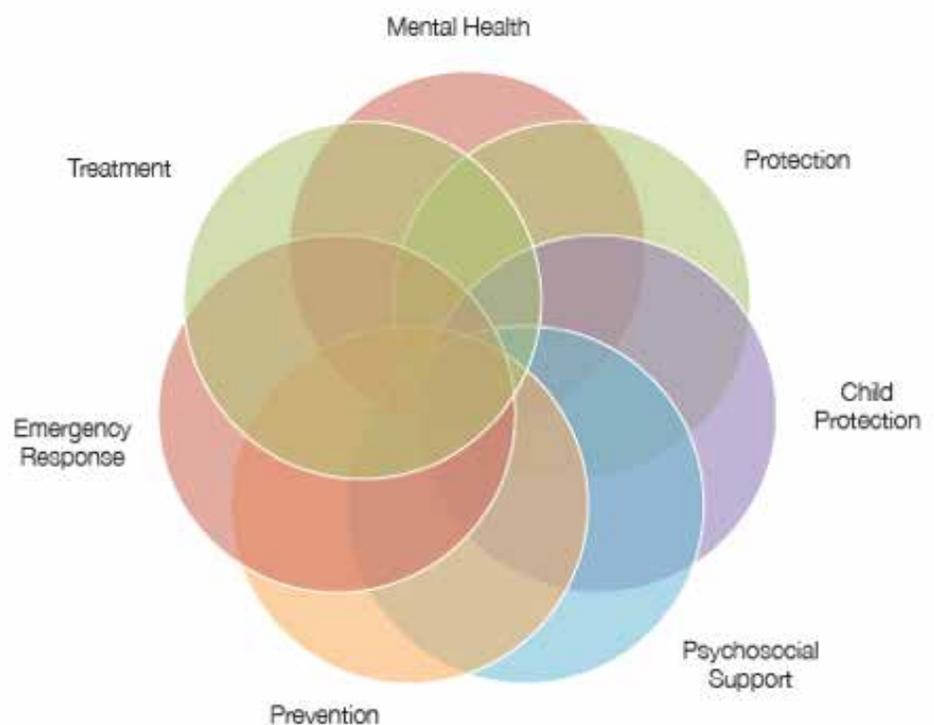
## Why MHPSS Case Management?

International Medical Corps (IMC) works with internally displaced, refugee or host populations affected by disasters or armed conflict. These populations are likely to have faced past stressful experiences such as violence and loss. They also have to adapt to the challenges of new environments such as transitional and camp facilities where access to basic needs is often difficult. Distressing experiences and fragmented or insufficient services can lead to unaddressed mental health, psychosocial and protection issues, impacting the welfare and functioning of individuals and families. Affected populations have multiple and complex needs and require a comprehensive mental health and case management approach which identifies, supports and protects those who are vulnerable and promotes stability and recovery



While case management models for protection and Gender Based Violence(GBV) have been developed and used by other organizations, IMC developed the unique MHCM approach. The MHCM model is based on general social work case management but recognizes that people with mental health problems are especially vulnerable and have multiple and complex needs. This is especially the case in refugee and humanitarian contexts. International Medical Corps has structured its mental health, psychosocial, and protection service programming around social work case management and is influenced by the wraparound approach to managing cases. The wraparound approach seeks to identify and increase access to services and resources around the person, family and community, beyond just those offered by IMC, even in a refugee population. Case management is a means of ensuring each client has access to the services they need and choose. Case management provides a framework by which the response can be monitored to ensure that it is effective. Fundamentally, it is the individual client and their protection, mental health, and psycho-

social support needs that are the center of all aspects of case management activities. The case management process should empower the client; the interventions selected should reflect their priorities, wishes, and choices; and thorough, careful implementation of the agreed-on plan will ensure that clients receive the support services they need and the advocacy they deserve.





*There are six stages to the case management process: Intake, Assessment, Planning, Referral, Monitoring, and Discharge. Case managers carry out a range of essential tasks based on this six-stage process.*

# 1 INTAKE

Case manager listens to client, considers safety. Can this agency help? If so, assess. If not, refer.

# 2 ASSESSMENT

Assess client's needs and concerns. Consider individual, family, community, institutional supports. Motivate, emphasise strengths, set goals.

# 3 PLANNING

Clients ideas on what can help. Case Manager supports, suggests, develop Care Plan.

# 4 REFERRAL

Case Manager works directly with client, arranges services and provides care. Refer to outside agencies and specialist services where needed.

# 5 MONITORING

Case Manager checks clients progress regularly. Agree changes to care plan with client and team.

# 6 DISCHARGE

Case Manager discharges client once they have assessed the client's recovery. Follow up support as necessary. Discharge may occur when the family has moved or is non-compliant with the care plan they help to create.

There are two main facets of case management: direct service and indirect service. Direct service means that the case manager takes action to address the client's needs. Indirect service means that the case manager enlist the help of others to address the client's needs. Very often case managers will use both types of case management to help a client achieve their goals.

IMC case managers are paraprofessionals trained and supervised by IMC professional MHPSS staff. They work in collaboration of IMC service provider teams including general health workers trained in mental health, psychologists, and psychiatrists.

## DIRECT SERVICES

- Interviewing client and family
- Home visits
- School visits
- Environmental assessment
- Safety assessment
- Care Planning
- Goal Setting
- Motivational Interviewing
- Psycho-education
- Group therapy

## INDIRECT SERVICES

- Gathering collateral information
- Referring to other agencies
- Follow up with referral agencies to assess progress

## PURPOSE AND GOALS

In 2013, IMC in partnership with Columbia University Teachers College, Johns Hopkins University (JHU), and Center for Disease Control and Prevention (CDC), was awarded the project 'Evaluating a Comprehensive Mental Health and Psychosocial Support Services for Vulnerable Refugees' by the US Department of State Bureau of Population, Refugees, and Migration (PRM).

The purpose of this project is to:

1. Further develop and validate clinical tools for MHCM
2. Development and finalizing of guidelines for MHCM
3. Evaluate the impact and outcomes of mental health case management in urban and camp settings among refugees in Jordan.

Methods, tools and findings from this project aim to inform mental health service delivery in similar settings regionally and globally. Additionally, the establishment of routine mental health evaluation tools and guidelines can inform a better response of comprehensive service provision, help direct resources toward refugee populations or post-conflict contexts and provide a foundation for ongoing, locally owned mental health systems evaluation and improvement.



# MATERIALS AND METHODS

## *Development and Validation of Clinical Tools for MHCM*

With support from partners (Columbia University, JHU and CDC), IMCs tools for MHCM were reviewed and further validated. The psychometric properties of a battery of candidate instruments was examined to select those that could assess reliably and validly, the mental health status, functioning, perceived needs, and client mental health service satisfaction of the refugee population served by the IMC clinics. Psychometric examination of the battery of candidate instruments informed the assembly of the revised battery<sup>8</sup>.

## *Development and finalizing of guidelines for MHCM*

The IMC training materials and guidelines used for MHCM were further reviewed based on the available peer reviewed literature, available guidelines and reports on case management approaches. IMC engaged a consultant who already had extensive experience in developing the MHCM approach in Jordan. The guidelines were developed with input from IMC field and HQ teams<sup>9</sup>.

## *Evaluation of MHCM Services in Jordan*

**COMMUNITY LEVEL DATA COLLECTION:** IMC also collected additional data from the population in affected areas with the aims to 1) gather information on the feasibility and acceptability of carrying out a randomized controlled trial comparing the two models of mental health care for the Syrian refugee population in the urban pockets of Amman; and 2) conduct a descriptive study of the impact of the two models of care on mental health symptoms, functioning, and satisfaction with services, on refugees who were initiating mental health treatment in the two settings. Three approaches were designed to compare IMC's MHCM model to the standard of care in the Za'atari camp as well as in urban settings. Descriptive analysis was conducted on baseline and follow-up samples, as well as review of HESPER against this sample. Qualitative data on perceived accessibility of mental health services and perceptions surrounding mental health was also obtained from data collectors.

**MHCM SERVICE RECORDS:** Data was collected to systematically review data on IMC's MHCM services in Jordan. Data from MHCM records over the course of the past 5 years (fall of 2009 to spring of 2015) was entered into a database with the purpose of describing and evaluating the comprehensive mental health service provision program. Services were provided both to refugees and Jordanians. Data was collected by trained data collectors from existing records and other databases and data from these clients it was de-identified. The extensive data set was converted and analyzed using SPSS predictive analysis software.



<sup>8</sup> Battery of psychometric tools are included in the appendix to this report which is available upon request

<sup>9</sup> Guidelines for MHCM are included in the appendix to this report which is available upon request

# DATA ANALYSIS AND PROCEDURES

## 1) Data Cleaning and Preparation

Frequency and descriptive analyses were run in all datasets on each of the variables, including gender, age, nationality and location; output was then examined for missing data or outliers. Outliers discovered were determined not to be data entry errors, and were left within the dataset.

### MHCM EVALUATION SAMPLE

Sub-variables reflecting each client's duration of treatment and total count of sessions were created. Out of 4767 clients, those who were found to have received only one session with IMC were removed (n=20, 0.4%), with the understanding that results from those individuals could not accurately reflect IMC MHCM interventions. Data on all clients in the remaining dataset included a comprehensive evaluation of the individual's functioning at baseline using the Client Functioning Scale (CFS). At the end of services, post-treatment CFS scores, as well as client satisfaction survey scores, were also obtained.

In order to conceptualize what each individual's score on the functioning subscales signified, rankings were created for each scale that represented a high functioning, moderate functioning, and low functioning level. High functioning individuals were established as those who responded to the CFS that they had "none" or "little" degree of difficulty completing tasks in any of the subscales. "Moderate" functioning was established as those who responded within the score of "moderate" difficulty with these tasks, and "low" functioning was established as those who responded that they had "a lot" of difficulty, or that they cannot complete the tasks listed in the subscales.

## 2) Statistical Data Analyses and Procedures

### 2.1. Development and Validation of Clinical Tools for MHCM

The process for selecting and validating a battery of instruments for MHCM consisted of four steps\*:

- An extensive literature review of two types of measures: a) those already in use by IMC, and b) new instruments that have been used with displaced persons in the past and tap on domains that IMC and research partners considered important additions to IMC evaluation process.
- Secondary psychometric analyses of the measures already in use by IMC
- Above steps informed compilation of a battery of candidate measures with acceptable psychometric properties, and

- Preparation and implementation of field testing of the battery of candidate measures with refugees receiving services by IMC and selection of final list of measures for the new battery

### Literature Review

Phase 1 included a review of published, peer-reviewed literature sources of:

a) Instruments already in use in routine clinical services by IMC assessing clinical status --the WASSS-Tool 8 and the Health of the Nations Outcome Scales (HoNOS); client functioning -- the Client Functioning Tool (CFT), and client and family service satisfaction -- Patient Satisfaction Survey (self-reports by client), and the Family Satisfaction Survey (reported by head of household of the client).

b) New instruments selected to (1) increase the accuracy and breadth of the current assessment domains of the IMC battery (more refined information on client's clinical status, including common and severe mental illness symptoms, PTSD, and convulsions; client's perceived needs; and family functioning); and (2) have psychometric data from published studies on displaced populations.

### Secondary Data Analyses

Psychometric analyses of the measures used by IMC was conducted on archival data from an outpatient clinical refugee sample in Jordan who received mental health services from IMC.

a) IMC Sample Characteristics: International Medical Corps (IMC) refugee sample (N=233) consisted of clients within age range of 18-75 years, who self-identified as Iraqi (69%) or Jordanian (31%), with 49.4 % males. In terms of mental health conditions diagnosed, the following categories emerged: recurrent depressive disorder (19.3%), depressive episodes (12%), generalized anxiety disorder (11.6%), schizophrenia (8.6%), and post-traumatic stress disorder (8.2%). Over the course of one year, the clients had received sessions ranging from 1-84 in number, with a median of 15.5 sessions.

b) Psychometric Analyses: The analyses aimed to provide three sources of evidence for each measure used: (1) evidence of scale structure based on factor analyses or dimensionality analyses (evidence of internal structure); (2) evidence on the degree of convergence of scores with other similar measures (convergent validity evidence); and (3) evidence of reliability - consistency of scores and summated ratings. The reliability that could be explored with this dataset was within persons across items consistency (internal consistency).

c) To examine factor structure, we employed principal axis factor extraction methods with promax rotation of factors. Convergent validity was examined with Pearson product-moment correlations with summated scale scores or with inter-factor correlations. Internal consistency reliability was examined with Cronbach's alpha

\*battery of psychometric tools are included in the appendix to this report which is available upon request

coefficients.

### **Battery of candidate measures for field study**

The academic partners and consultants synthesized the results of the psychometric analysis and the information gathered from the literature review, and proposed a list of instruments to be field-tested. To facilitate context-based interpretations of psychometric results and pre-existing peer-reviewed studies, differences in the composition of the patient/client populations were detailed.

**a)** Instruments already in use by IMC (see below and in Appendix B):

- WHO-UNHCR's Assessment Schedule of Serious Symptoms in Humanitarian Settings (WASSS-Tool 8)
- The Client Functioning Tool (CFT)
- Patient Satisfaction Survey
- Family Satisfaction Survey

**b)** Instruments newly added to the battery:

- Humanitarian Emergency Settings Perceived Needs Scale (HESPER)
- The McMaster Family Assessment Device (General Functioning)
- The Symptom Checklist 90 –Revised (SCL-90R)
- The PTSD Checklist (PCL)
- The Liverpool Seizure Severity Scale 2.0 (LSSS 2.0)

### **Tool Development**

Following the compilation of the battery of candidate instruments for field testing, the partners identified existing Arabic translations for the new instruments, and administration and scoring manuals. The team invited bilingual (Arab and English-speaking individuals) and oversaw the translation-back-translation process of the two instruments that were not translated in Arabic previously, the PTSD Checklist and the Liverpool Seizure Severity Scale. Training materials and scripts for the interviewers were prepared to standardize recruitment process.

### **Training**

Training in Arabic was conducted in Amman over one week (April 6 - April 10, 2014) for the 6 interviewers hired for the study (5 males and 1 female): a nurse, a social worker, and 4 college graduates with a degree in non-health related domain but extensive experience conducting surveys. The 2-day training included an overview of the study and basic procedures; the interviewers' role in the study; explanation of target domains of assessment; ethics, behavior, and attitudes of the interviewers; self-care to prevent burn-out; explanation of structure and function of each instrument, and administration and scoring procedures. During staff training, further revisions of the wording of items in the measures took place based on the feedback of the trainees, some of them Syrian\*. In addition, a standard data management checking protocol was conducted upon completion of the database frame. Two mock interview packets and associated responses in the database

were checked against the hard copies of the mock interview instruments. This procedure found the data entry process to be satisfactory.

### **Implementation**

Tools were administered by the interviewers with oversight to ensure adherence to the administration and scoring guidelines of the instruments and ethical standards between May and August 2014. Individuals 18+ years of age identified as refugees and who were receiving services from IMC were eligible to participate. Data were collected from the Za'atari camp and from IMC clinics in the urban areas of Amman. For this phase, the sample consisted of 188 refugees (age range: 18-79 years, mean=39). The breakdown of nationalities was as follows: Iraqi (10.1%), Sudanese (1.1%), and Syrian (88.8%). Males were 59.6% of the sample.

## **2.2. Data analyses for MHCM Service Evaluation**

Data analyses on examined the sample of clients receiving MHCM services and included sample demographics and descriptive statistics as well as correlations, comparison analyses (e.g. ANOVAs) and regression analyses. An alpha level of .05 was adopted throughout.

*\*training reports are included in the appendix to this report which is available upon request*

# RESULTS

## 1) Demographics and Client Characteristics

### Measures Validation Data Sample

Psychometric analyses of the measures used by IMC was conducted on archival data from an outpatient clinical refugee sample in Jordan who received mental health services from IMC.

**IMC Sample Characteristics:** International Medical Corps (IMC) refugee sample (N=233) consisted of clients within age range of 18-75 years, who self-identified as Iraqi (69%) or Jordanian (31%), with 49.4% males. In terms of mental health conditions diagnosed, the following categories emerged: recurrent depressive disorder (19.3%), depressive episodes (12%), generalized anxiety disorder (11.6%), schizophrenia (8.6%), and post-traumatic stress disorder (8.2%). Over the course of one year, the clients had received sessions ranging from 1-84 in number, with a median of 15.5 sessions.

### MHCM Evaluation Sample

A total of 4747 clients were included in data analysis and results (see Table 1 for sample demographics).

The majority of clients in the dataset were refugees (74.9% Syrian and 19.4% Iraqis). The remaining 5.7% were mostly Jordanian with some being of “other” nationality. Within the sample, all Iraqis and Jordanians sought services within urban areas, while only 30.8% of the Syrians receiving MHCM services did so within urban areas.

### Community Data Sample

In addition, our community recruited sample consisted of 29 refugees who agreed to participation and randomization (13 were randomized to MoH and 16 were randomized to IMC clinics). Of those 29, baseline data was collected for 10 participants who attended their initial scheduled visit to their assigned clinic. Specifically, 4 of 13 randomized to MOH completed baseline at MOH while 6 of 16 randomized to IMC completed baseline at IMC. Out of those 10 that provided baseline data, only 8 showed up to the clinics and actually received services. At baseline, 2 of the 10 interviews were conducted by phone while all other interviews were conducted in-person. The age of participants at baseline in this study ranged from 30 to 59. The average age of participants was 44.7 (SD 9.7) and 60% of the sample was female (N = 6). The follow-up rate was 30%; all 3 follow-ups were conducted with IMC participants.

Due to the small sample size and difficulty of successful follow-up with MoH participants, no statistically valid comparisons can be made between the two clinics or between the two time points. Instead, descriptive data solely of the IMC participants that was taken at baseline and follow-up (FU) will be presented.

*Table 1: Sample Demographics*

	Camp	Urban	Total Number	Percent
<b>Gender</b>				
Male	1474	1064	2538	53.5%
Female	1247	962	2209	46.5%
<b>Age Group (N)</b>				
Children, under 18 years	1045	334	1379	29.1%
Adult, 18 and Above	1676	1692	3368	70.9%
<b>Nationality</b>				
Syrian	2460	1095	3555	74.9%
Iraqi	0	921	921	19.4%
Jordanian/Other	0	271	271	5.7%
<b>Number of Sessions</b>				
2 or 3 sessions	817	448	1265	26.6%
4 to 20 sessions	1098	1332	2430	51.2%
>20 sessions	353	699	1052	22.2%

## 2) Development and Validation of Clinical Tools for MHCM- Psychometric Property Results

Based on the literature review and validation studies, changes made to the measures include adding questions on epilepsy, cleaning up items that did not show good reliability for this population, and involving Syrian clients in the part of the instrument translation process through “cognitive interviewing” which followed the WHO guidelines ensured that the project was adaptable to client’s needs. The following instruments were recommended as clinical tools for MHCM, as each of these reached the minimal alpha reliability cut-off of .7 for acceptability based on published psychometric criteria (alpha values based on all items of the measure should not be interpreted as evidence of validity):

Tool	Cronbach's Alpha	Sample Size (N)
WHO-UNHCR's Assessment Schedule of Serious Symptoms in Humanitarian Settings (WASSS-Tool 8)	0.762	186
The Client Functioning Tool (CFT)	0.824	180
Patient Satisfaction Survey	0.86	171
Humanitarian Emergency Settings Perceived Needs Scale (HESPER)	0.727	168
The Symptom Checklist 90 –Revised (SCL-90R)	0.974	113
The PTSD Checklist (PCL)	0.88	163
The Liverpool Seizure Severity Scale 2.0 (LSSS 2.0)	.224 (all items) or .706 (excluding 2, 3, 12)	43

For a full report on the psychometric validation process, see Appendix

### 3) Evaluation of MHCM Services in Jordan

#### 3.1. Types and Frequencies of Mental Health Problems

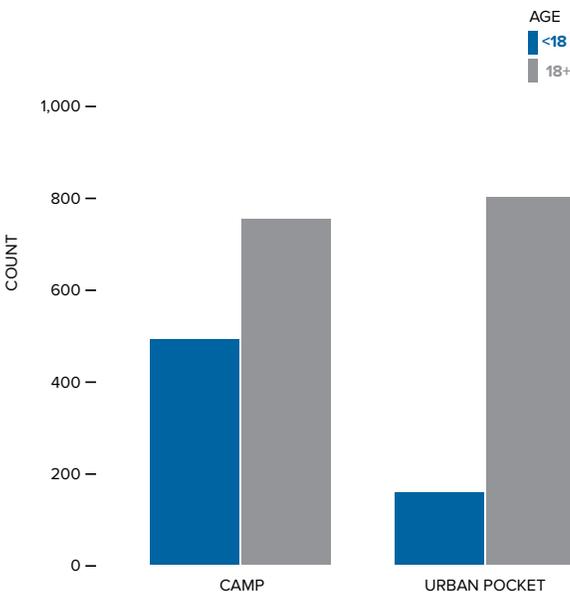
Types and frequencies of mental health problems were examined among clients seeking IMC MHCM services. Among the adult population, the most common diagnoses were related to mood and anxiety, psychosis, acute stress and adjustment, and epilepsy. 13.8% of the adult clients presented with recurrent depressive disorder, while 10.2% presented with mild depressive episodes. Paranoid schizophrenia was also commonly seen, at 15.1% of the clients, and 10.4% of individuals were seeking services for epilepsy.

Among youth, the most common diagnosis was nonorganic enuresis, at 34% percent. Epilepsy, mood and depression related disorders, intellectual disabilities, and traumatic-stress related mental illness were among the other most common diagnosis given to children. Table 2 depicts a breakdown of number of clients with different mental disorders (severe mental disorders are defined as bipolar disorder and psychotic disorders), by location (camp and urban pockets) and gender.

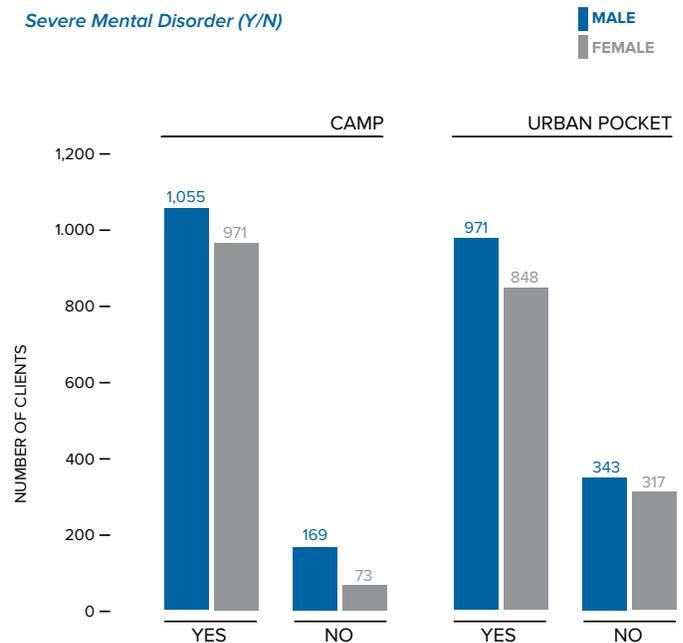
**Table 2: Common Diagnosis**

	Camp	Urban	Total Number	Percent
<b>UNHCR Categories of Mental Illness</b>				
Emotional Disorders	857	1533	2390	50.3%
Psychotic Disorders	217	452	669	14.1%
Epilepsy	299	238	537	11.3%
Other Disorders	794	112	906	19.1%
Behavioral Disorders	81	59	140	2.9%
Alcohol & Other Substance Abuse Disorders	6	15	21	0.4%
Other Psychological Complaints	4	10	14	0.2%
Medically Unexplained Somatic Complaints	10	60	70	1.5%

**Client Age Dispersion Dispersion in Camps vs. Urban Pockets**



**Severe Mental Disorder (Y/N)**



### 3.2. MHCM Sessions

In order to review number of sessions attended, data was evaluated for each client’s duration of treatment and total number of treatment sessions (not equivalent to count of visit since within a visit a client could have two sessions with two different types of mental health providers). Of the clients that remained in the database, just over half of the clients were found to have had between 4-20 sessions (N=2430), with 22.2% receiving more than twenty (N=1052) and 26.6% percent receiving less than 4 (N=1265). (Table 3). Analysis found that average number of sessions received was 16.1 with a standard deviation of 0.35. The most common number of sessions was two. Data on the types of sessions received by adult clients (over the age of 18) showed that CM sessions were the most common; psychiatric services were the next most common, with the average number of counseling sessions received by this adult sample of 1.7. Clients under the age of 18 also showed similar trends for the types of services received, but with a lower average number of sessions for each type.

No significant Pearson correlations (at  $p < .01$ ) were found when correlating the number of sessions and the satisfaction survey scores were examined.

*Table 3: Number of Sessions By Categories*

sessions	Frequency	Percent	Valid Percent	Cumulative Percent
2 or 3	<b>1265</b>	<b>26.6</b>	<b>26.6</b>	<b>26.6</b>
4 to 20	<b>2430</b>	<b>51.2</b>	<b>51.2</b>	<b>77.8</b>
20+	<b>1052</b>	<b>22.2</b>	<b>22.2</b>	<b>100.0</b>
Total	<b>4747</b>	<b>100.0</b>	<b>100.0</b>	

### 3.3. Satisfaction with IMC MHCM Services

Data from IMC’s satisfaction surveys which are administered as part of routine service provision (upon completion of treatment) were utilized, in addition to qualitative feedback from screeners.

In the satisfaction survey, clients answered questions relating to their services and treatment, such as “I feel that my case manager is accessible to me when I need them” or “I feel comfortable about asking questions about my treatment and medication”. The answers were in Likert type ranging from 1 (strongly agree, indicating highly satisfied) to 5 (strongly disagree, indicating highly dissatisfied). Clients response indicated with a score mean of 1.5 and ranging from 1 to 2 (n=4747, SD=0.309).

We also examined whether client satisfaction was predicted by other variables. Bivariate correlations were run on satisfaction survey results, treatment characteristics as well as client functioning level changes on all subcategories. Only items related to treatment were found to be correlated with satisfaction sum scores: the total number

of sessions was significantly correlated at 0.03 ( $\alpha=0.05$ ). Regression of total number of sessions by satisfaction scores was significant at 0.41 ( $\alpha=0.05$ ).

A linear regression was run to examine associations of satisfaction scores with age group (under 18 yr. vs. 18 or above), gender, total number of sessions attended, total baseline functioning score, presence of severe mental disorder (y/n), and location (urban vs. camp); the linear regression model predicting satisfaction scores was not significant.

### 3.4 MHCM Client Improvement in Functioning

Data collected from IMC’s clinics over the five years of service provision were analyzed in order to examine client improvement in functioning using the CFS (Client Functioning Scale). To examine potential determinates of improved functioning, IMC evaluated relationships between functioning and the number of sessions client’s received and variables such as age, gender, status, diagnosis, CFS results and urban vs. camp comparisons.

Looking at functioning scores, t-tests show that baseline functioning scores significantly differ from post-treatment functioning scores across all subscales of functioning as well as in total functioning, with

higher post-treatment scores than baseline, denoting an improvement in functioning. When regressions were run controlling for variables such as age, number of sessions, and gender, significant difference between pre and post functioning scores were still found.

#### *Predictors of Functioning*

Further analyses examining only clients who were within the category of low functioning at baseline showed that of the regressions on the five functioning subscales, only the regression for change in Social Acceptability functioning scores was significant ( $F(6,22) = 2.63, p < 0.05, r = .42$ ). In this model, gender and location (urban vs. camp) were significant predictors, accounting for 21.6% and 9.9% of the variation in Social Acceptability functioning change scores, respectively. Lower functioning males showed a significantly larger change (improvement) in Social Acceptability functioning scores than females. Lower functioning individuals in camp settings showed a significantly larger change in scores than those in urban settings.

In evaluating client improvement, IMC also examined improvement in functioning between urban and camp settings. Subcategories for “urban” vs. “camp” locations were created in SPSS, denoting services that were received within cities or within refugee camps. A t-test comparisons between camp and urban location showed that individuals in camps had greater improvement in total functioning scores  $F(1, 4745) = 8.346, p < 0.05, d = 0.086$ , and in Daily Skills

functioning scores,  $F(1,4745) = .8074$ ,  $p < 0.05$ ,  $d = .080$ . Other functioning subscales showed no significant difference by location. However, the effect size of this was relatively small. In a linear regression that was run predicting functioning change scores with each of the independent variables (age groups, camp vs. urban locations, gender, total number of sessions, and baseline functioning score), the only variable that was found to be a significant predictor of functioning improvement was baseline functioning scores. Thus it was concluded that location was not a significant predictor of functioning improvement.

Although causality cannot be inferred without a control group, this data suggests that IMC's MHCM services have had a significant impact on all clients' functioning as indicated by each of the CFS subcategories of Personal Care, completion of Daily Skills and Applied Skills, Interpersonal Relationships and Social Acceptability. MHCM improved functioning of clients consistently across sites and age groups.

#### Functioning among Adult Clients

In adult clients Increases in functioning were observed within

each subcategories, seen by an increased proportion of highly functioning adults. The largest increase in proportion of high functioning for adult clients between pre and post treatment was seen in the Daily Skills subcategory within camp settings (23.6); the second largest increase was seen in the Personal Care subcategory in camp settings (21.3, see table 5 and 6). The two smallest increases in proportion of individuals in high functioning level were seen in the Social Acceptability subcategory, for both camps settings (14.4) and urban settings (12.3). At baseline the Social Acceptability subcategory comprised the largest proportion of highly functioning clients in both urban (81.9%) and camp (78.9%) settings.

#### Functioning among Clients Under 18 Years Old

Similar to the adult clients, increases in the proportion of highly functioning individuals at post-treatment were observed within each subcategory for clients under the age of 18. The largest increase in proportions of high functioning individuals was seen in the Interpersonal Relationships subcategory in urban settings (22.2), while the second largest increase was seen in the Interpersonal Relationships subcategory in camp settings (21.6). Again similar to adults, the two smallest increases in proportion of individuals in high

#### Descriptives

		N	Mean	Std. Deviation	Std. Error
total	1	4747	46.4535	9.88497	.14347
	2	4747	34.0742	8.95651	.13000
	Total	9494	40.2639	11.28153	.11578
personal_care	1	4747	6.8129	2.73880	.03975
	2	4747	5.2684	2.61048	.03789
	Total	9494	6.0407	2.78452	.02858
Interpersonal_Rel	1	4747	8.8007	3.19560	.04638
	2	4747	6.8614	2.99673	.04349
	Total	9494	7.8311	3.24584	.03331
Social_Acc	1	4747	10.5471	3.56489	.05174
	2	4747	7.8961	3.33897	.04846
	Total	9494	9.2216	3.69924	.03797
Daily_Skills	1	4747	16.8077	4.42342	.06420
	2	4747	11.3387	3.92855	.05702
	Total	9494	14.0732	4.99763	.05129
Applied_Skills	1	4747	3.4851	1.85105	.02687
	2	4747	2.7095	1.77117	.02571
	Total	9494	3.0973	1.85251	.01901

Decreases in impairment in functioning sub-scores over time

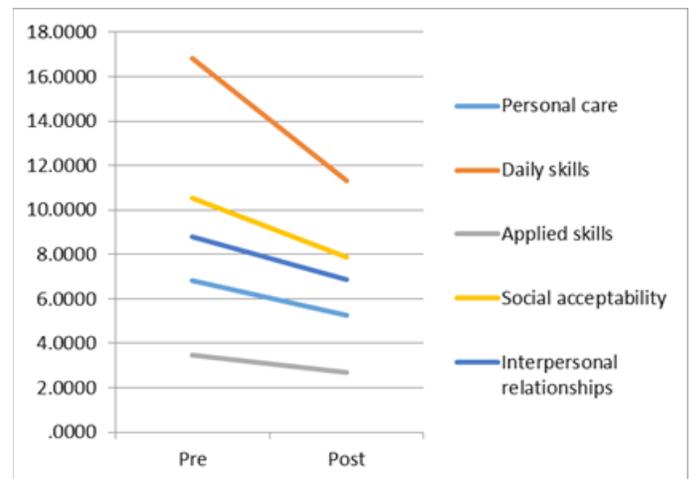


Table 5: Urban vs. Camp Function Change in Adult Population

	Adult Personal Care - Camp			Adult Daily Skills – Camp		
Functioning Level	High	Moderate	Low	High	Moderate	Low
Baseline Percentage	<b>58.5%</b>	<b>35.2%</b>	<b>6.3%</b>	<b>72.9%</b>	<b>26.2%</b>	<b>0.9%</b>
Post-treatment Percentage	<b>79.8%</b>	<b>18.0%</b>	<b>2.1%</b>	<b>96.5%</b>	<b>3.5%</b>	<b>0.0%</b>
	Adult Personal Care - Urban			Adult Daily Skills - Urban		
Functioning Level	High	Moderate	Low	High	Moderate	Low
Baseline Percentage	<b>62.5%</b>	<b>34.3%</b>	<b>3.2%</b>	<b>76.8%</b>	<b>22.5%</b>	<b>0.6%</b>
Post-treatment Percentage	<b>82.6%</b>	<b>17.0%</b>	<b>0.4%</b>	<b>97.5%</b>	<b>2.5%</b>	<b>0.0%</b>

**Table 6: Urban vs. Camp Function Change in Adult Population**

	CAMP			URBAN		
	Applied Skills			Applied Skills		
Functioning Level	High	Moderate	Low	High	Moderate	Low
Baseline Percentage	<b>49.4%</b>	<b>34.4%</b>	<b>16.2%</b>	<b>51.4%</b>	<b>33.9%</b>	<b>14.7%</b>
Post-treatment Percentage	<b>67.7%</b>	<b>24.3%</b>	<b>8.0%</b>	<b>68.7%</b>	<b>24.6%</b>	<b>6.7%</b>

	CAMP			URBAN		
	Social Acceptability			Social Acceptability		
Functioning Level	High	Moderate	Low	High	Moderate	Low
Baseline Percentage	<b>78.9%</b>	<b>20.8%</b>	<b>0.3%</b>	<b>81.9%</b>	<b>17.3%</b>	<b>0.8%</b>
Post-treatment Percentage	<b>93.3%</b>	<b>6.7%</b>	<b>0.0%</b>	<b>94.2%</b>	<b>5.7%</b>	<b>0.0%</b>

	CAMP			URBAN		
	Interpersonal Relationships			Interpersonal Relationships		
Functioning Level	High	Moderate	Low	High	Moderate	Low
Baseline Percentage	<b>60.5%</b>	<b>34.1%</b>	<b>5.4%</b>	<b>64.3%</b>	<b>32.2%</b>	<b>3.4%</b>
Post-treatment Percentage	<b>81.1%</b>	<b>17.6%</b>	<b>1.2%</b>	<b>84.1%</b>	<b>15.2%</b>	<b>0.7%</b>

functioning level were seen in the Social Acceptability subcategory, for both camps settings (11.4) and urban settings (13.0). While in this population, Daily Skills in urban settings at baseline comprised the largest proportion of highly functioning clients (81.9%), Social Acceptability subcategory comprised the second and third largest proportion of highly functioning clients in urban (81.2%) and camp (80.8%) settings. Based on functioning improvement seen, MHCM was found to be applicable and useful both in urban and in camp settings, with adults and children.

(HESPER) was used to assess the general needs prioritized among community study participants. Results are shown in the table below. Those expressed needs are similar to those found among IMC clients participating in the measures validation study, with income or livelihood being the greatest concern. Distress was cited as another key concern by IMC clients currently receiving services (as part of the measures validation study) but not by the community sample of people with mental health problems currently not receiving services.

**3.5. Perceived needs among people with mental health problems**

The Humanitarian Emergency Settings Perceived Needs Scale

**3.6. Perception of Mental Health Services**

Additional qualitative data from screeners also sheds light on the perception of mental health problems and available services among the refugee population. The IMC MH screeners identified many

**Table 7: Urban vs. Camp Function Change in Clients Under 18 Years Old**

	CAMP			URBAN		
	Personal Care			Personal Care		
Functioning Level	High	Moderate	Low	High	Moderate	Low
Baseline Percentage	<b>56.3%</b>	<b>35.4%</b>	<b>8.3%</b>	<b>63.1%</b>	<b>34.5%</b>	<b>2.4%</b>
Post-treatment Percentage	<b>74.9%</b>	<b>22.6%</b>	<b>2.5%</b>	<b>82.4%</b>	<b>17.1%</b>	<b>0.5%</b>

	CAMP			URBAN		
	Daily Skills			Daily Skills		
Functioning Level	High	Moderate	Low	High	Moderate	Low
Baseline Percentage	<b>74.2%</b>	<b>24.8%</b>	<b>0.1%</b>	<b>81.9%</b>	<b>17.8%</b>	<b>0.2%</b>
Post-treatment Percentage	<b>94.8%</b>	<b>5.2%</b>	<b>0.0%</b>	<b>98.6%</b>	<b>1.4%</b>	<b>0.0%</b>

**Table 8: Urban vs. Camp Function Change in Clients Under 18 Years Old**

	CAMP			URBAN		
	Applied Skills			Applied Skills		
Functioning Level	High	Moderate	Low	High	Moderate	Low
Baseline Percentage	<b>51.2%</b>	<b>31.0%</b>	<b>17.7%</b>	<b>54.0%</b>	<b>32.5%</b>	<b>13.5%</b>
Post-treatment Percentage	<b>66.9%</b>	<b>24.7%</b>	<b>8.4%</b>	<b>68.7%</b>	<b>25.3%</b>	<b>6.0%</b>
	Social Acceptability			Social Acceptability		
Functioning Level	High	Moderate	Low	High	Moderate	Low
Baseline Percentage	<b>80.8%</b>	<b>18.3%</b>	<b>0.9%</b>	<b>81.2%</b>	<b>18.8%</b>	<b>0.0%</b>
Post-treatment Percentage	<b>92.2%</b>	<b>7.8%</b>	<b>0.0%</b>	<b>94.2%</b>	<b>5.8%</b>	<b>0.0%</b>
	Interpersonal Relationships			Interpersonal Relationships		
Functioning Level	High	Moderate	Low	High	Moderate	Low
Baseline Percentage	<b>55.2%</b>	<b>36.5%</b>	<b>8.3%</b>	<b>59.5%</b>	<b>36.4%</b>	<b>7.1%</b>
Post-treatment Percentage	<b>76.8%</b>	<b>21.5%</b>	<b>1.8%</b>	<b>81.7%</b>	<b>20.3%</b>	<b>1.5%</b>

challenges to making IMC services accessible. These included broad concerns such as community-driven stigma surrounding mental health issues, and more specific issues regarding the terminology that was used in client identification and the length of the assessment interview. The screeners found that stigma throughout the community regarding mental health issues posed a challenge in gaining participation in the program. They were told, “We are not crazy”, “We don’t need services”, or “Who are you to tell us we need care”. In some cases, families were not supportive of their eligible members and prevented them from visiting the clinics due to stigma.

**Comparison of Priority Problems**

Priority Ratings for Most Serious Problems	Measures validation Participants	Community Participants
Which is the most serious problem?	Income/Livelihood	Income/Livelihood
Which is the second most serious problem?	Being Displaced From Home	Support From Others
Which is the third most serious problem?	Distress	Being displaced from home

**Ranking of Problems**

Item (Serious Problem with...)	n=10	% Yes
Income or livelihood	9	90.0%
Support from others	8	80.0%
Being displaced from home	7	77.8% <sup>†</sup>
Distress	7	70.0%
The way aid is provided	6	66.7% <sup>†</sup>
Place to live in	6	60.0%
Physical Health	6	60.0%
Health care	5	50.0%
Separation from family members	5	50.0%
Too much free time	5	50.0%

# DISCUSSION

The program aimed to fill key gaps in humanitarian research by contributing to improved methods and evaluation tools and by advancing the evidence base on comprehensive mental health interventions for conflict affected refugee populations. The focus of this work is aligned with the research priorities for MHPSS in humanitarian settings set forth by the Mental Health and Psychosocial Support in Humanitarian Settings – Research Priority Setting (MH-SET) project.<sup>10</sup> Specifically, MH-SET demonstrated that research in this area should be in one of four priority categories: (1) Problem Analysis, (2) Mental Health and Psychosocial Support Interventions, (3) Research and Information Management, and (4) Mental Health and Psychosocial Support Context. The project contributes to increasing the knowledge of MHPSS interventions including tools and best practices for effective mental health case management implementation. It also provides some initial findings on Research and Information Management approaches in protracted refugee contexts, especially in relation to challenges faced in screening and gathering information on MHPSS needs of the community.

## Research Project Challenges and Recommendations

The context of humanitarian emergencies is dynamic and changing rapidly with many of the changes influencing the flow and implementation of the research project. Based on this research experience, it is recommended that future research projects within a humanitarian context be carefully planned according to the risks of operational delays and lessons learned based on the challenges encountered in this project, which are outlined below:

### Institutional Review Board (IRB) Approval

Global MHPSS research guidelines recommend obtaining IRB approval from the academic partner as well as the host country<sup>11,12</sup>. In line with this, IMC applied for both local (King Hussein Cancer Center, Jordan) and U.S. IRBs (Teachers College, Columbia University), IRBs which took extensive coordination to align both applications since each IRB committee had different forms, requirements and application processes. While Teacher's College IRB approval took 2 to 3 weeks, the local IRB approval took approximately 8 months in total because their approval was pending approvals from Ministry of Interiors and Ministry of Health.

- Future research needs to take into account time for such anticipated delays and initiate IRB processes as early as possible.

### Human Resources

Recruiting a qualified national field research coordinator posed a significant challenge which required six months to find the right candidate for the position.

- Budgeting and planning for a regional or global research coordinator who can work closely with and build capacity of local counterparts can help avoid delays and ensure quality implementation.

### Lack of Comparison Sites in Camp Settings (Za'atari & Azraq)

Initially IMC had planned for comparison sites (for community level data collection and RCT study) that existed at the time of proposal writing but had closed down or declined collaboration at the time of the study.

- The settings of humanitarian context are dynamic and continuously changing according to economic, political, or societal factors. Research in those settings needs to be flexible and allow for alterations as unexpected changes occur in the situation, programming and availability of partners.

### Community Data Collection Challenges

The community-based data collection approach presented multiple challenges and limitations throughout the enrollment and follow-up periods of study. Data collectors engaging in community screening reported that it was “challenging, difficult, and embarrassing” to approach households and ask if the family is, for example, Syrian or Iraqi. Refugees in Amman do not prefer the term refugee and some Syrians refuse to be described or treated as refugees. In the current context, Syrians, in particular, and refugees, in general, are suspicious toward any community questionnaire activities and resulted in lower participation rates. The program enlisted and trained four Syrian screeners in order to mitigate these concerns yet the screeners felt it was still a difficult component of the program.

### Stigma

The community screeners faced many incidents where people told them ‘we are not crazy’, ‘we don't need services’, or ‘who are you to tell us we need care’. These responses may have indicated an underlying stigma associated with seeking services associated with mental health. In some cases, families were not supportive of their eligible members and prevented them from visiting the clinics due to stigma. Specific areas where additional screener training is essential includes:

- Understanding and addressing cultural or community-driven stigma associated with mental health issues. This includes awareness and cultural competency regarding the target cli-

10 Tol WA, Patel V, Tomlinson M, Baingana F, Galappatti A, et al. (2011) Research Priorities for Mental Health and Psychosocial Support in Humanitarian Settings.

11 Allden K, Jones L, Weissbecker I, Wessells M, Bolton P, Betancourt TS, Hijazi Z, Galappatti A, Yamout R, Patel P, Sumathipala A: Mental health and psychosocial support in crisis and conflict: Report of the Mental Health Working Group. *Prehosp Disaster Med* 2009;24(4):s217–s227.

12 IASC. (2007). IASC Guidelines for Mental Health and Psychosocial Support in Emergency Settings. Available at [http://www.who.int/mental\\_health/emergencies/guidelines\\_iasc\\_mental\\_health\\_psychosocial\\_june\\_2007.pdf](http://www.who.int/mental_health/emergencies/guidelines_iasc_mental_health_psychosocial_june_2007.pdf)

ent population and knowing about prevalent perceptions, expectations and diversity of the community

- Train interviewers in understanding and addressing the culture-specific obstacles to seeking mental health support and services.
- Additional training on the sensitivity and awareness needed when addressing and identifying refugee populations who, for instance, may not prefer to be identified by the term “refugee”.

**Based on these challenges, five overall key factors of success for future projects were identified:**

1. Regular coordination between partners, donors and country implementation team is essential.
2. Continued collaboration with academic partners that have experience in mental health research priorities and operational research design in addition to working with partners who have a strong understanding of the cultural and societal context at the field level.
3. Fostering strong links between programs of operation and research programs to ensure systems and data collections mechanisms serve learning and implementation purposes.
4. Working closely with donors is key factor to success and completion of research projects in order to adjust and modify objectives based on operational challenges.
5. Engaging community members, leaders and committees to gain a strong understanding of how research methods will be received by the community in order to adjust research design to ensure that a benefit to participants and broader population is integral to the design and findings<sup>13</sup>.

## *Development and Validation of Clinical Tools for MHCM*

As part of this project, we have validated a battery of clinically and conceptually meaningful tools, which can be used with IMC MHCM services and other mental health and social services provided to Syrian and Iraqi refugees. IMC plans to share and publish the Arabic versions of the tools for use in research and practice. It is important to note that the Arabic versions are the first validated Arabic tools for use with the Syrian refugee population. These tools can be valuable not only for monitoring and evaluating mental health service provision but also for a wide range of other activities such as MHPSS community level needs assessments (e.g. HESPER & WASSS). The validated Client Functioning Scale (CFS) is the first Arabic version ever to be prepared and in this population. The SCL 90 is a potentially useful tool for objective mental health assessments, which IMC intends to introduce to its case management tools to indicate

initial, potential mental health issues. Additionally, the SCL-90 being a self-report instrument allows administration by a wider range of personnel, including case managers and other para-professionals in the field with less training, experience, or authority to provide diagnoses. The Liverpool Seizures Severity Scale 2.0 and the PTSD Checklist are useful tools for future research in the refugee population in Jordan and the region and can also be used as part of clinical screening instruments in health care settings.

## **Development of the IMC Mental Health Case Management Training Manual**

Recommendations for successful mental health case management services include that all case managers receive intensive training on outreach, communication, and supervision in a context sensitive manner to combat the challenges to getting individuals to partake in mental health services. IMC is one of the few organizations implementing MHCM services<sup>14</sup> and is often called upon by other organizations to provide training and capacity building in this area. This project included the development of a MHCM training manual<sup>15</sup>. The manual was informed by ongoing fieldwork and experience in MHCM in camp and urban settings. It is recommended for use in future MHCM training and aims to enhance capacity building while promoting consistency and sustainability of MHCM services. IMC plans to share and disseminate this manual internally as well as with other humanitarian and development actors so it can be used with Syrian and Iraqi refugees as well as adapted to various contexts. The MHCM manual can also be an essential tool in building the capacity of local partners to adapt MHCM approach. Ultimately it is a stand-alone reference guide for all new case managers as well as case management training and capacity building projects.

## **Mental Health Case Management Service Recommendations**

The MHCM evaluation component of this study suggests that MHCM services may have a significant impact on clients' functioning as indicated by the total scores and each of the subcategories of Personal Care, Daily Skills, Applied Skills, Interpersonal Relationships and Social Acceptability. The project showed that clients consistently improve in functioning across different age groups (e.g. children and adults), with different diagnoses and within different settings (e.g. camps and urban). The strong results across different variables suggest that the IMC MHCM model is versatile and applicable to a variety of different populations and settings.

The highest increases in functioning among adults was in the categories of daily skills and personal care. It is known that people with

13 Allden K, Jones L, Weissbecker I, Wessells M, Bolton P, Betancourt TS, Hijazi Z, Galappatti A, Yamout R, Patel P, Sumathipala A: Mental health and psychosocial support in crisis and conflict: Report of the Mental Health Working Group. *Prehosp Disaster Med* 2009;24(4):s217–s227.

14 Quosh, C. Takamol: multi-professional capacity building in order to strengthen the psychosocial and mental health sector in response to refugee crises, *Intervention* 2011, Volume 9, Number 3, Page 249 - 264

15 MHCM training modules are included in the appendix to this report which is available upon request

mental health problems are particularly vulnerable in humanitarian settings and often cannot access basic needs. Improved day to day skills and personal care are likely to be critical for refugees affected by mental illness, and allow them to contribute to meeting their own as well as family needs.

The highest increases in functioning among children and youth under 18 was in interpersonal relationships. Mental health problems often impact the ability to initiate and maintain positive relationships with family members and peers among young people. Furthermore, difficulties with peers and bullying in schools has been cited as a significant concern among Syrian refugee children in Jordan, further contributing to distress. At the same time, social support and interpersonal relationships have been shown to be one of the biggest factors protecting people from mental illness. The fact that MHCM may improve interpersonal relationships among young people seems especially promising and positive within this context. It should also be noted that IMC is implementing programs for children and youth in Jordan, which often serve as an additional referral option to support those struggling with mental health problems. More research would be needed to examine the potential additive positive effect of such programs.

In addition to functioning, client satisfaction is a critical measure to understanding the client experience and participation in their care. The IMC functioning scale is based on conceptualizing a client within a larger and layered system or ecological environment, which includes (a) a micro-system, (e.g. direct activities and interpersonal relations), (b) the mesosystem, (consisting of interaction between settings, e.g. school, home, work), (c) the exosystem, (consisting of interaction between settings which the individual is not directly a part of, e.g. work environment of spouse of parent), and (d) the macrosystem, referring to cultural, societal and belief driven influences<sup>16</sup>. Client satisfaction can be examined within the micro-system as part of the interpersonal relationship between clients and case managers and is critical to how the client perceives, seeks and participates in services. IMC's MHCM model focuses on the engagement between case managers and clients as a central component in service provision, possibly leading to high client satisfaction.

The wraparound model of MHCM allows case managers and clients to assess individual needs and to move forward in meeting each of those needs. The average caseload for an IMC case manager is about 34 clients and MHCM focuses on engagement between case managers and clients (time and resources). Results showing that dedicating more time to clients may be related to higher satisfaction. This could indicate that one of the major strengths of the MHCM approach is the customized care focused on meeting each client's needs and circumstances.

This project also showed that stigma towards mental illness is significant among refugee communities based on feedback from screeners and other IMC MHPSS assessments in Jordan. Those already receiving MHCM services also seemed more likely to endorse psychological distress as a problem than people with mental health problems in the community. This underlines the importance of community outreach and awareness raising around mental health in a culturally sensitive manner. Ensuring IMC MHCM services are accessible without stigma (e.g. as part of general health care) and having mental health case managers reach out and follow up are an important part of the IMC MHCM model.

## **The MHCM Model and Potential for Scale-Up**

The mental health services provided by IMC in Jordan offer a unique multi-disciplinary, client-centered approach in a range of settings. Coverage includes 16 clinics in 3 camps and 10 main cities, with a sustainable approach that includes established referral pathways to various services. IMC is currently the sole service provider in this area implementing comprehensive mental health case management; other organizations offer specialized mental health services, such as strictly providing psychiatric services. The comprehensive IMC MHCM approach, which promotes continuity in mental health care, differs from the other mental health services being implemented by other providers in Jordan. Indeed, the interventions mapping report from WHO, Jordan MoH, and IMC: "Who is Doing What, Where and When (4Ws) in Mental Health & Psychosocial Support in Jordan?"<sup>17</sup> reported on data collected from 47 participating organizations in the area. Of those organizations, 43% offer some level of mental health case management and referral services, however only 12% provide case-focused specialized services.

Another benefit to IMC MHCM services are that they are hosted by primary health care centers, which plays a major role in reducing stigma associated with accessing mental health services and, as a result, improving access to services. IMC has signed an agreement with the MoH to build a partnership in efforts to build capacity of the ministry on implementing MHCM services at the primary healthcare level. IMC has also been able to provide ongoing MH services over the past eight years in Jordan, while other organizations have had to discontinue their services or offer them intermittently. This consistent presence and provision of comprehensive services differentiates IMC as a case-specialized, multi-disciplinary service provider throughout the country.

Continuity and the broad coverage of IMC's case management has proved to be essential components of increasing efficiency of these

<sup>16</sup> Bronfenbrenner, U. (1994). Ecological models of human development. In *International Encyclopedia of Education*, Vol. 3, 2nd. Ed. Oxford: Elsevier.

<sup>17</sup> WHO, Jordan Ministry of Health, IMC. (October, 2014). *Who is Doing What, Where, and When (4Ws) in Mental Health & Psychosocial Support in Jordan*.

services. Currently, IMC's collaboration with the MoH aims to sustain this approach to MHCM and implement it nationwide. This is a long-term objective and should be included in a long-term plan that balances the needs of Syrian refugees, host population, and the capacity of the MoH. As IMC continues to offer their MH services through these avenues, it recommends that other service providers

including MoH consider finding similar ways of integrating a MHCM model. The MHCM measures and the MHCM manual developed as part of this project will be disseminated, and have the potential of making a contribution to the scale up of similar programs.



## **ACKNOWLEDGEMENTS**

International Medical Corps would like to thank the following individuals and organizations for their contribution to this report:

Columbia University Teachers College researchers Dr. Helena Verdelli, Dr. Richard Neugebauer, Dr. Madhabi Chatterji, Bryan Cheng, and Jen Kao for their expertise and overall partnership on this project. Johns Hopkins University School of Public Health's Dr. Wietse Tol and Center for Disease Control and Prevention's Barbara Lopes-Cardozo for their technical guidance on evaluation study measures and research study design. Research assistants Cherisse Davis, Amy Wanninger, and Andrew Riley from the Humanitarian Assistance Applied Research Group (HAARG) at the Josef Korbel School of International Studies at the University of Denver. Finally, we would like to acknowledge the International Medical Corps Jordan research team responsible for overseeing this project and navigating the shifting field environment, led by Dr. Ahmad Bawaneh and Dr. Omar Asfour. Funding for this project was provided by the United States Government. International Medical Corps recognizes and thanks the United States Department of State's Bureau of Population, Refugees, and Migration for their generous support of the research project as well as support of humanitarian programming in Jordan.



# REFERENCES

- Allden K, Jones L, Weissbecker I, Wessells M, Bolton P, Betancourt TS, Hijazi Z, Galappatti A, Yamout R, Patel P, Sumathipala A: Mental health and psychosocial support in crisis and conflict: Report of the Mental Health Working Group. *Prehosp Disaster Med* 2009;24(4):s217–s227.
- Amnesty International, (April 7, 2015). “Syria: the worst humanitarian crisis of our time”. Retrieved from: <https://www.amnesty.org.nz/syria-worst-humanitarian-crisis-our-time>
- Bronfenbrenner, U. (1994). Ecological models of human development. In *International Encyclopedia of Education*, Vol. 3, 2nd. Ed. Oxford: Elsevier
- CARE Assessment, (2015). “Five Years into Exile.”
- Chammy, R. Assessment of mental health and psychosocial support services for Syrian refugees in Lebanon.
- Ciftci, Ayse, (2012). Mental health stigma in the Muslim community. *Purdue University & Illinois Institute of Technology. Stigma*, 7(1). DOI: <http://dx.doi.org/10.3998/jmmh.10381607.0007102>
- Doctors Without Borders, (October, 2013). “An Emergency in Itself: Mental Health Needs Among Syrians in Iraq.” Retrieved from: <http://www.doctorswithoutborders.org/newsstories/field-news/emergency-itself-mental-health-needs-among-syrians-iraq>
- Echoes from Syria. *Mental Health and Psychosocial Support*. Issue 5.
- Inter-Agency Standing Committee (IASC) (2007). *IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings*. Geneva: IASC.
- International Rescue Committee Jordan Country Program, (March 2013). *Cross-Sectoral Assessment of Syrian Refugees in Urban Areas of South and Central Jordan*.
- IMC Humanitarian Research Proposal, (2013).
- International Medical Corps and Jordan Health Aid Society, (February 2012).
- International Medical Corps, (2014). *Syria Crisis: Addressing Regional Mental Health Needs and Gaps in the Context of the Syria Crisis*. Available at <http://internationalmedicalcorps.org/document.doc?id=526>
- IMC- UNICEF, (2013). *Mental health, psychosocial, and child protection for Syrian for adolescent refugees in Za’atari*. Available upon request.
- IMC, (2015). *Mental health, psychosocial, and child protection for Syrian adolescent refugees in Jordan. DRAFT*. Available upon request.
- Johns Hopkins Bloomberg School of Public Health, MDM, IMC, Humanitarian Aid and Civil Protection, American University of Beirut, UNHCR, (2015).
- Johns Hopkins Bloomberg School of Public Health, Medecins Du Monde, International Medical Corps, Humanitarian Aid and Civil Protection, American University of Beirut, United Nations High Commissioner for Refugees, (2015). *Syrian refugee and affected host population health access survey in Lebanon*.
- Mental Health and Psychosocial Support (MHPSS) Working Group Jordan, (2014). *Guidelines on MHPSS Projects, Jordan*.
- Montgomery, K. (2015). *Mental health issues the most underreported problem in Syria-Doctor*.
- The Lancet, (2011). *Lancet Global Mental Health Series (2007-2011)*. Available at: <http://www.thelancet.com/series/global-mental-health-2011>
- Quosh, C. Takamol: multi-professional capacity building in order to strengthen the psychosocial and mental health sector in response to refugee crises, *Intervention* 2011, Volume 9, Number 3, Page 249 – 264
- Regional Refugee & Resilience Plan, 2015-16 Turkey, (2015-16). Available at <http://www.3rpsyriacrisis.org/>
- Tol WA, Patel V, Tomlinson M, Baingana F, Galappatti A, et al. (2011) *Research Priorities for Mental Health and Psychosocial Support in Humanitarian Settings*
- United Nations Office for the Coordination of Human Affairs, (June, 2015). Retrieved from: <http://www.unocha.org/syria>
- United Nations High Commissioner for Refugees, (June 17, 2015). *Syria Regional Refugee Response*. Retrieved from: <http://data.unhcr.org/syrianrefugees/country.php?id=107>
- World Health Organization & United Nations High Commissioner for Refugees. *Assessing Mental Health and Psychosocial Needs and Resources: Toolkit for Major Humanitarian Settings*. Geneva: WHO, 2012.
- World Health Organization, (2013). *Building Back Better: Sustainable Mental Health Care After Emergencies*. Available at: [http://www.who.int/mental\\_health/emergencies/building\\_back\\_better/en/](http://www.who.int/mental_health/emergencies/building_back_better/en/)
- World Health Organization, Department of Mental Health and Substance Dependence. “Gender Disparities in Mental Health”.
- World Health Organization, Jordanian Ministry of Health, & International Medical Corps, (October, 2014). “Who is doing what, where and when (4Ws) in Mental health and psychosocial support in Jordan”.
- World Health Organization, International Medical Corps, Jordanian Ministry of Health and Eastern Mediterranean Public Health Network, (2013). *Mental Health and Psychosocial Support Needs of Displaced Syrians in Jordan*.



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This report was funded by a grant from the United States Department of State. The opinions, findings and conclusions stated herein are those of the authors and do not necessarily reflect those of the United States Department of State.

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