RWG Iraq
Returns Working Group

Social Inquiry

PSYCHOSOCIAL DIMENSIONS OF DISPLACEMENT

PREVALENCE OF MENTAL HEALTH OUTCOMES AND RELATED STRESSORS AMONG IDPs IN IRAQ

ABOUT RETURNS WORKING GROUP

The Returns Working Group (RWG) is an operational and multi- stakeholder platform on returns, which was established in line with Strategic Objective 3 of the 2016 Iraq Humanitarian Response Plan "to support voluntary, safe and dignified return" of IDPs, to monitor and report on conditions in return areas, and determine to what extent durable solutions have been achieved- or progress made- for returnees.

The key objective of the group is to establish coherence of information, data and analysis, strengthen coordination and advocacy, give guidance on activities related to the key areas, and enhance complementary action among its partners with the overall goal of supporting and reinforcing the national response to Iraq's coming reintegration challenge.

ABOUT SOCIAL INQUIRY

Social Inquiry is an Iraq-based not-for-profit research institution focused on influencing policy and praxis that establishes civic trust and repairs social fabric within and between fragile communities, and communities and the state. Its research focuses on three thematic rubrics: (i) social cohesion and fragility, (ii) transitional justice and reconciliation, and (iii) post-conflict political economy, exploring intersecting political, social, psychological, economic, and historical dimensions within these themes.

DISCLAIMER

IOM contributed to this report with data collection by field teams in its ongoing support to partners and academic institutions. IOM does not endorse the findings contained in the report and the views and opinions of authors expressed in the report do not necessarily state or reflect those of the IOM, and they may not be used for endorsement purposes.

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DEFINITION OF MENTAL HEALTH TERMS

Trauma

Trauma refers to incidents that involve actual or threatened death, serious injury, or sexual violence.[1] Having direct personal exposure to traumatic events, witnessing others experiencing traumatic events, having indirect exposure through traumatic experiences of a family member or close associate, and/or having repeated or extreme exposure to aversive details of a traumatic event may put an individual at risk for post-traumatic stress disorder (PTSD).[2] This is understood as occurring if symptoms related to re-experiencing and avoidance begin and/or symptoms related to negative alterations of cognition and mood and alterations in arousal and reactivity worsen after the traumatic event.[3]

Depression

Depression may or may not be linked to trauma and can vary in severity.[4] Its diagnosis requires five or more symptoms to be present within an individual over a two-week period. These must include either or both a depressed mood or loss of interest or pleasure with secondary symptoms linked to appetite or weight changes, sleep difficulties, psychomotor agitation or impairment, fatigue or loss of energy, diminished ability to think or concentrate, feelings of worthlessness or excessive guilt, and suicidality.[5]

Somatoform

Somatoform disorders are understood as physical symptoms suggestive of a medical condition but unexplained by an underlying disease or mental disorder.[6]

1 *American Psychiatric Association, Diagnostic and Statistical Manual of Mental Health Disorders, 5th ed. (Arlington, VA: American Psychiatric Association, 2013).*

2 *Anuska Pai, Alina M. Suris, and Carol S. North, "Posttraumatic Stress Disorder in the DSM-5: Controversy, Change, and Conceptual Considerations," Behavioral Sciences (Basel) 7 no. 1, 2017: 7.*

3 *Ibid.*

4 *Julio C. Tolentino and Sergio L. Schmidt, "DSM-5 Criteria and Depression Severity: Implications for Clinical Practice," Frontiers in Psychiatry 9, 2018: 450.*

5 *Ibid.*

6 *Jonathon K. Smith and Ralph F. Jozefowicz, "Diagnosis and Treatment of Somatoform Disorders," Neurology Clinical Practice 2 no. 2, 2012: 94-102.*

EXECUTIVE SUMMARY

As of December 2018, one year after the end of ISIL related conflict, 1.8 million people remain internally displaced in Iraq out of a total of nearly 6 million originally displaced.

Internally displaced persons (IDPs) experience forced movement in three stages: pre-displacement, flight, and displacement. Each stage may uniquely impact displaced populations' mental health. As such, IDPs' mental health and the lack of appropriate resources to address them may negatively affect their ability to cope in displacement towards durable solutions: local integration, return, or relocation. This study, initiated by the Returns Working Group (RWG), IOM Iraq, and Social Inquiry, with support from academic partner Bielefeld University, seeks to address this gap and help in further elucidating the relationship between mental health and potential stressors. It is one of the first large quantitative, nationally representative analyses of post-2014 camp and non-camp IDPs in Iraq on depression, post-traumatic stress disorder (PTSD), and somatoform symptoms. Data collection covered a total of 820 IDPs in seven governorates hosting the largest share of post-2014 IDPs in the country.

Prevalence of symptomology for PTSD, depression, and somatoform disorders, respectively, were found across the sample, with women reporting higher prevalence than men. In addition, the more recently displaced IDPs reported mental health symptomology in greater frequency. Overall, 13% of IDPs in this sample meet the symptom criteria for PTSD, with those who displaced most recently (July 2017 to present) experiencing the highest rates across the sample at 19%. Those displaced out of camps tend to report PTSD symptomology in greater proportion than those in other displacement locations. Women meet these criteria at a rate four times higher than that of men (20% compared to 5%), based on self-reported trauma symptoms and their frequency. Depression is more prevalent at 21% of the overall IDP sample herein. This percentage is disaggregated into 15% classified as moderate, 3% as moderately severe, and 3% as severe in relation to the number of symptoms reported and frequency in which they occur. As with PTSD, depression symptomology is more prevalent among those most recently displaced (27%). It is also seen in greater proportion among IDPs in non-camp settings. The highest prevalence within this IDP sample relates to somatoform symptoms, with an overall rate of 28%. The share of women meeting criteria in this regard is nearly four times as high as men (44% compared to 12%). A small subset of the IDPs surveyed met the symptom criteria for all three mental health concerns. This group makes up 7% of the overall sample. Women make up 87% of IDPs who meet symptomology criteria for PTSD, depression, and somatoform responses combined.

Factors that may exacerbate or mitigate mental health symptomology among IDPs, specifically depression, PTSD, and/or a co-incidence of both, were explored through a multivariate analysis. In relation to demographic factors, the most significant among this group pertain to where respondents live, their gender, and role in the household, respectively. IDPs in camps are less likely to meet criteria for depression, PTSD, or a co-incidence of both as compared to their non-camp counterparts, controlling for all other factors in the model. Women who are heads of household are more likely to meet these criteria than men or than other women who are not heads of household. The correlation with PTSD among women who are heads of household is particularly strong in that they are 10 times more likely to exhibit these symptoms than men. With respect to economic factors, being unemployed while living in a camp is positively correlated with depression, while being unemployed out of camp is linked to PTSD. The only other economic indicator correlated with mental health outcomes is eviction or threat of eviction. This includes non-camp populations as well as camp-based IDPs who face the possibility of being pushed out due to camp closure. Such circumstances are linked to increased likelihood for depression. The final group explores conflict-related factors and those linked to lack of accountability for injustice. IDPs who displaced most recently have higher rates of depression, PTSD, and co-incidence of both than the rest of the sample. Furthermore, IDPs who have experienced forced separation of immediate family members are more likely to meet symptom criteria for depression, PTSD, and co-incidence of both than those who have not. Within the sample, 10% of respondents report having an immediate family member missing or detained. Lack of information about place of origin and house destruction in place of origin are also linked with these three conditions. Those who feel negatively judged or labelled are more likely to meet criteria for depression.

The following points to consider, based on the findings above, highlight the need for better assessment and outreach linked to mental health as well as longer-term measures related to social cohesion and redress for all conflict-affected people.

- While women overall reported a higher prevalence of mental health symptoms, women who are heads of household are a subgroup in particular need of attention – not only to support the household in general but the head of household in particular, especially in relation to mental health and psychosocial needs. In this regard, female-headed households are more frequently present in particularly challenging environments, such as displacement camps and relatively unstable governorates such as Salah al-Din.
- The prevalence rates of mental health symptoms described here are a useful starting point but may not fully capture the experiences of IDP men in particular. Their low rates of symptomology likely relate to underreporting and, as such, better and more culturally appropriate means for capturing, understanding, and treating mental health symptoms among men is particularly important.
- Mental health services and outreach need to be extended or enhanced towards out-of-camp displaced populations as well as to host community members, who may also need this type of care. Related to this, study of the mental health of the Iraq-wide population would also be warranted, not only to understand rate of need of care but to better put IDP prevalence of mental health conditions into perspective.
- Economic and housing insecurity remain critical priorities to address among IDPs in Iraq. Addressing lack of jobs among both camp and non-camp populations would potentially help in alleviating one of the main stressors negatively influencing mental health. Furthermore, policies or practices forcing IDPs out of their housing, whether people are evicted or face the risk of it, are also detrimental to mental health outcomes. The psychological dimensions of eviction must be taken into account in the planning of camp closures and included in any plans for relocating IDPs in an informed, voluntary, and safe manner. With respect to non-camp IDPs, an important aspect is to identify potential protection issues among those who rent housing – including when faced with policies or practices aimed at forced movement, including return.
- Collective blame and negative labelling and judgement felt by some IDPs is also particularly correlated to depression. The general narrative and perception of IDPs, particularly those from central governorates and displaced most recently, needs to shift. This can take place at a more local level through specific social cohesion or reconciliation programmes and initiatives to help families resolve their displacement, or at a national or federal government level through more holistic, rights-based accountability and redress processes in relation to this conflict for all those affected. Linked particularly to lifting collective blame would be initiatives to explore and address root causes of conflict, share narratives of conflict, enable people to more easily, efficiently, and objectively clear their names, and seek acknowledgement, redress, and accountability.
- Connected to the above, forced separation of family members is a significant hurdle for IDPs to deal with, both materially and emotionally. In particular, lack of information as to the whereabouts of a family member, when or if they will ever come home, and/or what happened to them, make it difficult to gain closure and move on from such a loss. The lack of information on the fate of family members also obscures a more public reckoning with what happened during and after conflict to ensure such events do not happen again. These factors have helped in shaping international legal frameworks on the right to know about the circumstances of serious violations of victims' human rights and about who was responsible. The importance of this is not lost in the Iraq context as national and internationally supported initiatives are underway to provide such closure to particular subsets of victims of human rights violations in this conflict. These types of endeavours need to extend to all victims, especially as this affects a diversity of IDPs across areas of displacement.
- Finally, these findings also highlight that rebuilding trust within and between communities as well as between communities and the State would go a long way towards healing. This includes working to create a sustainable, durable, and just transition out of conflict, particularly as 77% of this sample report being unsatisfied with how past experiences of violent conflict and abuses have been handled in Iraq to date.

1. INTRODUCTION

Conflict-affected people, whether refugees or IDPs, experience forced movement in three stages: pre-displacement, flight, and displacement. Each stage may uniquely impact displaced populations' mental health. In Iraq in particular, people have likely experienced these stages and related stressors multiple times due to decades of continuous conflict and repression,[7] culminating most recently with the emergence of ISIL and the ensuing conflict, which produced mass waves of IDPs. As of December 2018, one year after the end of this conflict, 1.8 million people remain internally displaced out of a total of nearly 6 million originally displaced. Slightly less than two-thirds of these IDPs have been displaced for more than three years. The remaining subset of IDPs, who have been displaced for less than three years, may have experienced not only living under ISIL for a longer duration, but the military operations to retake their places of origin more recently as well.

As such, IDPs' mental health, including accumulated experience or knowledge of violent events, and the lack of appropriate resources to address them, may negatively affect their ability to cope in displacement towards durable solutions of displacement: local integration, return, or relocation. At present, there is little comprehensive data or consensus on the mental health of IDPs in Iraq nor on the potential factors aggravating or alleviating this condition. However, the need to understand this is critical in light of recent findings related to protracted displacement in Iraq, where 31% of camp and non-camp displaced households indicated "fear or trauma" as a reason for not returning to their place of origin in addition to the 29% of non-camp IDPs who self-reported having fair to poor mental health.[8]

This study was initiated to address this gap and help in further elucidating the relationship between mental health and potential stressors including individual/household characteristics and perceptions as well as location factors among IDPs. It is one of the first large sample quantitative, nationally representative analyses of post-2014 camp and non-camp IDPs in Iraq on depression, post-traumatic stress disorder (PTSD), and somatoform symptoms, using validated mental health scales for Iraq and contextually appropriate determinants. Data collection covered seven governorates hosting the largest share of post-2014 IDPs in the country.

Overall, prevalence of depression, PTSD, and somatoform symptoms were found across the sample. Women reported higher prevalence than men, despite reporting having experienced similar traumatic events. Lower rates in men in this sample may be related to sex and gender differences inherent in the presentation of trauma symptomology in general.[9] The more recently displaced IDPs reported mental health symptomology in greater frequency. When analysing in more detail other factors that may influence mental health outcomes among the displaced, three main findings appear. The first highlights the gendered impact of conflict and displacement in that women who head their households show the strongest correlation with poorer mental health outcomes across indices. This may be linked to how some women became heads of household through violence and conflict. The second indicates that economic factors play a lesser role in mental health outcomes than others. Only unemployment and eviction (or the risk of it) was found correlated to depression in this regard. Finally, conflict-related factors and lack of accountability related to injustice, while frequently missing from the debate, have some of the strongest correlations with mental health of all factors analysed; this includes forced separation of family members, feelings of collective blame, and house destruction in place of origin.

7 *Ameel Farooq Al-Shawi, "Prevalence of Posttraumatic Stress Disorders among Sample of Internally Displaced Persons in Iraq: A Preliminary Study," Journal of Community Medicine and Health Education 8 no. 2 (March 2018): 1-3.*

8 *IOM, Returns Working Group, and Social Inquiry, Reasons to Remain: Categorizing Protracted Displacement in Iraq (Erbil: IOM, 2018).*

9 *See for example, Miranda Olff, "Sex and Gender Differences in Post-Traumatic Stress Disorder: An Update," European Journal of Psychotraumatology 8 sup.4, 2017.*

2. LITERATURE REVIEW

Individuals and households are often exposed to emotionally challenging events before, during, and/or after becoming internally displaced – and not always for the first time. This is likely the case for many in Iraq due to decades of violence and repression in the country coupled with the most recent conflict with ISIL. Given this history, it is critical to know how best to measure and understand mental health conditions among IDPs in Iraq. To further shed light on these topics, this literature review aims to highlight the scope of symptoms, range of factors, and give a contextual analysis of existing studies on the mental health conditions of displaced populations.

It is often one or a combination of mental health conditions, most notably PTSD, depression, and/or somatoform symptoms, that are examined among displaced populations, including IDPs. A recent systematic review of 915 studies[10] on the mental health of displaced persons, contains only one study on Iraq, with focus on refugees from the country.[11] This literature review did yield three reports on IDPs in Iraq. These three studies from Iraqi universities on post-2014 IDPs report a PTSD prevalence rate ranging from 18.5%[12] to 67%.[13] However, these rates reflect a relatively small, non-representative sample of camp-based IDPs.

At the same time, this range of PTSD prevalence is compatible with findings of studies among IDPs in Nigeria (42%),[14] Ukraine (32%),[15] Syria (32%),[16] Sri Lanka[17] (13%), and from the Kurdistan region of Turkey (76%).[18] These studies include populations residing in both camp and non-camp settings and explore the impact of past displacement history on current mental health. Similar to two of the reports on IDPs in Iraq, these case studies (with the exception of those on Sri Lanka and Ukraine) do not measure rates of depression and somatoform disorder but focus solely on PTSD.

Of the studies above, those that presented a more holistic understanding of mental health used multiple tools to screen for a wider variety of mental health conditions. Research that combines these tools not only captures more symptoms, thus giving a fuller picture of mental health, but also reveal important data on the context where IDPs experience these mental health symptoms and the external factors that influence them.

One such risk factor which can exacerbate mental health conditions of IDPs is limited access to social support. In particular, the lack of social support can serve "as a stronger predictor of depression morbidity than trauma factors"[19] and functions as a stressor as displacement progresses. The undermining of social networks and fears regarding the prolonged absence of loved ones exacerbates a displaced person's insecurity.[20] Lack of protection networks can increase tensions between IDPs and the host community, affecting the displaced individual's ability to integrate into the local community and access basic services.[21] Furthermore, employment conditions may also operate as determinants of psychiatric disorder. For example, both female and male Syrian Kurdish refugees in the Kurdistan Region of Iraq cite unemployment and labour exploitation

10 *Naser Morina et al., "Psychiatric Disorders in Refugees and Internally Displaced Persons After Forced Displacement: A Systematic Review," Frontiers in Psychiatry 9 no. 433 (September 2018): 1-12.*

11 *Shannon Doocy et al., "Chronic Disease and Disability Among Iraqi Populations Displaced in Jordan and Syria," The International Journal of Health Planning and Management 28 no. 1 (January-March 2013): 1-12.*

12 *Fuaad Mohammed Freh, "Prolonged Internal Displacement People (IDPs) and Common Mental Disorders in Iraq: The COMRAID Study," Annual Mental Health Report (October 2018): 645.*

13 *Eman Salem Al-Khaf, "Post-traumatic Stress Disorder among Displaced People in Iraq," Kufa Journal for Nursing Studies 7 no. 2 (December 2017): 1.*

14 *Taiwo Lateef Sheikh, Abdulaziz Mohammed, and Agunbiade Samuel, "Psycho-trauma, Psychosocial Adjustment, and Symptomatic Post-traumatic Stress Disorder Among Internally Displaced Persons in Kaduna, Northwestern Nigeria," Frontiers in Psychology 5 no. 127 (September 2014): 3.*

15 *Roberts Bayard, Nino Makhashvili, and Jana Javakhishvili, "Hidden Burdens of Conflict: Issues of Mental Health and Access to Services Among Internally Displaced Persons in Ukraine." (London: International Alert / GIP-Tbilisi and the London School of Hygiene and Tropical Medicine, 2017): 6.*

16 *Boshra Al Ibraheem et al., "The Health Effect of the Syrian Conflict on IDPs and Refugees," Peace and Conflict: Journal of Peace Psychology 23 no. 2 (2017): 145.*

17 *Shannon Doherty et al., "Prevalence of Mental Disorders and Epidemiological Associations in Post-conflict Primary Care Attendees: a Cross-sectional Study in the Northern Province of Sri Lanka," BMC Psychiatry 19 no. 83 (2019): 1.*

18 *Gülsen Cheka, Jeroen Knipscheer, and Rolf Kleber, "The Impact of Forced Migration on Mental Health: A Comparative Study on Posttraumatic Stress Among Internally Displaced and Externally Migrated Kurdish Women," Traumatology 16 no 4 (2014): 113.*

19 *Elijah Mironga Getanda, Chris Papadopoulos, and Hala Evans, "The Mental Health, Quality of Life and Life Satisfaction of Internally Displaced Persons Living in Nakuru County, Kenya," BMC Public Health 15 no. 7 (2015): 6-7.*

20 *Ghayda Hassan et al., Culture, Context and the Mental Health and Psychosocial Wellbeing of Syrians: A Review for Mental Health and Psychosocial Support Staff Working with Syrians Affected by Armed Conflict (Geneva: UNHCR, 2015), 12, 14.*

21 *Ibid.*

of men as stressors in displacement.[22] When displaced individuals exhaust their financial means, they can resort to survival strategies like illegal housing, debt, child marriage, survival sex, and child labour, which place a heavy toll on both mental and physical wellbeing.[23] Taken together, access to basic services, new social connections, and support in pursuing educational and economic opportunities help in mitigating mental health disorders among IDPs.[24]

Place or spatial factors like restrictive policies, host community perceptions, loss of identity, overreliance on humanitarian aid, and changes in customs also function as stressors during displacement. Regarding structural protection mechanisms, IDPs in general are disproportionately left more vulnerable than refugees, in part due to issues of state sovereignty regarding their status as citizens of the state they are displaced in; as such, they do not receive the same level of international protection as refugees do under international law.[25] An additional place-based factor is how host communities and IDPs interact, including any negative perceptions host communities have of the displaced.[26] These perceptions operate as risk factors for mental health disorders, because they may result in tensions, discrimination, and violence. Differences in customs, habits, and norms from what IDPs are used to may also serve as stressors.[27]

Finally, and perhaps the most necessary consideration that needs to be taken into account when examining mental health conditions among displaced populations is that men and women experience conflict and manifest related psychosocial conditions differently.[28] Women are twice as likely to have PTSD,[29] depression, and somatic symptoms.[30] Studies among IDPs in Ukraine and Sri Lanka illustrate this as well given that women have higher PTSD, depression,[31]' and somatoform disorder[32] diagnoses than men. At the same time, cultural issues of shame and stigma[33] also affect a male forced migrant's ability to disclose information about their experiences with conflict; this is especially true in the Middle East. Furthermore, studies on Nigerian and Syrian IDPs show that, depending on the conflict, men are exposed to more violence, but this does not necessarily translate into higher rates of self-reported trauma-related symptomology.[34]

Thus, when seeking to understand the psychological dimensions of displacement, it is important to assess mental health conditions in context while also taking individual factors into account. This framing underpins this study, the first large-scale, nationally representative analysis of post-2014 camp and non-camp IDPs in Iraq for symptoms of PTSD, depression, and somatoform disorders, using contextually appropriate determinants. The aim is to fill in gaps in knowledge on the mental health of IDPs and explore how the data can further support mechanisms to achieve durable solutions to displacement.

22 *Ceasefire Centre for Civilian Rights and ASUDA, Combating sexual and gender-based violence in refugee crises: Lessons from working with Syrian refugees in the Kurdistan Region of Iraq (London: Ceasefire Centre for Civilian Rights, 2019).*

23 *Hassan et al., Culture, Context and the Mental Health and Psychosocial Wellbeing of Syrians, 14.*

24 *Patricio V. Marquez, Mental Health Among Displaced People and Refugees: Making the Case for Action at The World Bank Group (Washington D.C.: World Bank, 2017), 10.*

25 *Gülsen et al., "The Impact of Forced Migration on Mental Health," 114.*

26 *Ibid.*

27 *Norwegian Refugee Council, Cash Consortium for Iraq, and Social Inquiry, "The Impact of Multi-Purpose Cash Assistance on Social Cohesion in Iraq: Lessons from Hamdaniya and Qa'im Districts" (Erbil: NRC, forthcoming)..*

28 *Morina et al., "Psychiatric Disorders in Refugees," 11.*

29 *Seoyoung Yoon and Yong-Ku Kim, "Gender Differences in Depression," in Understanding Depression, ed. Yong-Ku Kim (New York: Springer, 2018), 297-307.*

30 *Ibid.*

31 *Bayard et al, "Hidden Burdens of Conflict," 17.*

32 *Doherty et al., "Prevalence of Mental Disorders," 6.*

33 *Hassan et al., Culture, Context and the Mental Health and Psychosocial Wellbeing of Syrians, 34.*

34 *Al Ibraheem et al., "The Health Effect of the Syrian Conflict,"145.*

3. METHODOLOGY

This study is based on a cross-sectional survey conducted on a sample of 820 internally displaced adult individuals across different areas of Iraq (Table 1).

The survey was designed jointly by RWG Iraq, IOM Iraq, Social Inquiry, and academic partner Bielefeld University in Germany. It was administered in February 2019.

Table 1. List of governorates surveyed and number of IDPs hosted

GOVERNORATE AND TYPE OF LOCATION	TOTAL NUMBER OF INDIVIDUALS	PERCENTAGE OVER THE TOTAL	
Dahuk Non-Camp	241,194	13%	Sampled
Ninewa Non-Camp	237,042	13%	
Sulaymaniyah Non-Camp	131,766	7%	
Salah al-Din Non-Camp	129,708	7%	
Kirkuk Non-Camp	94,860	5%	
Baghdad Non-Camp	64,728	4%	
Ninewa Camp	249,672	14%	
Dahuk Camp	185,718	10%	
Anbar Camp	38,124	2%	
Other Governorates Non-Camp	356,226	20%	Not sampled
Other Governorates Camp	73,794	4%	
Total	**1,802,832**	**100%**	

Data obtained from IOM DTM Round 107 (December 2018).

The data is representative of 76% of the total IDP population in Iraq. Sampling was designed to be representative for each governorate surveyed with a 10% margin of error and generalizable with a 5% margin of error at the country level. Specific locations were selected with probability proportional to size. In general, this survey allowed for an extrapolation of mental health outcomes for the IDP population as a whole (assuming that no significant differences exist in the governorates not covered in the sampling) as well as a more in-depth local analysis. Results can also be disaggregated for the IDPs in camps and out of camps separately, with the same level of representativeness.

The survey incorporated two main modules: first, a set of socio-economic and demographic questions, including perceptions of displacement and conflict-related issues, and second, a set of mental health scales that screen for PTSD, depression, and somatoform disorders (Table 2).

Table 2. Mental health scales and referral mechanism

Post-Traumatic Stress Disorder	PTSD Checklist for Diagnostic and Statistical Manual for Mental Disorders-5 (PCL-5) with Life Event Checklist for Diagnostic and Statistical Manual for Mental Disorders-5 (LEC-5) and Criterion A Assessment. These tools screen for exposure to traumatic events and provide a 20-item measure of symptoms and their frequency. Scores on this scale range from 0 to 80, with those scoring 33 and above meeting criteria for PTSD.
Depression	Patient Health Questionnaire 9 (PHQ-9). This 9-item tool screens for and measures severity of depression based on symptoms and their frequency in the past two weeks. Scores on this scale range from 0 to 27, with those scoring from 10 to 14 meeting criteria for moderate depression, from 15 to 19 meeting criteria for moderately severe depression, and those scoring from 20 to 27 meeting criteria for severe depression.
Somatoform	Patient Health Questionnaire 15 (PHQ-15). This 15-item tool screens for and measures physical symptoms and their frequency over the past four months that reflect mental health concerns. Scores on this scale range from 0 to 30, with those scoring 10 to 14 having medium severity of symptoms and those scoring between 15 to 30 having high severity of symptoms.
Referral Mechanism	The 8-question Mini-International Neuropsychiatric Interview (MINI) Suicidal Modality was administered to those individuals who reported any frequency of suicidal or self-harm ideation in the PHQ-9 and automatic referral was made in the presence of the respondent for IOM Mental Health and Psychosocial Support services.

The PHQ-9 and PHQ-15 were selected as they have been validated in Arabic and are used by IOM in Iraq in its mental health and psychosocial support programmes for displaced populations in the country. The PCL-5 with LEC-5 and Criterion A was used as it has also been validated for the Iraq context in both Arabic and Kurdish languages.[35]

> It is important to note that these scales help in identifying whether individuals meet symptom criteria for specific mental health conditions and thus help in providing prevalence rates within a population. The scales alone however do not constitute a clinical diagnosis of a mental health disorder; having a score that indicates a level of PTSD does not necessarily mean the respondent has PTSD.

35 *Hawkar Ibrahim et al., "The Validity of Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5) as Screening Instrument with Kurdish and Arabic Displaced Populations Living in the Kurdistan Region of Iraq," BMC Psychiatry 18 (2018): 259.*

Table 3 provides basic descriptive statistics of the sample collected. The data is weighted to adjust the sample in each governorate in accordance with the appropriate proportion of IDPs over the total population. Weights were also applied to obtain gender-balanced results.

Table 3. Demographic characteristics of the respondents (N = 820)

		NUMBER OF RESPONDENTS	UNWEIGHTED (%)	WEIGHTED (%)
Gender	Male	415	51%	50%
	Female	405	49%	50%
Age	18-30	172	21%	22%
	31-49	432	53%	52%
	50-max	216	26%	26%
Occupation	Student	22	3%	3%
	Government employee	40	5%	4%
	Member of security forces	14	2%	2%
	Business owner / self-employed	119	15%	13%
	Farmer	29	4%	4%
	Employee of company or NGO	21	3%	2%
	Housewife	354	43%	43%
	Unemployed but looking for work	137	17%	18%
	Inactive, not looking for work	35	4%	4%
	Not allowed to work	10	1%	2%
	Retired	38	5%	5%
	No response	1	0%	0%
Location	Urban	463	56%	57%
	Rural	82	10%	8%
	Camp	275	34%	35%
Governorate of Origin	Anbar	138	17%	6%
	Babylon	63	8%	3%
	Baghdad	11	1%	1%
	Diyala	33	4%	4%
	Erbil	4	0%	1%
	Kirkuk	85	10%	7%
	Ninewa	333	41%	63%
	Salah al-Din	153	19%	15%

		NUMBER OF RESPONDENTS	UNWEIGHTED (%)	WEIGHTED (%)
Governorate of Displacement	Anbar	102	12%	3%
	Baghdad	102	12%	5%
	Dahuk	136	17%	29%
	Kirkuk	101	12%	7%
	Ninewa	210	26%	37%
	Salah al-Din	100	12%	9%
	Sulaymaniyah	69	8%	10%
Displacement Wave	January 2014 - May 2014	177	22%	21%
	June 2014 - April 2015	416	51%	49%
	May 2015 - September 2016	71	9%	7%
	October 2016 - June 2017	93	11%	13%
	July 2017 – now	61	7%	10%

Weights were applied based on the proportions provided by data in Table 1.

Several limitations of the study need to be taken into account to better understand the findings presented in the next section:

- Sample design included an additional 100 surveys in Erbil Governorate, which hosts the third largest population of IDPs in Iraq. Data collection could not take place there due to access issues. However, the expectation is that results would not have varied significantly was Erbil surveyed.
- In-depth practical training was provided to the experienced field teams involved in data collection, specifically in relation to approaching respondents on this topic and in framing the study in neutral terms pertaining to mental health and symptomology to further ensure individuals felt safe to respond to questions on psychological and physical health. However, as in other studies of mental health among displaced populations, men reported symptoms at much lower rates than women. This does not mean that men experience better mental health than women but rather they may not as readily report severity. As such, the prevalence rates presented here must be understood with the possibility of underreporting.
- Finally, data on the mental health rates of the hosting and wider community in Iraq is not available. This is important to note when assessing prevalence as it is difficult to know how moderate or severe such rates among IDPs are without understanding national averages in this regard.

4. FINDINGS

This section discusses overall results of the survey, exploring in particular the relation between mental health status and displacement. The analysis is organized as follows:

- Section 4.1 analyses findings from the mental health scales, detailing prevalence of symptoms of PTSD, depression, and somatoform disorders among the IDP population in Iraq, with attention paid to variation by gender, time of displacement, and governorate of displacement.
- Section 4.2 explores potential stressors including individual / household characteristics and perceptions as well as place factors and their correlation with likelihood of reporting symptoms meeting criteria specifically for PTSD and depression.

For the descriptive and multivariate regression analyses, the cut-off points used for screening mental health criteria were those recommended by the instruments used: for PTSD, respondents had to score ≥ 33 on the PCL-5; for depression across its severity spectrum, respondents had to score ≥ 10 on the PHQ-9; and for somatoform across its severity spectrum, respondents had to score ≥ 10 on the PHQ-15.

4.1 PREVALENCE RATES OF MENTAL HEALTH CONCERNS

The prevalence rates of symptomology for PTSD, depression, and somatoform disorders for each governorate of displacement under study are presented in Table 4.

Table 4. Prevalence rates among respondents

	% RESPONDENTS MEETING CRITERIA FOR:		
GOVERNORATE OF DISPLACEMENT AND LOCATION TYPE	DEPRESSION	PTSD	SOMATOFORM DISORDERS
Anbar Camp	41%	9%	26%
Baghdad Non-Camp	39%	14%	33%
Dahuk Camp	17%	15%	22%
Dahuk Non-Camp	15%	8%	18%
Kirkuk Non-Camp	12%	11%	35%
Ninewa Camp	14%	11%	28%
Ninewa Non-Camp	28%	18%	38%
Salah al-Din Non-Camp	47%	22%	42%
Sulaymaniyah Non-Camp	5%	2%	15%
Total average (weighted by population size)	21%	13%	28%

Governorates listed in alphabetical order.

PTSD

Overall, 13% of IDPs in this sample meet the symptom criteria for PTSD, with those who displaced most recently (July 2017 to present) experiencing the highest rates across the sample at 19%.[36] Those displaced out of camps in Salah al-Din (22%) and Ninewa (18%) and in camps in Dahuk (15%) tend to report PTSD symptomology in greater proportion than those in other displacement locations. In addition, women meet these criteria at a rate four times higher than that of men (20% compared to 5%), based on self-reported trauma symptoms and their frequency. In terms of the symptomology reported, however, no notable gender difference was detected.

Men and women also indicated incidence of traumatic events at the same frequency. In particular, they noted, by and large, witnessing or having directly experienced between 1 and 3 traumatic events in their lives including severe human suffering such as depravation of food, water, and medical care (54%), bombing or burning of residential areas (54%), combat or exposure to a war-zone (45%), and fire explosions (35%). Further detail on the frequency of traumatic events is available in Figure 6 in Annex 1.

Depression

Depression symptomology is more prevalent at 21% of the overall IDP sample herein. This percentage is disaggregated into 15% classified as moderate, 3% as moderately severe, and 3% as severe in relation to the number of symptoms reported and frequency in which they occur. As with PTSD, depression symptomology is more prevalent among those most recently displaced (27%). It is also seen in greater proportion among IDPs in non-camp settings in Salah al-Din (47%), in camps in Anbar (41%), and in out-of-camp environments in Baghdad (39%).

The most commonly reported symptoms across the sample include feeling tired or having little energy (79%), feeling down, hopeless, or depressed (71%), and feeling little to no interest or pleasure in doing things (71%). Women report all symptoms in greater proportion to men which explains why the rate of depression is twice as high in women than men in this sample (28% compared to 14%). The difference between genders is most stark in relation to having thoughts of self-harm or suicide. While the rate overall is relatively low (16%) compared to other depression symptoms, women report experiencing such thoughts at considerably higher rates than men (24% compared to 10%). Further detail on the prevalence of symptoms reported is available in Figure 7 in Annex 1.

Somatoform

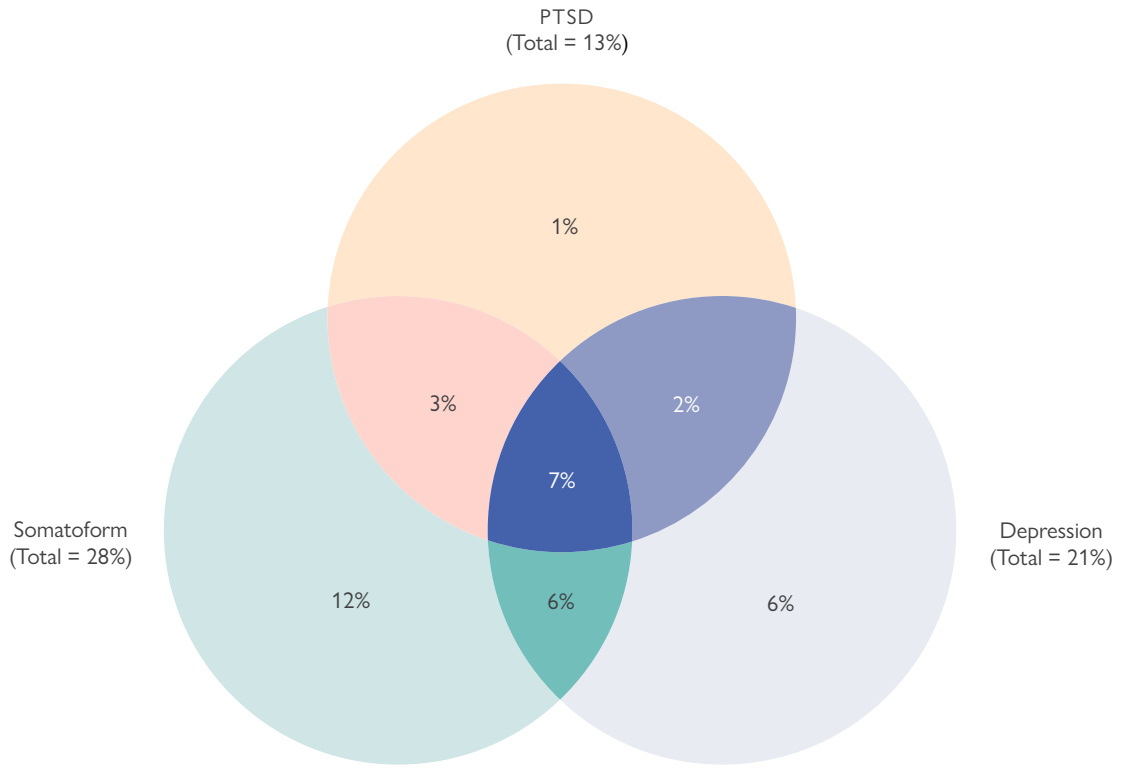
The highest prevalence within this IDP sample relates to somatoform symptoms, with an overall rate of 28%. The share of women meeting criteria in this regard is nearly four times as high as men (44% compared to 12%). Once again, those displaced between July 2017 to present have higher incidence of symptoms (35%) than those displaced longer ago, however, by a smaller margin than either trauma or depression. IDPs in out-of-camp environments in Salah al-Din (42%), Kirkuk (35%), and Baghdad (33%) report these symptoms in greater proportion than those displaced elsewhere in the sample. Further detail on the prevalence of symptoms reported is available in Figure 8 in Annex 1.

Co-incidence of Symptoms

A small subset of the IDPs surveyed met the criteria for all three mental health concerns (Figure 1). This group makes up 7% of the overall sample. Women make up 87% of IDPs who meet symptomology criteria for PTSD, depression, and somatoform responses combined. In terms of displacement location of these IDPs, 27% reside in non-camp settings in Ninewa, 23% in camps in Ninewa, 20% in non-camp settings in Salah al-Din, and 12% in non-camp settings in Dahuk.

36 This prevalence rate takes into account the standard PCL-5 cut-off score of 33 and higher to meet criteria for PTSD. A recent study validated using a cut-off score of 23 and over for the Iraq context. Using this lower scoring threshold would make the prevalence rate in this sample 30% overall (41% rate for women, 19% rate for men).

Figure 1. Co-incidence of symptoms of one or more mental health outcomes among respondents



4.2 POTENTIAL STRESSORS IN DISPLACEMENT AND MENTAL HEALTH

Factors that may exacerbate or mitigate mental health symptomology among IDPs are explored in detail below through a multivariate analysis. The results are presented in an impact matrix table to simplify their interpretation for a general audience. The coding used for this impact matrix is derived from the statistical coefficients generated in a logistical model, the results of which are presented fully in Annex 2. The variable with the highest coefficient is used as a benchmark to rate the other variables in terms of their relative impact over the condition assessed (PTSD, depression, or co-incidence of both).

+ + + +	The coefficient for this variable is found to be **positively** correlated with mental health criteria at least within a 90% confidence interval, statistically speaking. That is, respondents who meet the variable condition are **more likely** to meet the criteria for having PTSD or depression (or both).	**Frequency of symbols:** In both cases, the greater the number of symbols, the greater the likelihood of meeting the criteria for PTSD or depression (or both).
– – – –	The coefficient for this factor is found to be **negatively** correlated with mental health criteria at least within a 90% confidence interval, statistically speaking. That is, respondents who meet the variable condition are **less likely** to meet the criteria for having for having PTSD or depression (or both).	
•	The coefficient for this factor is not found to be correlated with mental health symptomology. That is, respondents that meet the variable condition are as likely to meet the criteria for having PTSD or depression (or both) as respondents who do not.	

The cross-analysis of explanatory variables as a whole ultimately provides a comprehensive understanding of what factors and circumstances characterize those IDPs who meet symptom criteria for mental health conditions. Such correlation, however, does not necessarily imply causation; that is, a specific mental health outcome may not be directly caused by these factors and circumstances.[37] Taking this into account, the summary of results is given in Table 5. Discussion of results is organized in three categories of factors: demographic, economic, and conflict-related / accountability.

Table 5. Relative impact of respondent factors on mental health outcomes

FACTORS CORRELATED TO IDPS' LIKELIHOOD TO MEET CRITERIA FOR...	DEPRESSION	PTSD	CO-INCIDENCE OF BOTH
Demographic factors of respondent			
Living in a displacement camp	– –	– –	– –
Female who is the head of household	+ + +	+ + + + +	+ + + + +
Female who is not the head of household	+ +	+ + + +	+ + + +
Aged between 31 and 49 years old	+ +	•	+ +
Aged more than 50 years old	+ + +	•	•
Marital status is widowed, separated, or divorced	•	•	•
Marital status is single	+ + +	•	+ +
Household has a member with a disability	+	•	•
Household size larger than 6 members	– –	•	•
Has family networks in the location of displacement	•	•	•
Economic factors of respondent			
Household is able to provide for basic needs	•	•	•
Unemployed in a camp setting	+ +	•	•
Unemployed in a non-camp setting	•	+ +	•
Weak economic situation pre-displacement	•	•	•
Renting a house in displacement	•	•	•
Living in critical shelter (non-camp) or in a tent (camp)	•	•	•
Faced eviction or threat of eviction (incl. camp closure)	+ +	•	•
Conflict and accountability related factors of respondent			
Displaced between May 2015 and June 2017	•	+ +	•
Displaced between July 2017 and present	+ +	+ +	+ + +
Has an immediate family member who was separated at a checkpoint, kidnapped, detained, or missing	+ + +	+ +	+ +
Feelings of being negatively judged or labelled by the host community	+ + + +	•	•
Has no information about place of origin	+ +	+ +	+ +
House in place of origin is destroyed	+	+ +	+ +
Fear of repetition of what happened before in place of origin happening again	+ +	Not used	Not used

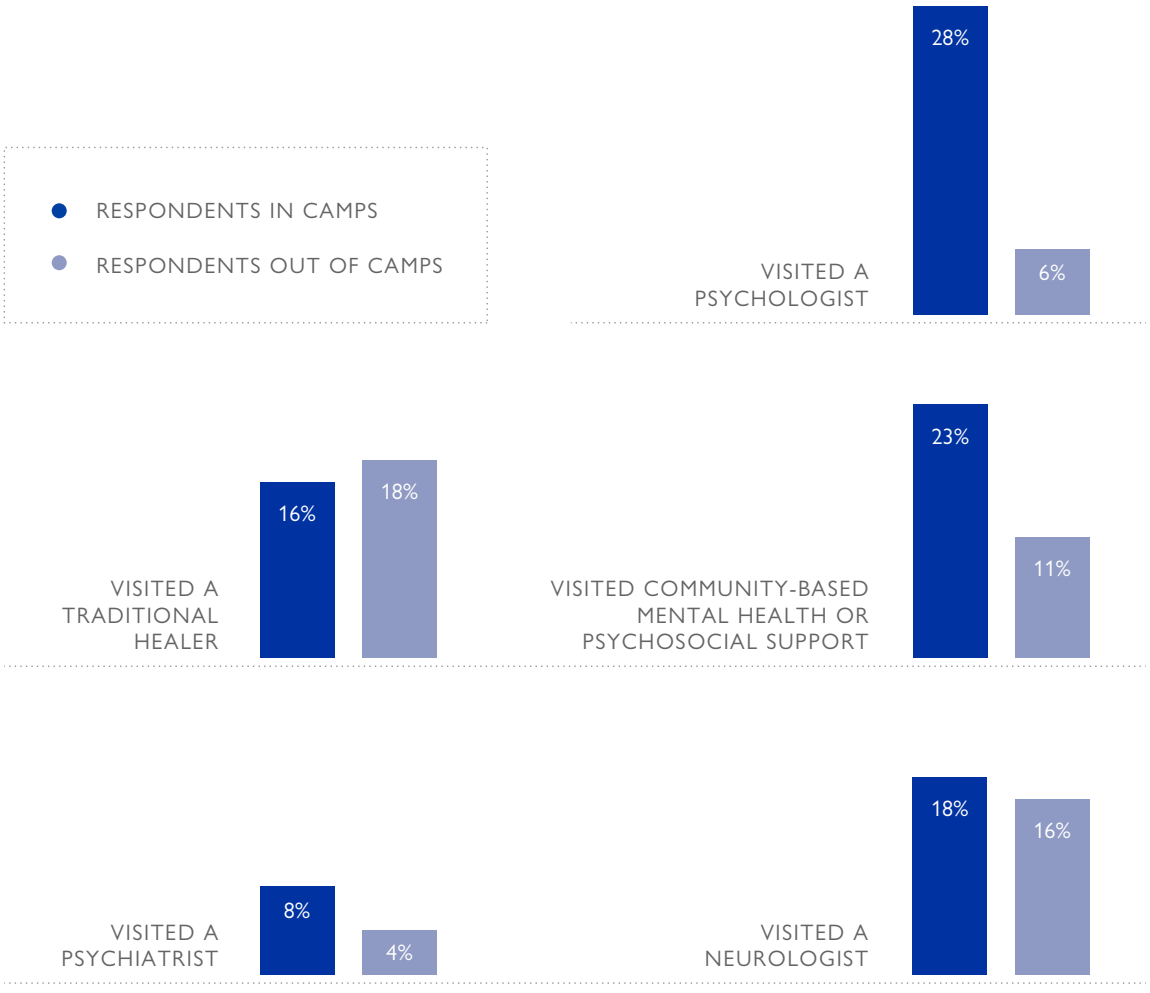
37 *One way to illustrate this distinction is through the example of employment. Unemployed respondents are more likely to report depression than employed ones. While the correlation is proven, the causal relation is not explicit: unemployment can trigger or exacerbate depression, but depression in the first place can also make finding and keeping a job more challenging.*

Demographic Factors

The most significant factors among this group correlated to all three mental health variables pertain to where respondents live, their gender and role in the household, respectively. IDPs in camps are less likely to meet criteria for depression, PTSD, or a co-incidence of both as compared to their non-camp counterparts, controlling for all other factors in the model. A potential explanation for this may be the greater access and availability of services provided by NGOs particularly linked to mental health and psychosocial support, found in camp settings, coupled with more regular outreach and communication about these services. Figure 2 highlights this, given the much higher rates of camp-based IDPs seeking mental health care than those out-of-camp, where these services may be less readily available and harder to find in general.

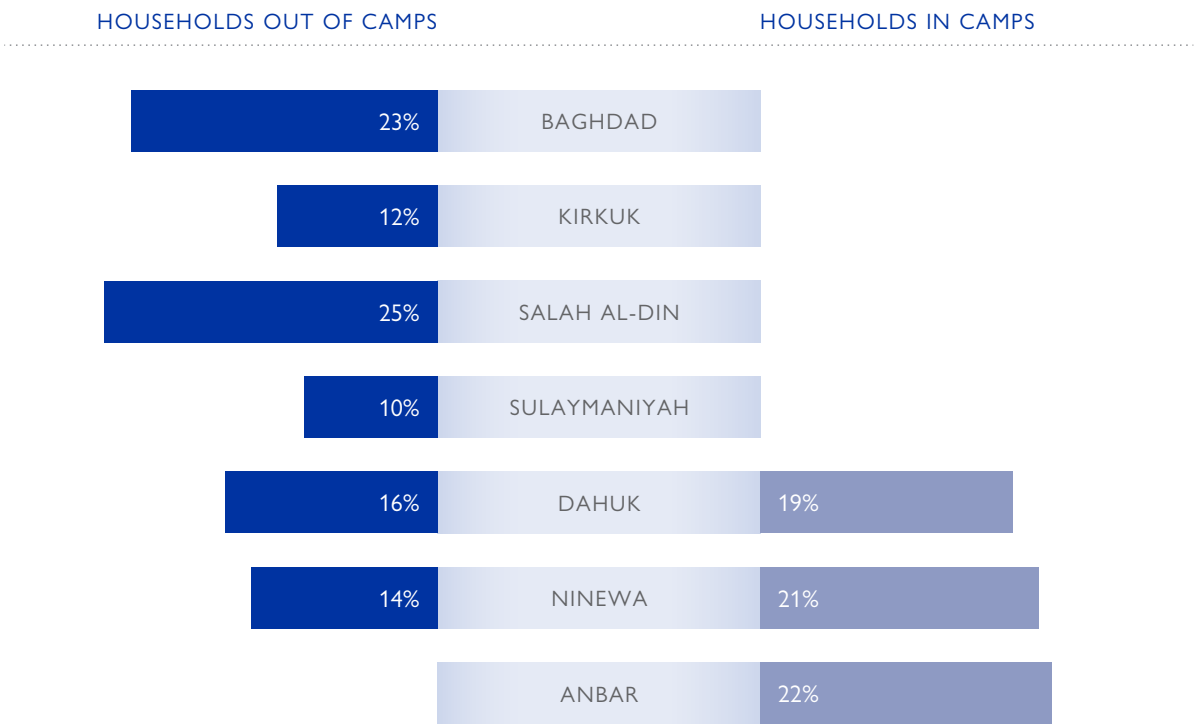
The percentages only include those respondents that met the symptom criteria for depression, PTSD, or somatoform disorders.

Figure 2. Rate of attendance to different mental health care services at any time during displacement



Respondent's gender linked to household role is the most prominent stressor for mental health outcomes compared to all other factors in this model. As noted when describing prevalence above, women overall are more likely than men to meet symptom criteria for depression, PTSD, or co-incidence of both. Looking at this more closely, women who are heads of household are more likely to meet these criteria than men or other women who are not heads of household. The correlation with PTSD among women who are heads of household is particularly strong in that they are 10 times more likely to exhibit these symptoms than men. This mental health outcome among this subset of female IDPs may be linked to how some became heads of their households through recent violence and conflict in the first place.[38] These households tended to have displaced into camps and in Baghdad and Salah al-Din governorates out of camps (Figure 3).

Figure 3. Percentage of female-headed households



Three other factors linked to family configuration were also tested. Two factors, households with a member with a disability and households with over 6 members, are correlated with depression. The former increases the likelihood of depression criteria albeit not very strongly and the latter decreases it. The third factor, having family networks in the place of displacement had no relationship to mental health outcomes.

38 Marital status, specifically separated, widowed, or divorced, becomes significantly correlated with mental health outcomes if not controlling for female-headed households.

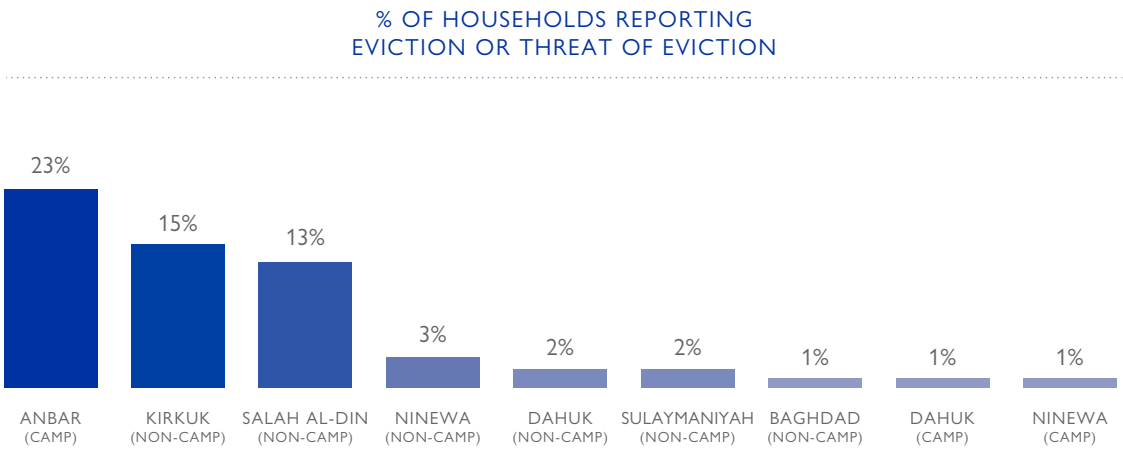
Economic Factors

Results indicate that the majority of economic indicators tested are not significant stressors in relation to mental health among IDPs in this sample. This includes being able to meet basic needs, type of dwelling (both critical shelter and paying rent), and pre-displacement household economic situation (measured as having government or private sector salary or not prior to 2014).

The rate of unemployment in camps is 24% and out of camp is 14%, across the IDP population in this sample. Women comprise only 5% of the entire pool of the unemployed. Being unemployed while living in a camp is positively correlated with depression, while being unemployed out of camp is linked to PTSD. These findings are, however, too mixed and inconsistent to draw conclusions from and perhaps highlight the need for more precise indicators on these correlations.[39]

The only other economic indicator correlated with mental health outcomes is eviction or threat of eviction. This includes non-camp populations as well as camp-based IDPs who face the possibility of being pushed out due to camp closure. Such circumstances are linked to increased likelihood for depression. Rates of eviction or risk for it are highest among IDPs residing in Anbar camps (21%), followed by non-camp IDPs displaced in Kirkuk (15%) and Salah al-Din (13%) governorates (Figure 4). This matches the context where Anbar is going through a process of camp closure and consolidation and both Kirkuk and Salah al-Din authorities are placing greater pressure on IDPs to return to their places of origin.[40]

Figure 4. Percentage of households reporting eviction or threat of it



Conflict-Related and Accountability Factors

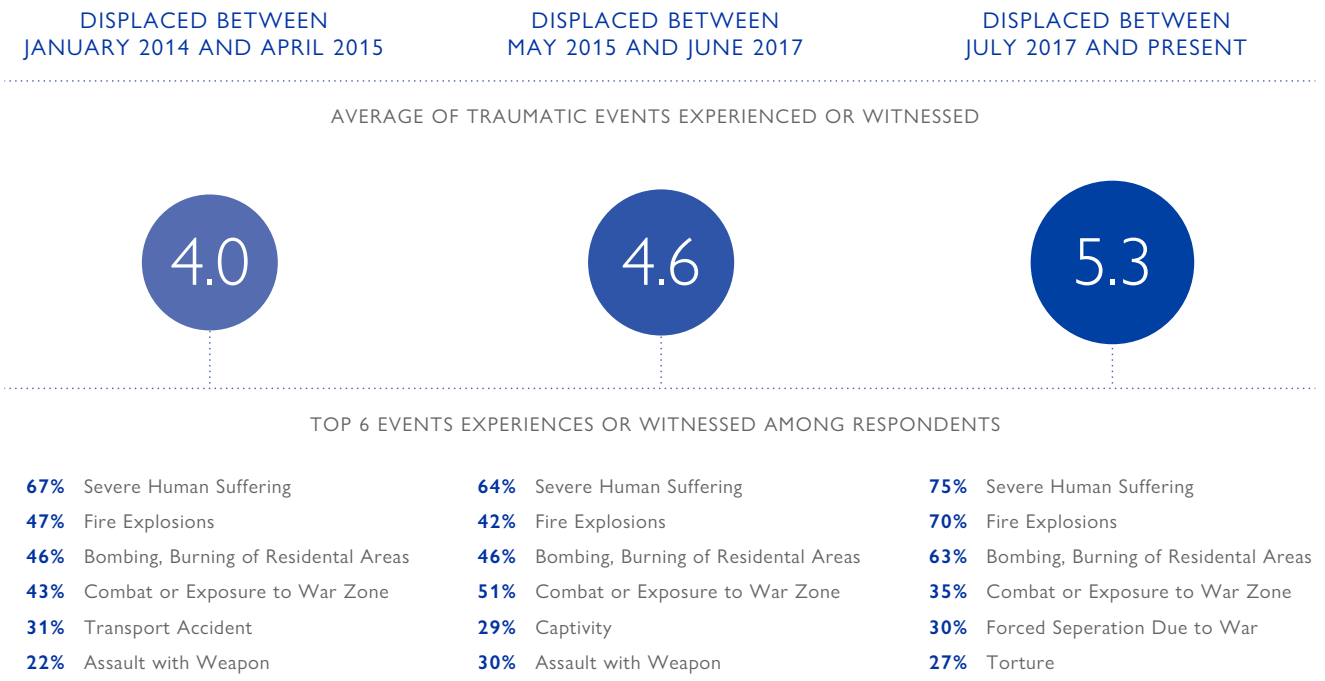
Beyond demographic characteristics, conflict and accountability related factors play the largest role for determinants of mental health outcomes in a number of ways.

Those IDPs who displaced in the last conflict wave (July 2017 to present), while smaller in absolute number in this sample, hold the highest rates of symptomology across mental health indices. This is observed in the model and may be linked to their prolonged exposure to violence and extreme conditions as compared to IDPs displaced earlier during the conflict (see Figure 5). This includes having potentially lived under ISIL occupation for a longer duration than others in the sample and having experienced the military operations to retake their places of origin more recently.

39 The fact that men seem to have reported significantly less mental health symptoms may also influence these findings, particularly as they are the main breadwinners in this sample.

40 See, for example, OCHA, "Governorate of Return Committee Updates for ICCG," presented at the Returns Working Group meeting, Erbil / Baghdad, 19 September 2018.

Figure 5. Average number and frequency of traumatic events by displacement wave



Another highly significant factor connected to all three mental health outcomes listed in the model is whether or not IDPs experienced forced separation from a first-degree family member at any point from when they first displaced to present. That is, IDPs who have experienced this separation are more likely to meet criteria for depression, PTSD, and co-incidence of both than those who have not. Within this sample, approximately 10% of IDPs report having a first-degree family member either missing or detained. The majority of these IDPs are from Anbar, Babylon, and Salah al-Din and are displaced in the central governorates.

Within the same domain of social fractures caused by this conflict, IDPs' feelings of being negatively judged or labelled by others are particularly related to depression. Of note is that those IDPs who report this sentiment the most are from the same governorates as those who report detained or missing family members above. The multivariate analysis also tested other indicators measuring these dynamics instead of negative judgement, including feeling belonging (or not) to the place of displacement and feeling that IDP suffering is acknowledged (or not). Not feeling a sense of belonging or acknowledgement in displacement are both found to be significant in relation to depression, while feeling a sense of collective blame overall presented more consistent findings and might help explain why IDPs may not feel belonging to their place of displacement or acknowledgement of their suffering.

The final set of indicators tested in this thematic grouping relates to perceptions of and conditions in place of origin. All three have some correlation to mental health outcomes. IDPs who report having no information about the physical and/or social conditions in their places of origin in particular are more likely to present symptoms meeting criteria for depression, PTSD, and co-incidence of both than those who do have information. The same holds true for those IDPs whose houses have been or remain destroyed in their places of origin. Lastly, the fear of conflict leading to displacement recurring in places of origin is particularly correlated with depression, but not with PTSD.[41]

41 One symptom of PTSD is re-experiencing traumatic events either mentally or because they happen again and as such, fear of reoccurrence is intrinsic to the condition.

5. KEY TAKEAWAYS

The following points to consider, based on the findings above, highlight the need for better capturing mental health conditions in Iraq and in providing outreach and care to those who need help. They also emphasize the need for longer-term measures geared toward addressing social cohesion and redress for all conflict-affected people.

- While women overall reported a higher prevalence of mental health symptoms, women who are heads of household are a subgroup in particular need of attention – not only to support the household in general but the head of household in particular, especially in relation to mental health and psychosocial needs. In this regard, female-headed households are more frequently present in particularly challenging environments, such as displacement camps and relatively unstable governorates such as Salah al-Din.
- The prevalence rates of mental health symptoms described here are a useful starting point but may not fully capture the experiences of IDP men in particular. Their low rates of symptomology likely relate to under-reporting and, as such, better and more culturally appropriate means for capturing, understanding, and treating mental health conditions among men is particularly important.
- Mental health services and outreach need to be extended or enhanced towards out-of-camp displaced populations as well as to host community members, who may also need this type of care. Related to this, study of the mental health of the Iraq-wide population would also be warranted, not only to understand rate of need of care but to better put IDP prevalence of mental health symptoms into perspective.
- Economic and housing insecurity remain critical priorities to address among IDPs in Iraq. Addressing lack of jobs among both camp and non-camp populations would potentially help in alleviating one of the main stressors negatively influencing mental health. Furthermore, policies or practices forcing IDPs out of their housing, whether people are evicted or face the risk of it, are also detrimental to mental health outcomes. The psychological dimensions of eviction must be taken into account in the planning of camp closures and included in any plans for relocating IDPs in an informed, voluntary, and safe manner. With respect to non-camp IDPs, an important aspect is to identify potential protection issues among those who rent housing – including when faced with policies or practices aimed at forced movement, including return.
- Collective blame and negative labelling and judgement felt by some IDPs is also particularly correlated to depression. The general narrative and perception of IDPs, particularly those from central governorates and displaced most recently, needs to shift. This can take place at a more local level through specific social cohesion or reconciliation programmes and initiatives to help families resolve their displacement, or at a national or federal government level through more holistic, rights-based accountability and redress processes in relation to this conflict for all those affected. Linked particularly to lifting collective blame would be initiatives to explore and address root causes of conflict, share narratives of conflict, enable people to more easily, efficiently, and objectively clear their names, and seek acknowledgement, redress, and accountability.

- Connected to the above, forced separation of family members is a significant hurdle for IDPs to deal with, both materially and emotionally. In particular, lack of information as to the whereabouts of a family member, when or if they will ever come home, and/or what happened to them, make it difficult to gain closure and move on from such a loss. The lack of information on the fate of family members also obscures a more public reckoning with what happened during and after conflict to ensure such events do not happen again. These factors have helped in shaping international legal frameworks on the right to know about the circumstances of serious violations of victims' human rights and about who was responsible.[42] The importance of this is not lost in the Iraq context as national and internationally supported initiatives are underway to provide such closure to particular subsets of victims of human rights violations in this conflict.[43] These types of endeavours need to extend to all victims, especially as this affects a diversity of IDPs across areas of displacement.
- Finally, these findings also highlight that rebuilding trust within and between communities as well as between communities and the State would go a long way towards healing. This includes working to create a sustainable, durable, and just transition out of conflict, particularly as 77% of this sample report being unsatisfied with how past experiences of violent conflict and abuses have been handled in Iraq to date.

Some of these points reinforce what is already understood about determinants for integration and return among IDPs in Iraq, while others give much needed nuance.[44] Specifically, they provide an additional evidence base that certain factors and conditions may cause lasting harm to people that is not always visible or easy to detect if they are left unaddressed and symptoms remain untreated.

42 See for example, United Nations General Assembly, Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law, Resolution 60/147, 16 December 2005.

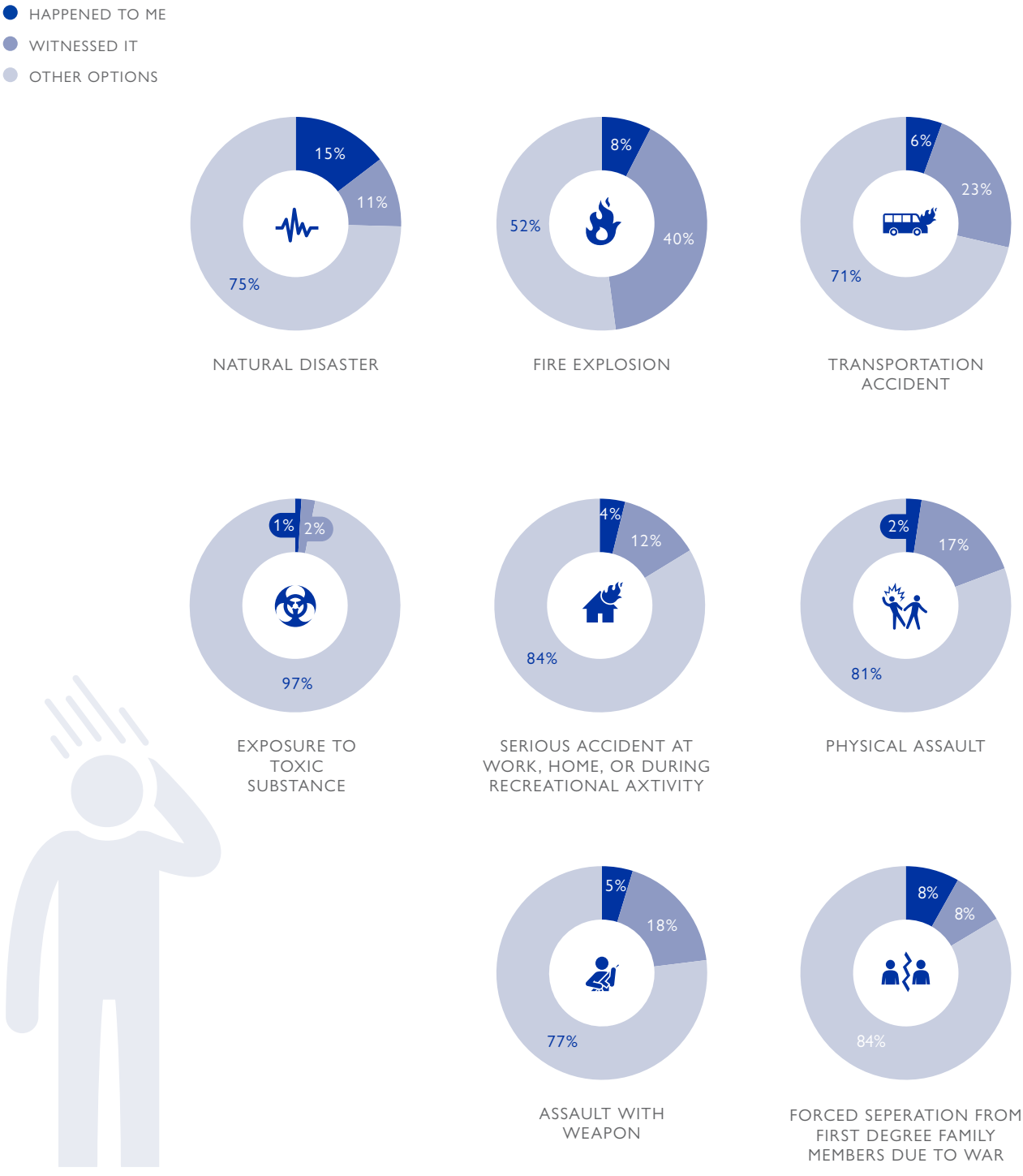
43 UN Iraq, "UNITAD working with Government of Iraq to commence exhumation of mass grave site at Kojo, Sinjar Region," UN Iraq, 14 March 2019.

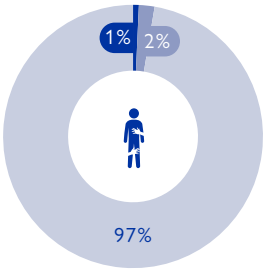
44 IOM, Returns Working Group, and Social Inquiry, Reasons to Remain (Part 2): Determinants of IDP Integration into Host Communities in Iraq (Erbil: IOM, 2019).

STATISTICAL ANNEX 1

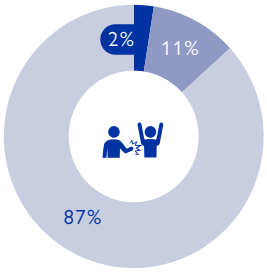
Figures 6 to 8 provide a deeper look at the specific symptomology behind each of the mental health outcomes analysed in this report. The figures show the prevalence of traumatic events and depression and somatoform symptoms disaggregated by their frequency as self-reported by respondents. Percentages are weighted by population size.

Figure 6. Frequency of self-reported traumatic events over lifetime in the PCL-5 (PTSD scale)

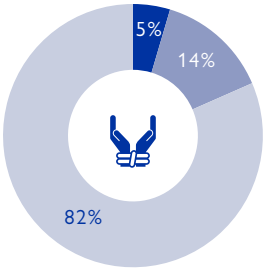




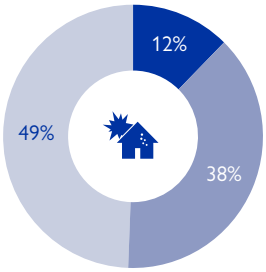
SEXUAL ASSAULT



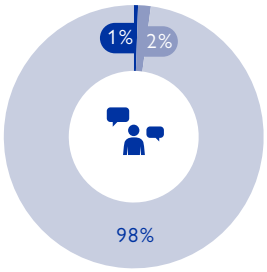
TORTURE



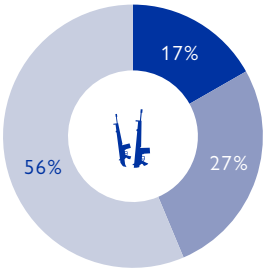
CAPTIVITY



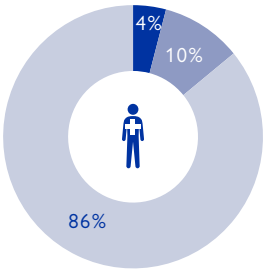
BOMBING, BURNING, OR VIOLENT DESTRUCTION OF RESIDENTAL AREAS



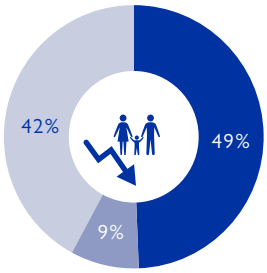
OTHER UNWANTED OR UNCOMFORTABLE SEXUAL EXPERIENCE



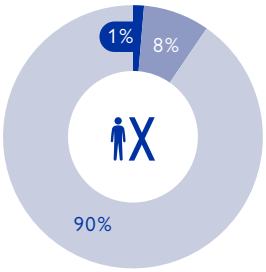
COMBAT OR EXPOSURE TO WAR-ZONE



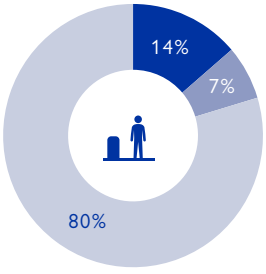
LIFE-THREATENING ILLNESS OR INJURY



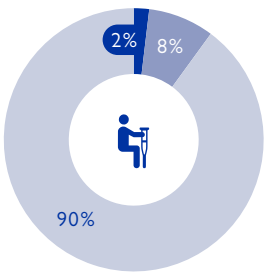
SEVERE HUMAN SUFFERING



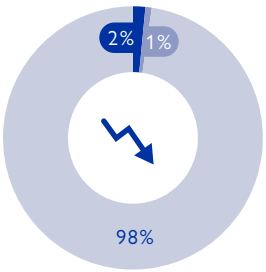
SUDDEN, VIOLENT DEATH



SUDDEN, UNEXPECTED DEATH OF SOMEONE CLOSE TO YOU



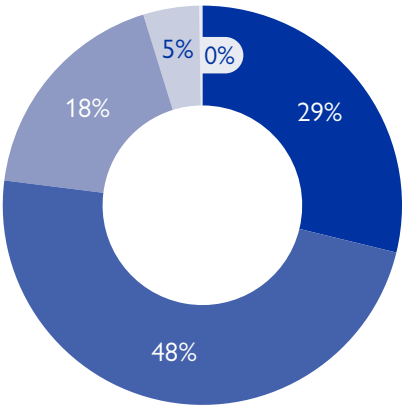
SERIOUS INJURY, HARM, OR DEATH YOU CAUSED TO SOMEONE ELSE



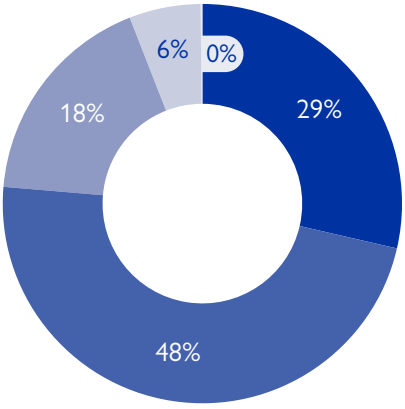
ANY OTHER VERY STRESSFUL EVENT OR EXPERIENCE

Figure 7. Frequency of self-reported symptoms in the past two weeks in the PHQ-9 (depression scale)

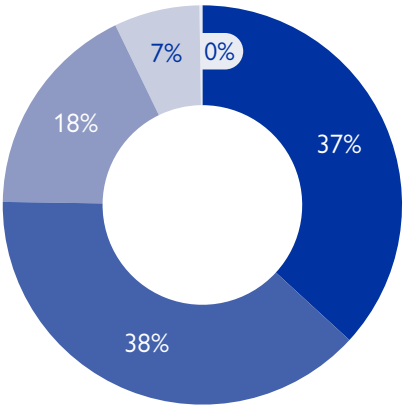
- NOT AT ALL
- SEVERAL DAYS
- MORE THAN HALF THE DAYS
- NEARLY EVERY DAY
- NO RESPONSE



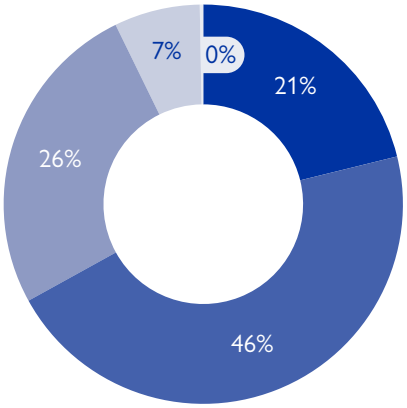
LITTLE INTEREST OR PLEASURE IN DOING THINGS



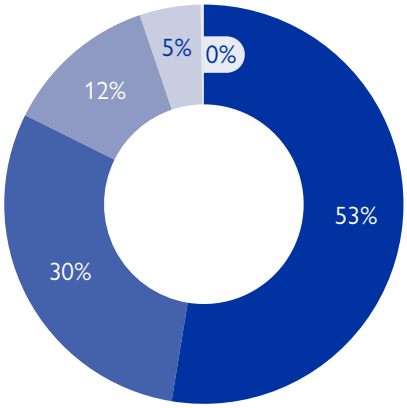
FEELING DOWN, DEPRESSED, OR HOPELESS



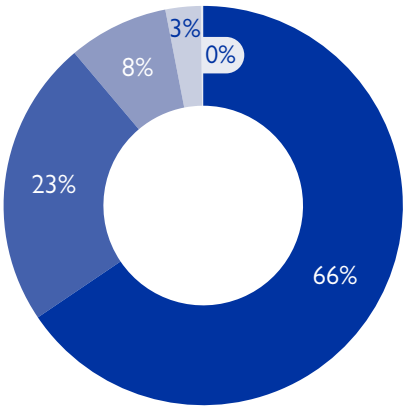
TROUBLE FALLING ASLEEP OR SLEEPING TOO MUCH



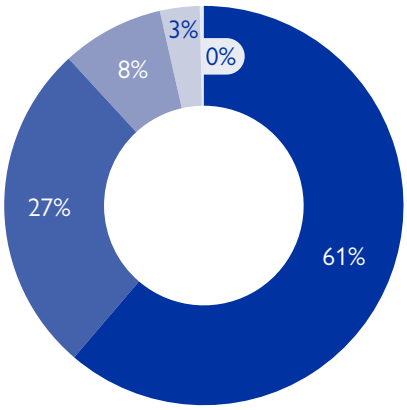
FEELING TIRED OR HAVING LITTLE ENERGY



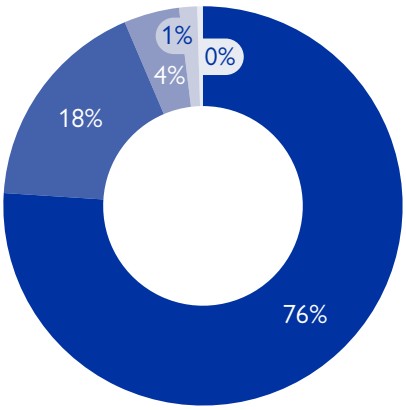
POOR APPETITE OR OVEREATING



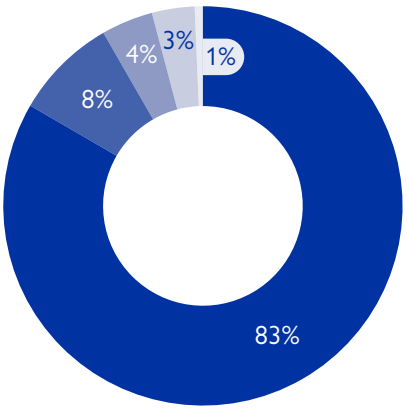
FEELING BAD ABOUT YOURSELF OR THAT YOU ARE A FAILURE OR HAVE LET YOURSELF OR YOUR FAMILY DOWN



TROUBLE CONCENTRATING ON THINGS

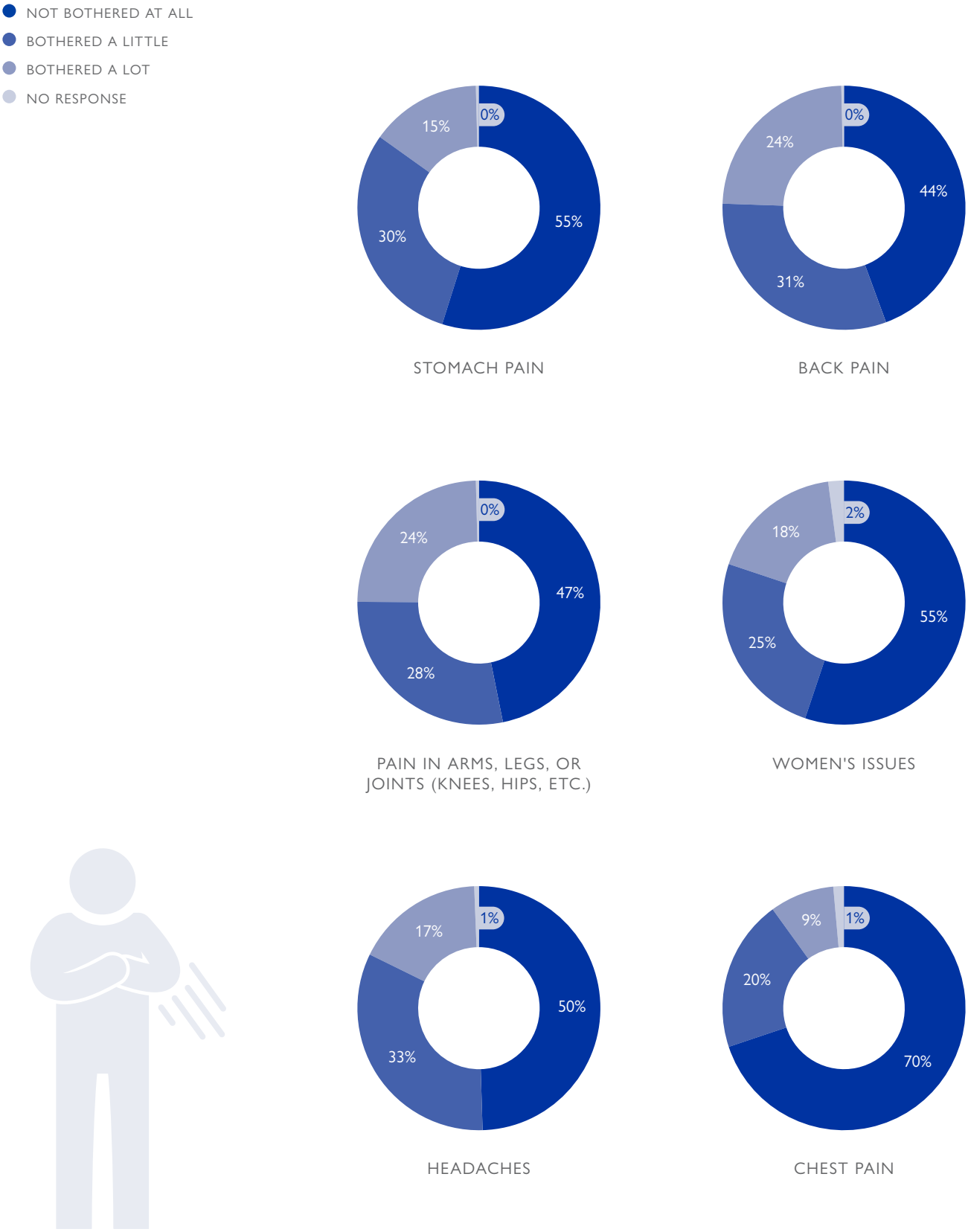


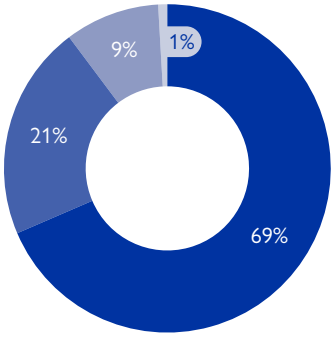
MOVING OR SPEAKING SO SLOWLY THAT OTHERS HAVE NOTICED OR BEING SO RESTLESS YOU HAVE BEEN MOVING AROUND A LOT MORE THAN USUAL



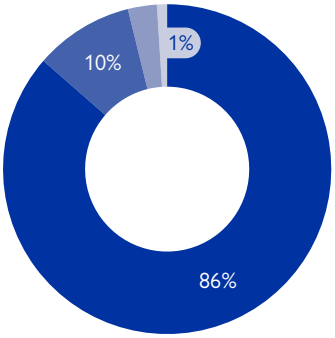
THOUGHTS THAT YOU WOULD BE BETTER OFF DEAD OR OF HURTING YOURSELF IN SOME WAY

Figure 8. Frequency of symptoms in the past four weeks self-reported in the PHQ-15 (somatoform scale)

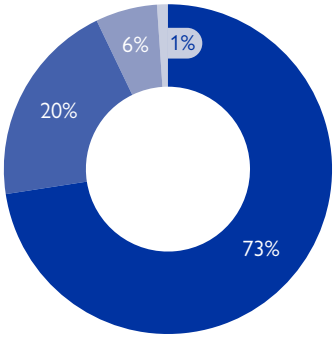




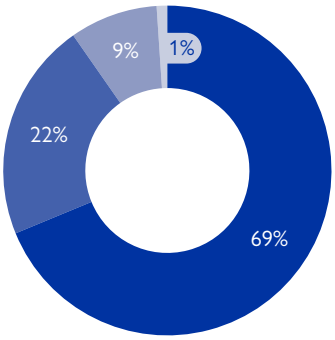
DIZZINESS



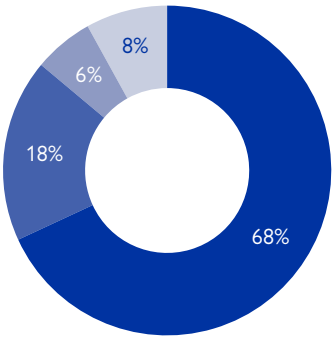
FAINTING SPELLS



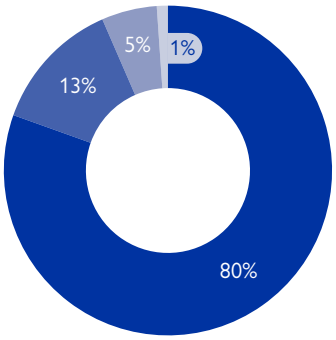
FEELING HEART POUND OR RACE



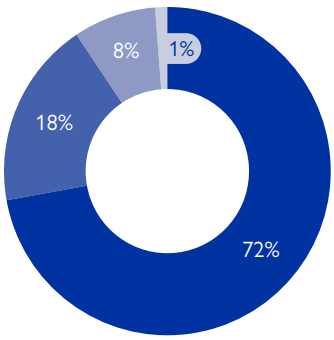
SHORTNESS OF BREATH



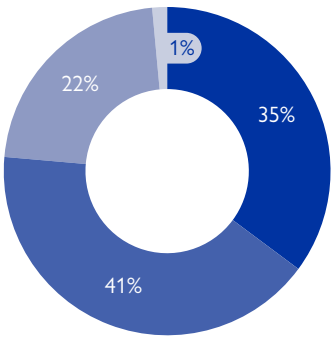
PROBLEMS OR PAIN DURING SEXUAL INTERCOURSE



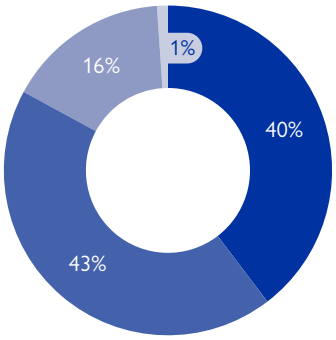
CONSTIPATION, LOOSE BOWELS, OR DIARRHEA



NAUSEA, GAS, OR INDISGESTION



FEELING TIRED OR HAVING LOW ENERGY



TROUBLE SLEEPING

STATISTICAL ANNEX 2

Tables 6 and 7 provide the statistical outputs of the logistical regressions used to analyse which factors and circumstances are correlated with IDPs' likelihood to meet symptom criteria for depression, PTSD, and/or a co-incidence of both. The dependent variable consists of a binary variable categorizing IDPs as those at or above the threshold score for meeting criteria for the relevant mental health conditions (see table notes for information of the thresholds used).

Table 6 shows the results of the models used in the main analysis (as in Table 5). Table 7 shows the results of alternative models that include the number of traumatic events (either experienced or witnessed) as a covariate. This latter table, however, suffers from multicollinearity as the number of events is, as can be expected, partially correlated at the same time with other covariates, such as the time of displacement, rendering them not statistically significant. While taking into consideration the importance of the number of traumatic events as one of the key predictors in the literature, results in Table 5 are the ones taken forward in the analysis given that they provide more information for programmatic and policy purposes.

Finally, the odds ratio estimated are used to create the matrix of results in the main report (Table 5). The equivalence of symbols is as follows:

Odds ratio higher than 5:	+ + + + +
Odds ratio close to 5:	+ + + +
Odds ratio close to 3:	+ + +
Odds ratio close to 2:	+ +
Odds ratio close to 1:	+
Odds ratio close to 0.5:	– –
Odds ratio not statistically significant:	•

Table 6. Results of multivariate regression analysis (main model)

FACTORS	DEPRESSION (ODDS RATIO)	PTSD (ODDS RATIO)	CO-INCIDENCE OF BOTH (ODDS RATIO)
Living in a displacement camp	0.51**	0.53*	0.55
a. Male	Ref.	Ref.	Ref.
b. Female who is not the head of household	1.83**	5.13***	4.73***
c. Female who is the head of household	2.97***	9.99***	8.23***
a. Aged less than 30 years old	Ref.	Ref.	Ref.
b. Aged between 31 and 49 years old	2.12**	1.59	2.73**
c. Aged more than 50 years old	2.97***	0.89	1.80
a. Marital status is married	Ref.	Ref.	Ref.

FACTORS	DEPRESSION (ODDS RATIO)	PTSD (ODDS RATIO)	CO-INCIDENCE OF BOTH (ODDS RATIO)
b. Marital status is widowed, separated, or divorced	0.77	1.19	1.10
c. Marital status is single	2.83***	1.25	2.30*
Household size larger than 6 members	0.54***	0.82	0.74
Household has a member with disability	1.49*	1.04	1.01
Has family networks in the location of displacement	1.02	0.85	1.01
Household is able to provide for basic needs	1.03	1.02	1.24
a. Employed	Ref.	Ref.	Ref.
b. Unemployed in a camp setting	1.99*	0.72	
c. Unemployed in a non-camp setting	1.17	2.54*	2.16
Weak economic situation pre-displacement	0.99	1.01	1.03
Renting a house in displacement	1.00	0.68	0.77
Living in critical shelter (non-camp) or in a tent (camp)	1.02	0.78	0.97
Faced eviction or threat of eviction (incl. camp closure)	1.97**	1.15	1.63
a. Displaced between January 2014 and April 2015	Ref.	Ref.	Ref.
b. Displaced between May 2015 and June 2017	0.78	2.15***	1.49
c. Displaced between July 2017 and present	1.76*	2.16*	2.60**
Has no information about place of origin	1.81**	2.38**	2.37**
House in place of origin is destroyed	1.45*	1.76**	1.84**
Feelings of being negatively judged or labelled by the host community	3.77***	1.24	1.45
Has an immediate family member who was separated at a checkpoint, kidnapped, detained, or missing	2.65***	2.16**	2.23**
Fear or repetition of what happened before in place of origin happening again	2.35***		
Observations	802	799	712

Table Notes:

Score thresholds: Depression = PHQ-9 scores ≥ 10; PTSD = PCL-5 scores ≥ 33.

Ref. = Reference category.

Statistical significance: *** p<0.01, ** p<0.05, * p<0.1.

Results are in odds ratio showing the likelihood of a factor being associated with the mental health outcome. For example, an OR of 2.97 signifies that women who are heads of households were almost three times as likely as men to have symptoms of depression, keeping other factors equal.

Table 7. Results of multivariate regression analysis (alternative model with number of traumatic events)

FACTORS	DEPRESSION (ODDS RATIO)	PTSD (ODDS RATIO)	CO-INCIDENCE OF BOTH (ODDS RATIO)
Living in a displacement camp	0.43**	0.45**	0.50*
a. Male	Ref.	Ref.	Ref.
b. Female who is the head of household	2.10***	6.18***	5.33***
c. Female who is not the head of household	3.31***	10.67***	8.20***
a. Aged less than 30 years old	Ref.	Ref.	Ref.
b. Aged between 31 and 49 years old	2.18***	1.75*	3.03**
c. Aged more than 50 years old	3.42***	1.11	2.23
a. Marital status is married	Ref.	Ref.	Ref.
b. Marital status is widowed, separated, or divorced	0.64	1.04	0.99
c. Marital status is single	2.74***	1.20	2.26
Household size larger than 6 members	0.51***	0.76	0.69
Household has a member with disability	1.37	0.86	0.87
Has family networks in the location of displacement	0.99	0.82	0.96
Household is able to provide for basic needs	0.81	0.84	1.08
a. Employed	Ref.	Ref.	Ref.
b. Unemployed in a camp setting	1.63	0.57	
c. Unemployed in a non-camp setting	1.43	2.95*	2.31
Weak economic situation pre-displacement	1.03	1.03	1.05
Renting a house in displacement	0.91	0.60	0.69
Living in critical shelter (non-camp) or in a tent (camp)	1.12	0.76	0.94
Faced eviction or threat of eviction (incl. camp closure)	2.25**	1.29	1.76
a. Displaced between January 2014 and April 2015	Ref.	Ref.	Ref.
b. Displaced between May 2015 and June 2017	0.68	1.84**	1.34

FACTORS	DEPRESSION (ODDS RATIO)	PTSD (ODDS RATIO)	CO-INCIDENCE OF BOTH (ODDS RATIO)
c. Displaced between July 2017 and present	1.45	1.66	2.08
Has no information about place of origin	1.98**	2.60***	2.48**
House in place of origin is destroyed	1.49*	1.92**	1.94**
Feelings of being negatively judged or labelled by the host community	4.06***	1.44	1.64*
Has an immediate family member who was separated at a checkpoint, kidnapped, detained, or missing	1.99**	1.58	1.68
Fear or repetition of what happened before in place of origin happening again	2.30***		
Number of traumatic events experienced or witnessed	1.20***	1.23***	1.18***
Observations	802	799	712

Table Notes:

Score thresholds: Depression = PHQ-9 scores ≥ 10; PTSD = PCL-5 scores ≥ 33.

Ref. = Reference category.

Statistical significance: *** p<0.01, ** p<0.05, * p<0.1.

Results are in odds ratio showing the likelihood of a factor being associated with the mental health outcome. For example, an OR of 2.97 signifies that women who are heads of households were almost three times as likely as men to have symptoms of depression, keeping other factors equal.

PSYCHOSOCIAL DIMENSIONS OF DISPLACEMENT

PREVALENCE OF MENTAL HEALTH OUTCOMES AND RELATED STRESSORS AMONG IDPs IN IRAQ

RWG IRAQ

iraqrecovery.org/RWG

iraqrwg@iom.int