



## Prevalence of physical health status among displaced individuals at Hamam al-Alil camp in Ninevah governorate

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### Abstract

**Background:** The Iraqi conflicts that have unfolded since 2013 have given rise to the most significant displacement crisis in the Middle East in more than six decades. Approximately 4.5 million Iraqis have been forced to leave their residences, resulting in Iraqis emerging as one of the globe's most extensively displaced communities.

**Aim:** This study aims to assess the physical health problems of people displaced in Hamam Al-Alil Camp.

**Methods:** The cross-sectional survey study design was performed in Hamam Al-Alil camps (Located on the western bank of the Tigris River in the Nineveh Governorate in Iraq, to the south of Mosul) for the period of 26<sup>th</sup> December 2017 throughout 1<sup>st</sup> March 2018. The sample of the study consists of (869) participants.

**Results:** The study distributed 869 surveys which show that the estimation of females was (54%), while males (46%), most of the participants in this study were at age (18-30) years old, and the majority of them reported at least one chronic condition.

**Conclusions:** This study concluded that most of the participants were female (54%), middle-aged, and reported a high prevalence of suffering from physical health symptoms such as hypertension, diabetes, and diarrhea.

**Recommendation:** Resettlement partners should be mindful of the unique health challenges affecting this population to effectively meet the community's specific needs.

## **Introduction**

More than 45 million individuals globally have been compelled to leave their homes due to conflicts and insecurity (Greenough, 2008). Out of this total, over 24 million are internally displaced persons (IDPs), individuals who have stayed within the borders of their own country despite being forced to leave their homes (Martin, 2016; Shami 2016). Upon being displaced, a significant number of refugees experience stress-related cardiac deaths, especially during and immediately following disasters. So, Healthcare providers at shelters and nearby health facilities need to comprehend the prevalence of both acute and chronic diseases among the population to adequately address their healthcare needs (Mowafi et al., 2018). Studies on the health of internally displaced persons (IDPs) have concentrated on particular physical and mental health conditions (Ormel, 2011). The study on Psychological Problems in Primary Health Care revealed that individuals with one or more mental disorders experienced elevated levels of physical disability when compared to patients seeking primary care for conditions unrelated to mental health (Paquet et al., 2018). Violence and displacement amplify the demand for health services, particularly for women and children. This challenge is exacerbated by the scarcity of health professionals in countries experiencing crises. (Derogatis et al., 2009). Since the onset of the conflict in Iraq, there has been a notable rise in physical distress among the population. It is estimated that over 50% of the population requires health support (Suha et al., 2013). Addressing the public health implications of infectious diseases among refugees and internally displaced persons (IDPs) remains a challenging task, both in developed and developing nations (Shami 2016). Displaced populations often experience a heightened prevalence of physical disorders, exacerbated by a lack of fundamental health knowledge, education, and/or promotion within the population (Mowafi et al., 2018). There is a consensus that refugees and internally displaced persons (IDPs) tend to escape from comparable root causes, facing similar occurrences, circumstances, and experiences before being compelled to leave their homes (Greenough, 2008).

## **Methodology**

The cross-sectional survey study design chosen aimed to fulfill the objectives of the current study during the specified period from 26<sup>th</sup> December 2017 to 1<sup>st</sup> March 2018. Data was collected from the Hamam Al-Alil camps. The sample of the study consists of (869) samples. The collected data was arranged and analyzed by using SPSS version 25

## Results

**Table (1): Demographic characteristics of Hamam Al-Alil displaced survey participants (N=869)**

Gender	N	%
Male	٤٠٠	٤٦
Female	٤٦٩	٥٤
Age(years)	N	%
18-30	٣٥٢	٣٩
31-40	204	24
41-50	152	18
50-or more	161	١٩
Marital status	N	%
Single	١٠٣	١٢
Married	٦٤٨	٧٥
Divorce	٢٠	٢
Widow	٩٨	١١
Occupation	N	%
Employee	116	14
Retirement	105	11
Without work	١٩٦	٢٣
Housewife	٤٥٢	٥٢
Level of education	N	%
Illiterate	52	٥
Elementary school	٤٥٢	٥٢
Middle school	١٩٥	٢٣
High school	٣٠	3
College	١٤٠	١٧

This table shows that most of the participants were females and housewives (54%) (52%) respectively, in concerning of age (٣٩%) of them ranged in age from 18 to 30 years old. A majority of the participants were married about (75%), and finally (52%) of the sample had elementary school certifications.

These results agree with Greenough et, al. (2008) who found that two-thirds of the sampled population was married, as well as A significant proportion of the participants were female (57.6%), on the other hand, socioeconomic indicators, such as unemployment (52.9%), reliance on benefits or assistance (38.5%), absence of home ownership (66.2%), and lack of health insurance (47.0%), indicated a state of vulnerability.

**Table (2): Prevalence of health problems among Hamam Al-Alil displaced participants (N=869)**

Clinical history (Physical Domain)							
	Male		Female		Overall		P-vale
	N	%	N	%	N	%	
Hypertension	١٠٦	٢٦	٥٧	١٢	١٦٣	٢٥	٠,٤
Diabetics	٧٢	١٨	٢٣	٥	٩٥	٢٠	0.3
High cholesterol	٣٩	١٠	٤٨	١٠	٨٧	١٠	٠,٠٤
Myocardial Infarction	١٨	٤	١٣	٣	٣١	٤	٠,٥
Angina	١٧	٤	١٢	٣	٢٩	٣	٠,٥
Asthma	١٤	٣	٩	٢	٢٣	٣	٠,٥
No disease	١٣٤	٣٥	٣٠٧	٦٥	٤٤١	٣٥	٠,٠٥

This table demonstrates the prevalence of health problems among Hamam Al-Alil displaced people which shows that the majority of them suffer from no disease (35%) on the other hand the researcher found there are chronic health conditions among the refugees such as hypertension and diabetes (25%) (20%) respectively which due to stress-related physical problems and lack in health care providers and at local health facilities near shelters

Similar studies conducted by Tamil Canadians (2010) in postwar settings found higher prevalences of physical symptoms than those found in our study. Refugees exhibit heightened susceptibility to Non-Communicable Diseases (NCDs), and some studies note a transition from acute to chronic disease burden within this population. While the precise reasons for this shift are not entirely clear, it is theorized that the stress associated with leaving one's home increases vulnerability to various chronic diseases, including hypertension, diabetes, and several types of cancer.

**Table (3): Prevalence of Communicable Disease among Hamam Al-Alil displaced participants (N=869)**

Communicable Disease							
	Male	%	Female	%	Overall	%	P-vale
Scabies	٧١	١٨	١٩	٤	٩٠	١٠	٠,٣
Hepatitis	١٢	٣	٣	١	١٥	٢	0.4
Lice	44	١١	٢٣	٥	٦٧	٨	٠,٣
Mumps	١٣	٣	٤	١	١٧	٢	٠,٥

Diarrhea	١٨٥	٤٦	٢٥٤	٥٤	٤٣٩	٥١	٠,٣٤
TB	٤	٢	٢	١	٦	٣	٠,٦
No disease	٧١	١٧	١٦٤	٣٤	٢٣٥	٢٤	٠,٥

This table demonstrates the prevalence of communicable diseases among Hamam Al-Alil displaced participants which shows that the majority were suffering from diarrhea (51%) which is mainly attributable to the limited access to improved water and sanitation. Communicable diseases continue to be a noteworthy global health concern. The surge in refugees and asylum seekers linked to conflicts has the potential to modify the burden of communicable diseases in host countries. (Mollica, 2011). These results disagree with a study performed by Martin et al., (2006) The study revealed variations in prevalence ranges between active and latent Tuberculosis (TB). Notably, there was a substantial difference in the results of active TB across different regions, ranging from less than 0.01 to 0.6. This suggests significant variations among the studies included in the analysis.

#### **Conclusion:**

1. Participants consisted of females (54%), with ages ranging from 18 to 30 years. A significant majority of participants were married (75%) and identified as housewives (52%). Additionally, more than half of the participants had less than elementary school education (52%).
2. High prevalence of Non-Communicable Diseases such as Hypertension(25%), diabetes (20%), and Communicable Diseases like diarrhea (51%)

#### **Recommendation:**

1. Resettlement partners must be cognizant of the unique health concerns within this population to effectively meet the needs of the community.
2. Resettlement partners and healthcare providers collaborating with the displaced population from Mosul should be mindful of the elevated prevalence of chronic diseases. It is crucial to conduct screenings for risk factors associated with chronic diseases among the Mosul displaced to ensure appropriate care and interventions.
3. There is a pressing need to establish and enhance programs for displaced individuals, utilizing health promotion strategies and fostering collaboration among displaced communities in our country. Additionally, there is a necessity for the implementation of a more extensive study with a broader participant pool to gain deeper insights into health education and healthcare in this context.

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