

# Medical conditions among Iraqi refugees in Jordan: data from the United Nations Refugee Assistance Information System

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**Objective** To determine the range and burden of health services utilization among Iraqi refugees receiving health assistance in Jordan, a country of first asylum.

**Methods** Medical conditions, diagnosed in accordance with the tenth revision of the *International classification of diseases*, were actively monitored from 1 January to 31 December 2010 using a pilot centralized database in Jordan called the Refugee Assistance Information System.

**Findings** There were 27 166 medical visits by 7642 Iraqi refugees (mean age: 37.4 years; 49% male; 70% from Baghdad; 6% disabled; 3% with a history of torture). Chronic diseases were common, including essential hypertension (22% of refugees), visual disturbances (12%), joint disorders (11%) and type II diabetes mellitus (11%). The most common reasons for seeking acute care were upper respiratory tract infection (11%), supervision of normal pregnancy (4%) and urinary disorders (3%). The conditions requiring the highest number of visits per refugee were cerebrovascular disease (1.46 visits), senile cataract (1.46) and glaucoma (1.44). Sponsored care included 31 747 referrals or consultations to a specialty service, 18 432 drug dispensations, 2307 laboratory studies and 1090 X-rays. The specialties most commonly required were ophthalmology, dentistry, gynaecology and orthopaedic surgery.

**Conclusion** Iraqi refugees in countries of first asylum and resettlement require targeted health services, health education and sustainable prevention and control strategies for predominantly chronic diseases.

Abstracts in **عربي**, **中文**, **Français**, **Русский** and **Español** at the end of each article.

## Introduction

The war in Iraq began on 20 March 2003 and officially ended in 2011. The Iraqi refugee crisis that ensued has led to the displacement of more than 4.2 million people.<sup>1</sup> More than 2 million Iraqi refugees are resettled abroad.<sup>2</sup> Many Iraqi civilians seek humanitarian assistance in the countries to which they flee and require health services in the countries in which they resettle. In the surrounding regions of Iraq, the United Nations High Commissioner for Refugees (UNHCR) often assumes primary responsibility for ensuring access to health care for refugees and asylum seekers (people whose refugee status has yet to be determined by the UNHCR). This includes surveillance of disease and provision of appropriate medical treatments.

The value of monitoring and understanding the health needs of refugees in the place where they first seek asylum has prompted the development of a new refugee health and humanitarian assistance monitoring system by the UNHCR. Assessment of the output of this system, designed to report all medical diagnoses and rates of health care utilization, may be a source of important lessons for future refugees in similar settings, especially urbanized refugees from non-tropical, middle-income countries. Health data for a large group of refugees can provide important baseline information on a vulnerable population for which no baseline data exist in their country of origin and resolve any controversy with respect to their health status. Prior to the Iraqi war, Iraqi physicians had already reported high rates of chronic disease,<sup>3,4</sup> but few

data are available on the epidemiology of disease in the Iraqi population.<sup>5-7</sup> High quality information on Iraqi refugee health care could direct health and humanitarian services, focus expenditures, enhance awareness, highlight unmet population-based needs, reveal stigma and, ideally, improve the health status of the Iraqi refugee population.

Given the potentially high burden of medical conditions in refugee populations from Iraq and the need to find a long-term response to their health needs, our objective is to describe the medical diagnoses and health service utilization patterns seen in a large group of Iraqi refugees in Jordan.

## Methods

### Source population

The total population of Jordan is approximately 6.3 million people.<sup>8</sup> Jordan is second only to the Syrian Arab Republic as a country of first asylum for Iraqi refugees.<sup>2</sup> In 2010, 36 944 Iraqis in Jordan registered with the UNHCR. Among them were 31 467 active registrants, 3444 people who resettled elsewhere during the year, 107 who voluntarily repatriated, 507 who independently departed and 1419 whose cases were closed because of death.<sup>9</sup>

### Data collection

The Refugee Assistance Information System (RAIS), an online system owned and operated by the UNHCR, collects demographic and health services data on all health conditions for

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which registered refugees and asylum seekers request care. The RAIS was piloted in Jordan beginning on 1 January 2010, and all data collected up to 31 December 2010 were included in this analysis. The RAIS actively receives health information on registered Iraqi asylum seekers and refugees in Jordan from more than 30 partnering organizations at 100 centres, including non-governmental organizations (NGOs), primary health-care clinics, hospitals, pharmacies and government-sponsored medical centres.<sup>10</sup> Major organizations providing care in 2010 included Caritas Jordan, the Jordan Health Aid Society and Mercy Corps.

### Data entry

Diagnoses were entered into the RAIS using the World Health Organization's *International classification of diseases*, 10th revision (ICD-10) handbook<sup>11</sup> and rendered or confirmed by local health-care providers in health centres and hospitals in Jordan. Health data were actively entered throughout 2010 by trained project workers and dedicated data entry specialists employed by UNHCR partner organizations in Jordan. Each refugee health visit was entered in the RAIS by patient name, date of birth, date of visit, sex, ICD-10 diagnosis, type of care (acute versus chronic), type of evaluation (inpatient or outpatient), use of a medical procedure and referral to a medical specialty. For this study, RAIS data were linked to existing record systems at UNHCR, which included data on nationality, governorate of origin in Iraq as well as vulnerability and resettlement application status; None of the data in the UNHCR records system were available to care providers.

Vulnerability status was reported by the UNHCR, based on in-person interviews, as either (i) a serious medical condition, defined as one "requiring assistance, in terms of treatment or provision of nutritional and non-food items, in the country of asylum"; (ii) disability, defined as "physical, mental, intellectual or sensory impairments from birth, or resulting from illness, infection, injury, trauma or old age" that "may hinder full and effective participation in society on an equal basis with others"; *specific legal and physical protection needs* "because of a threat to life, freedom or physical safety"; *torture*, or "any act by which severe pain or suffering, whether physical

or mental, is intentionally inflicted on a person . . . when such pain or suffering is inflicted by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity"; *woman at risk* "because of her gender, such as single mothers or caregivers, single women, widows, older women, women with disabilities, or survivors of violence"; *older person at risk*, defined as a "person 60 years old or above with specific need(s) in addition to age" on account of being another's sole caregiver, or of having health problems, difficulty adjusting to the new environment, and/or lack of psychological, physical, economic, social or other support from family members or others); *family unity*, "when action is taken to separate an existing family unit, or when family members who already have been separated are not able or permitted to reunite"; *unaccompanied or separated child*, "currently not under the care of either parent or other legal or customary primary caregiver"; single parent, or "both the primary income earner and/or caregiver"; or *child at risk* "due to age, dependency, and/or immaturity."

Only UNHCR officials have access to identifiable data and protected health information, which is securely archived. Patients can request their own health data through individual providers. The authors did not check individual patients' records or communicate with medical providers in this study.

Data accuracy was ensured through: (i) drop-down menus and calendars for accurate entry; (ii) linkage with the UNHCR database (proGres) for registration and verification of demographic data, including personal interviews and official documents; (iii) comparison with stand-alone health records kept by partner organizations; (iv) routine checks and report generation to identify data anomalies; and (v) regular communication with partner organizations.

### Statistical analysis

Basic descriptive statistics were used to characterize outcomes of interest in the study population. Disease burden in subpopulations was assessed by appropriately cross-tabulating outcomes and indicators of subgroup membership.

### Ethics approval

The Johns Hopkins University Institutional Review Board approved the de-

identified data analysis of the UNHCR programmatic data.

## Results

### Demographics

In 2010, 27 166 visits were made and health services were provided to 7642 registered Iraqi refugees, who represented 20.7% (7642/36 944) of all UNHCR-registered Iraqi refugees in Jordan. The mean number of visits per refugee was 3.6. Fig. 1 shows the population pyramid representing refugees receiving UNHCR health assistance, 78% of whom were at least 18 years old. The average duration of refugee status since registration was 2.6 years. The place of origin in Iraq of refugees seeking health assistance was most often Baghdad (69.5%), Basrah (6.6%) and Ninewa (3.2%). Less than 3.0% of the total population came from other regions.

### Burden of disease

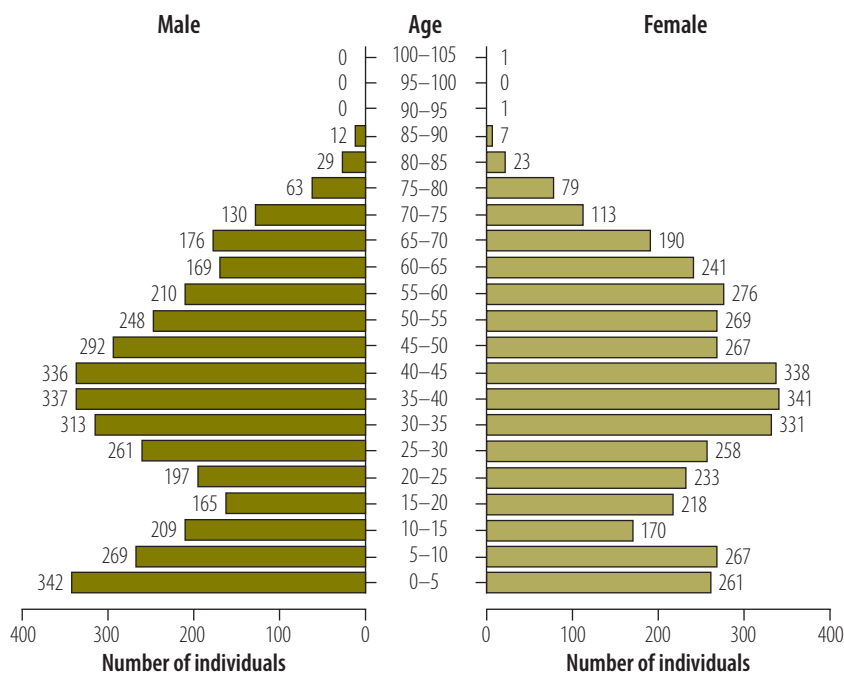
A total of 904 separate diagnoses were recorded in the RAIS. The most common ones and their frequencies are broken down by age in Table 1 and by sex, for acute and chronic conditions, in Table 2. The diagnoses per refugee were one in 41%; two in 21%; three in 13%; four in 9%; five in 5%; six in 4%, and seven or more in 8%. Cancer care was required by 2% of refugees.

More than 1500 refugees had cardiovascular problems; respiratory diseases; diseases of the musculoskeletal system and connective tissues, and endocrine, nutritional and metabolic disorders. Among adults 18 years or older, 22% (1668) had hypertension; 11% (804) had type II diabetes mellitus; 4% (299) had type I diabetes mellitus; 10% (737) had visual disturbances; 10% (715) had disorders of lipoprotein metabolism and other lipidemias; 9% (697) had other joint disorders and 7% (517) had chronic ischaemic heart disease.

### Health services utilization

Most visits were to outpatient services (65.9%). The diagnoses requiring the greatest number of visits per refugee were cerebrovascular disease (average of 1.46 visits per refugee); senile cataract (1.46); glaucoma (1.44); urolithiasis (1.38); prostatic hyperplasia (1.36); angina pectoris (1.35); pain in throat and chest (1.34); inguinal hernia (1.34); cervical disc disorder (1.33), and recur-

Fig. 1. Population pyramid representing refugees receiving health care with the assistance of the United Nations High Commissioner for Refugees in Jordan, 2010



rent depressive disorder (1.30). For all refugees as a group, the largest number of visits were for essential hypertension (2067 visits); visual disturbances (1129); type II diabetes mellitus (1021); other joint disorders (969), and acute upper respiratory infections (952).

The most common services, including consultations, for the health care of refugees were consultation or referral to a specialty ( $n = 31\,747$ ), medication provision ( $n = 18\,432$ ), laboratory studies ( $n = 2307$ ), X-rays ( $n = 1090$ ), dental care ( $n = 926$ ), emergency care ( $n = 654$ ), eyeglasses ( $n = 597$ ), and ultrasound ( $n = 495$ ). The most common specialty medical visits were to ophthalmology ( $n = 1116$  visits), dentistry ( $n = 805$ ), gynaecology ( $n = 655$ ), orthopaedic surgery ( $n = 525$ ), internal medicine ( $n = 495$ ), paediatrics ( $n = 401$ ), ear, nose and throat ( $n = 392$ ), general surgery ( $n = 359$ ) and dermatology ( $n = 323$ ).

### Vulnerability status

Vulnerability status included a serious medical condition (24.2%), disability (5.6%), need for specific legal and physical protection (5.3%), torture victim (3.4%), woman at risk (3.2%), older person at risk (3.2%), family unity (0.4%), unaccompanied or separated child or child at risk (0.3%) and single parent (0.2%). Most refugees received cash as-

sistance (70.4%). Resettlement claims were submitted by 43.4%, and 7.5% of refugees receiving health assistance departed for resettlement in 2010. Essential hypertension, visual disturbances, type II diabetes mellitus, and “other” joint disorders were uniformly common among the subpopulations with a specific vulnerability status.

### Discussion

A high burden of chronic, non-communicable diseases exists in the Iraqi refugee population receiving health-care assistance in Jordan. Most refugees seeking UNHCR-funded health assistance, which is nearly 4 out of every 5 individuals, require chronic disease management. The most prevalent chronic disease diagnoses are found with nearly equal frequency in both sexes. This disease profile requires a revamped and long-term approach to health care provision in humanitarian settings. Less than 7% of individuals had an infectious or parasitic illness, even though these have been the focus for screening and prevention among refugees from other locations.<sup>12-14</sup>

The Iraqi refugee situation in Jordan provides several important lessons. First, targeted programmes, specifically for the management of hypertension, diabetes, joint disorders and eye care, are needed

and can be implemented at the community level to reduce the high volume of physician-based management. Trained staff, including non-medical staff, should be engaged to manage common treatable diseases. For example, eye problems, including visual disturbances requiring corrective eyewear, were common among Iraqi refugees in Jordan, along with the more specific diagnoses made by physicians, such as cataracts and glaucoma.

Second, mental health care provision requires more than merely having specialized physicians available. Community outreach, advertising of available care, preventive public health measures and general awareness are also required. RAIS recorded a low prevalence of psychiatric disorders even in populations in which higher than average rates of mental disturbances are expected. Among the tortured, disabled and elderly, psychiatric disorders were not recorded as frequent, perhaps because refugees may be turning elsewhere for mental health care or, more likely, because psychiatric disorders are underdiagnosed and under-ascertained in refugees. The putative reasons for this include the stigma surrounding mental disorders, cultural barriers, lack of screening by health-care providers and low health-care-seeking behaviour in the area of mental health.

Third, the types of specialists refugees need to consult differ in middle-income countries and have not been well documented. The need for ophthalmologists, dentists, gynaecologists and orthopaedic surgeons was paramount. Specialists in these areas should be actively engaged in providing care during future refugee crises of a similar nature.

Fourth, some diagnoses in RAIS are probably “indicator illnesses” pointing to refugees’ need for access to health services. Such illnesses include type I diabetes, chronic ischaemic heart disease and epilepsy among the chronic diseases, and, among acute conditions, abdominal pain or pelvic pain and fracture. Future work could seek to monitor specific diagnoses and determine whether they represent a stable fraction of the overall health needs of the refugee population. Minimum standards for the diagnosis and treatment of common, life-threatening noncommunicable diseases are needed.

Finally, an organized data system for the monitoring of health care utilization is possible and desirable in an

Table 1. Most common acute and chronic conditions among Iraqi refugees in Jordan, by age group, 2010

Age group (in years)	Percentage of Iraqi refugees seeking assistance	Most common diagnoses (% of refugees affected)
0–4 ( <i>n</i> = 480)	6.3	Acute upper respiratory infections of multiple and unspecified sites (30.2%) Diarrhoea and gastroenteritis of presumed infectious origin (16.0%) Influenza (virus not identified) (8.3%) Chronic diseases of tonsils and adenoids (7.1%) Acute tonsillitis (5.8%)
5–11 ( <i>n</i> = 730)	9.6	Acute upper respiratory infections of multiple and unspecified sites (18.6%) Chronic diseases of tonsils and adenoids (9.9%) Visual disturbances (9.0%) Disorders of the urinary system (7.7%) Acute tonsillitis (6.8%)
12–17 ( <i>n</i> = 451)	5.9	Visual disturbances (18.4%) Acute upper respiratory infections of multiple and unspecified sites (12.0%) Epilepsy (6.0%) Other disorders of the urinary system (4.4%) Asthma (4.4%)
18–59, male ( <i>n</i> = 2 252)	29.5	Essential (primary) hypertension (17.3%) Visual disturbances (12.8%) Other joint disorders, not classified elsewhere (10.3%) Type II diabetes mellitus (8.8%) Acute upper respiratory infections of multiple and unspecified sites (8.5%)
18–59, female ( <i>n</i> = 2 399)	31.4	Essential (primary) hypertension (17.5%) Supervision of a normal pregnancy (11.3%) Visual disturbances (11.0%) Other joint disorders, not classified elsewhere (10.9%) Type II diabetes mellitus (8.6%)
60–79 ( <i>n</i> = 1 230)	16.1	Essential (primary) hypertension (63.7%) Type II diabetes mellitus (30.2%) Disorders of lipoprotein metabolism and other lipidemias (28.4%) Chronic ischaemic heart disease (23.7%) Other joint disorders, not classified elsewhere (16.0%)
≥ 80 ( <i>n</i> = 100)	1.3	Essential (primary) hypertension (76.0%) Chronic ischaemic heart disease (29.0%) Type II diabetes mellitus (27.0%) Hyperplasia of the prostate (20.0%) Disorders of lipoprotein metabolism and other lipidemias (19.0%)

urbanized refugee situation. Active monitoring of health information for vulnerable refugee populations may soon be possible, allowing for programmatic responses to refugees' changing health needs by season, population size and political circumstances. The documented care and services provided to Iraqi civilians in Jordan will be useful as a starting point for aiding other populations whose security situation is unclear, including people seeking asylum during the recent Arab Spring.

Our data are consistent with reported health information on Iraqi refugees. The global trend towards a high burden of chronic disease is also seen in the Iraqi refugee population. This trend is expected to reach pandemic proportions in

the coming years.<sup>15–17</sup> According to an independent national survey of 1200 Iraqi households in Jordan, 36% of Iraqi refugees have a chronic disorder; 20% have hypertension, 19% have musculoskeletal conditions and 9% have diabetes mellitus.<sup>18</sup> In a study of resettled Iraqi refugees in California by the Centers for Disease Control and Prevention, the prevalence of obesity (body mass index  $\geq 30$  kg/m<sup>2</sup>) among refugees (25%) approximated the prevalence seen in the United States population. Hypertension occurred in 15% of Iraqi refugees overall and in 64% of refugees 65 years of age or older.<sup>19</sup> Tobacco use, obesity, physical inactivity and non-adherence to medication could also be high in Iraqi refugees but were simply not captured by the RAIS.

Our study is not intended to be an economic analysis. Nonetheless, it provides insight into the smouldering financial crisis related to chronic disease management in refugees. More than 5000 Iraqi refugees received UNHCR cash assistance among the 7642 refugees in this study, a sign that they are dependent on humanitarian aid for daily living. Chronic disease increases refugees' daily expenses and can generate new costs related to things such as assistance in performing the activities of daily living, gait aids or transportation assistance. The care of chronic diseases is financially unsustainable for NGOs and supranational organizations in the longer term. In Jordan, an estimated 63 million United States dollars (US\$)



Table 2. Most common acute and chronic conditions among Iraqi refugees in Jordan, by sex, 2010

Condition	No.	Average no. of visits per refugee	Condition	No.	Average no. of visits per refugee
<b>Chronic, males</b>			<b>Acute, males</b>		
Essential hypertension	789	1.26	Acute upper respiratory infections of multiple and unspecified sites	431	1.18
Visual disturbances	467	1.27	Diarrhoea and gastroenteritis of presumed infectious origin	98	1.12
Type II diabetes mellitus	404	1.26	Acute tonsillitis	96	1.05
Other joint disorders, not classified elsewhere	321	1.26	Suppurative and unspecified otitis media	93	1.25
Disorders of lipoprotein metabolism and other lipidemias	319	1.23	Allergic contact dermatitis	88	1.33
Chronic ischaemic heart disease	313	1.28	Other disorders of the urinary system	83	1.24
Dorsalgia	171	1.24	Unspecified renal colic	79	1.32
Type I diabetes mellitus	155	1.25	Acute sinusitis	72	1.11
Asthma	128	1.21	Abdominal and pelvic pain	72	1.16
Hyperplasia of the prostate	142	1.37	Angina pectoris	62	1.35
<b>Chronic, females</b>			<b>Acute, females</b>		
Essential hypertension	887	1.21	Acute upper respiratory infections of multiple and unspecified sites	385	1.15
Visual disturbances	436	1.23	Supervision of normal pregnancy	275	1.21
Other joint disorders, not classified elsewhere	432	1.30	Other disorders of the urinary system	121	1.18
Type II diabetes mellitus	414	1.23	Abdominal and pelvic pain	113	1.18
Disorders of lipoprotein metabolism and other lipidemias	392	1.20	Diarrhoea and gastroenteritis of presumed infectious origin	101	1.16
Chronic ischaemic heart disease	219	1.24	Allergic contact dermatitis	97	1.15
Osteoporosis without fracture	209	1.20	Suppurative and unspecified otitis media	95	1.15
Other form of hypothyroidism	183	1.14	Acute tonsillitis	86	1.05
Type I diabetes mellitus	165	1.27	Viral conjunctivitis	73	1.07
Other disorders of the urinary system	156	1.18	Rash and other nonspecific skin eruption	61	1.18

were spent on refugee health care, predominantly for Iraqis, in 2010.<sup>9</sup> Tertiary health care costs US\$ 6000 to 20 000 per refugee, and a budget deficit led to the suspension of UNHCR medical aid to 600 Iraqi refugee families in 2009.<sup>20</sup> Urgent and responsive refugee health care for infectious disease outbreaks has been considered within the context of a human rights approach to health. Aid for the management of chronic diseases and subclinical health problems and for the control of preventable chronic illnesses requires a similar discussion.

This study benefited from a large country-wide sample that received data actively over the course of one year. The RAIS is expanding its scope to asylum seekers and refugees of many different backgrounds in the Middle East and northern Africa and it generates useful, new information on the use of health services by refugees. These data do not

come from self-reports or surveys, but rather, they represent actual procedures, medical visits and diagnoses made by physicians. Although more than 3.5 million Iraqi refugees are recognized by the UNHCR<sup>2</sup> there are very few published reports on the health status of Iraqi refugees and asylum seekers. Those that have been published include a small number of refugees and have usually been about refugees in countries of resettlement. In contrast, full demographic information is reported to the UNHCR, which allows for subgroup analyses. Although some diagnoses are written as “unspecified” or “other,” an ICD-10 code is given for each clinical presentation, as is commonly found in high-income country data sets.

This study has several limitations. The RAIS provides data from refugees who seek humanitarian assistance and health care but reports on only 21% of Iraqi refugees in Jordan. Refugees able

to purchase private inpatient and outpatient care are not normally reported to the RAIS. Refugees in the RAIS may be systematically poorer than refugees who do not seek UNHCR assistance, and healthy refugees may not access the UNHCR at all. On the other hand, some Iraqis may have been too ill or too poor to leave Iraq (personal communication, G Burnham, Johns Hopkins University). Thus, health care needs among refugee Iraqis are probably higher than reported here. Furthermore, this study should not be considered a burden of disease analysis since many diseases, such as dyslipidemias and diabetes, may have gone undetected. No comparable data exist from earlier stages of the refugee crisis or for the Iraqi population that remained in Iraq. The majority of Iraqi refugees in Jordan are assumed to have arrived in the region since 2003, but the UNHCR has been present in

Iraq since the 1980s. A small number of Iraqi refugees may have lived in Jordan even before the 2003 war.<sup>21</sup> We had no systematic way to observe or quantify data entry errors, since individual-level data came from more than 100 centres and our analysis was retrospective.

More than nine years after the Iraq war, large numbers of Iraqis continue to seek resettlement worldwide.<sup>22</sup> Iraqi refugees would find themselves in a more difficult situation were it not for

the Jordanian health system and its refugee support.<sup>18</sup> These preliminary data provide a strong impetus to strengthen the primary-health-care system in Jordan and to provide these refugees with access to basic diagnostic tests and treatments. ■

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**Competing interests:** None declared.

## ملخص

**الظروف الطبية للاجئين العراقيين في الأردن: بيانات من نظام الأمم المتحدة لمعلومات مساعدة اللاجئين**  
الغرض تحديد نطاق وعبء استخدام الخدمات الصحية بين اللاجئين العراقيين الذين يتلقون مساعدة صحية في الأردن، بلد اللجوء الأول. الطريقة تم إخضاع الظروف الطبية، التي تم تشخيصها وفقاً للمراجعة العاشرة لتصنيف الدولي للأمراض، للمراقبة بشكل نشط في الفترة من 1 كانون الثاني/يناير إلى 31 كانون الأول/ديسمبر 2010 باستخدام قاعدة بيانات مركزية تجريبية في الأردن تسمى نظام معلومات مساعدات اللاجئين. النتائج قام 7642 لاجئاً عراقياً بإجراء 27166 زيارة طبية (متوسط العمر: 37.4 عاماً؛ 49٪ ذكور؛ 70٪ من بغداد؛ 6٪ معاقين؛ 3٪ لديهم تاريخ من التعذيب). وكانت الأمراض المزمنة شائعة، بما في ذلك ضغط الدم المرتفع الأساسي (22٪ من اللاجئين) والاضطرابات البصرية (12٪) واضطرابات المفاصل (11٪) ومرض السكري غير المعتمد على الأنسولين (11٪). وكان

## 摘要

### 在约旦的伊拉克难民的医疗条件:来自联合国难民援助信息系统的数据

目的 确定在第一庇护国约旦接受卫生援助的伊拉克难民卫生服务利用的范围和负担。

方法 从2010年1月1日到12月31日,使用在约旦的名为“难民援助信息系统”的试点集中式数据库主动监测按照国际疾病分类第十版诊断的医疗条件。

结果 有7642名伊拉克难民(平均年龄:37.4岁;49%为男性;70%来自巴格达;6%为残疾人;3%有受折磨史)就诊27166次。慢性疾病很常见,包括高血压(22%难民)、视力障碍(12%)、关节炎(11%)和非胰岛素依赖型糖尿病(11%)。就医的最常见的原因是上呼吸道感染(11%)、正常妊娠妇

女的监管(4%)和泌尿功能失调(3%)。每名难民需要看病次数最多的病况是脑血管疾病(1.46人次)、老年性白内障(1.46)和青光眼(1.44)。举办的医护工作包括31747例专科转诊或会诊和18432次药物配方、2307项实验室研究和1090次X射线。一般最需要的专科是眼科、口腔科、妇科和整形外科。

结论 在第一庇护和安置国的伊拉克难民需要有针对性的健康服务、健康教育和主要慢性疾病可持续的预防和控制战略。

## Résumé

### Pathologies des réfugiés irakiens en Jordanie: données du Système d'Information Sanitaire des réfugiés des Nations Unies

**Objectif** Déterminer l'étendue et le degré d'utilisation des services de santé parmi les réfugiés irakiens recevant une aide sanitaire en Jordanie, pays de premier asile.

**Méthodes** Les pathologies, diagnostiquées en conformité avec la dixième révision de la classification internationale des maladies, ont été étroitement surveillées du 1<sup>er</sup> janvier au 31 décembre 2010 via une base de données pilote centralisée en Jordanie, appelée Système d'Information Sanitaire.

**Résultats** 27 166 visites médicales ont été effectuées par 7642 réfugiés irakiens (âge moyen: 37,4 ans; 49% d'hommes; 70% originaires de

Bagdad; 6% de personnes handicapées; 3% avec un passé de torture). Les maladies chroniques étaient fréquentes, incluant l'hypertension artérielle essentielle (22% des réfugiés), les troubles de la vue (12%), les pathologies articulaires (11%) et le diabète sucré non-insulinodépendant (11%). Les motifs les plus courants de demande de soins étaient les infections des voies respiratoires supérieures (11%), le suivi d'une grossesse normale (4%) et des troubles urinaires (3%). Les affections nécessitant le plus grand nombre de visites par réfugié étaient les maladies vasculaires cérébrales (1,46 visites), la cataracte sénile (1,46) et le glaucome (1,44). Les soins pourvus incluaient 31 747 cas référés ou

consultations spécialisées et 18 432 délivrances de médicaments, 2307 analyses de laboratoire et 1090 radiographies. Les spécialités les plus fréquemment requises étaient la chirurgie ophtalmique, la dentisterie, la gynécologie et la chirurgie orthopédique.

**Conclusion** Les réfugiés irakiens dans les pays de premier asile et de relocalisation nécessitent des soins de santé ciblés, une éducation sanitaire et préventive durable et des stratégies de contrôle des maladies, principalement chroniques.

## Резюме

### Состояние здоровья иракских беженцев, находящихся в Иордании: данные информационной системы данных США о помощи беженцам.

**Цель** Определить спектр и объем медицинских услуг, оказываемых иракским беженцам в Иордании – стране, которая первой предоставила им убежище.

**Методы** С помощью пилотной централизованной базы данных Иордании, под названием «Информационная система данных о помощи беженцам» в период с 1 января по 31 декабря 2010 г. проводился активный мониторинг состояния здоровья беженцев, диагностированного согласно 10-й редакции Международной классификации болезней.

**Результаты** За медицинской помощью 27166 раз обращалось 7642 иракских беженца (средний возраст: 37,4 лет; 49% мужчин; 70% из Багдада; 6% человек с физическими недостатками; 3% с признаками перенесенных пыток). В подавляющем большинстве встречались хронические заболевания, включая первичную артериальную гипертензию (у 22% беженцев), нарушения зрения (12%), проблемы с суставами (11%), а также инсулиннезависимый сахарный диабет (11%). В большинстве случаев за медицинской помощью обращались в случаях инфекций верхних дыхательных

путей (11%), для наблюдения при нормальной беременности (4%) и при нарушениях со стороны мочевыводящих путей (3%). Проблемы со здоровьем, требующие максимального количества визитов на 1 беженца, были следующими: цереброваскулярные заболевания (1,46 визитов), возрастная катаракта (1,46) и глаукома (1,44). Финансированная помощь включает в себя 31747 направлений или консультаций в специализированной службе, 18432 случая отпуска лекарств, 2307 лабораторных исследований, и 1090 случаев применения рентгеновского анализа. Наиболее востребованными были врачи специализации в следующих областях медицины: офтальмология, стоматология, гинекология, и ортопедическая хирургия.

**Вывод** Иракские беженцы в странах, которые первыми предоставили убежище, нуждаются в специализированной медицинской помощи, санитарном просвещении, а также эффективной профилактике и методах контроля преимущественно хронических заболеваний.

## Resumen

### Condiciones médicas de los refugiados iraquíes en Jordania: datos del Sistema de información de Naciones Unidas de asistencia al refugiado

**Objetivo** Determinar la variedad y la carga de los servicios sanitarios utilizados entre los refugiados iraquíes que reciben asistencia sanitaria en Jordania, un país de primer asilo.

**Métodos** Entre el 1 de enero y el 31 de diciembre de 2010 se aplicó un control activo de los problemas de salud diagnosticados de acuerdo con la décima revisión de la Clasificación Internacional de Enfermedades, utilizando una base de datos preliminar centralizada en Jordania y denominada «Sistema de información de asistencia al refugiado».

**Resultados** Se realizaron 27 166 visitas médicas a 7642 refugiados iraquíes (edad media: 37,4 años; 49% hombres; 70% de Bagdad; 6% discapacitados; 3% con un historial de tortura). Las enfermedades crónicas fueron frecuentes, incluyendo la hipertensión idiopática (22% de refugiados), trastornos visuales (12%), trastornos articulares (11%) y diabetes mellitus no dependiente de la insulina (11%). Las razones

más comunes para la solicitud de asistencia fueron la infección del tracto respiratorio superior (11%), supervisión de embarazo normal (4%) y trastornos urinarios (3%). Las afecciones que requirieron un mayor número de visitas por refugiado fueron las enfermedades cerebrovasculares (1,46 visitas), catarata senil (1,46) y glaucoma (1,44). La asistencia patrocinada incluyó 31 747 remisiones o consultas a un servicio especializado y 18 432 dispensaciones de fármacos, 2307 estudios de laboratorio y 1090 placas de rayos X. Las especialidades más solicitadas fueron oftalmología, odontología, ginecología y cirugía ortopédica.

**Conclusión** Los refugiados europeos en países de primer asilo y reasentamiento requieren servicios sanitarios, educación sanitaria, prevención sostenible y estrategias de control específicos para, predominantemente, enfermedades crónicas.

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