

A Preliminary Description of Medical Complaints and Medication Consumption among 375 Syrian Refugees Residing in North Jordan

Omar Salem Gammoh^{1*}

¹ PhD, Pharmacological Sciences, Assistant Professor of Pharmacology, Department of Pharmacy, Faculty of Health Sciences, American University of Madaba, Jordan.

ABSTRACT

Syrians are fleeing to nearby countries as a result of civil war. In Jordan, they mainly reside in the northern districts. Little is known about their general health status. This study aimed to describe medical complaints and medication consumption in a Syrian refugee population residing in north Jordan. This is a cross-sectional retrospective chart review study for a group of Syrian refugees. Medical charts of 375 refugees attending primary health care clinics were analysed for symptoms, diagnosis and dispensed medication. Almost 30% of the study sample had Pain, infectious diseases and chronic diseases. A total of 280 prescriptions were issued, consisting mainly of anti-infective, anti-inflammatory and anti-hypertensive drugs. It can be concluded that the medical complaints experienced by Syrian refugees represent a medical challenge for the host country; however, the medical complaints found were similar to other refugees' complaints worldwide.

Keywords: Syrian Refugees, Medical Complaints, Medication Consumption.

1. INTRODUCTION

Since the beginning of the Syrian conflict in 2011, civilians have been fleeing to the surrounding countries such as Lebanon, Turkey and Jordan. According to the Jordanian authorities, more than 500,000 Syrian refugees legally crossed the Jordanian borders for their lives, and the number is dramatically increasing on a daily basis. For example, in April 2012, 1500–3000 refugees crossed the Jordanian borders daily¹. The number of displaced Syrians refugees has dramatically increased from 200,000 in 2012 to more than 2 million in 2013². The overall health status of incoming Syrians is quite challenging to determine due to the deterioration of the infrastructure and health care systems in Syria as a consequence of the civil war. According to incoming reports, almost one

third of Syrian hospitals were damaged and pharmaceutical industries halted³. Regarding the Syrian refugee population in Jordan, it is estimated that 30% are settled in Al-Za'tari camp and that the vast majority lives in urban areas of the northern districts of Jordan⁴. Syrian refugees in Jordan suffer from psychiatric and physical health problems that represent a burden on the host country⁵. Al-Za'tari camp provides health care services and close medical supervision to prevent disease outbreaks through several hospitals operating through non-governmental organisations (NGOs) such as the WHO, UNICEF, and the UNHCR. However, little is known about health care services provided for Syrians in urban areas in north Jordan. The recent conflict is further straining Jordan's limited resources for providing shelter, education, infrastructure and proper health care for these unexpected guests, mainly women and children. Although NGOs accompanied by the Jordanian Ministry of Health (MOH) are working in synergy to provide health and humanitarian aid to these communities, little

* o.gammouh@aum.edu.jo

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data are available regarding the prevalence of different diseases and the medication consumption of different age groups among Syrian refugees in Jordanian urban areas, particularly in the northern district. The study tried to answer the question: What were the chief medical complaints and what were the most consumed medications among a group of Syrian refugees who attending free medical days in north Jordan.

METHODS

Study Setting and Design:

This is a retrospective medical chart review study of refugees who attended a primary care centre organised for charity purposes for three days by the ACCTS in collaboration with the American Physicians of Southwest Washington Medical Center and Family Medicine of Albemarle. The ACCTS's higher management approved the study and submitted the medical charts to the author.

According to ACTTS, for every patient attending the clinic from the 2nd until the 5th of November 2013, a medical chart was filled in by American nurses. Since they do not speak Arabic, nurses were helped by interpreters. The medical charts included information about a patient's age, gender, medical history and chief complaint. As part of the routine test, blood pressure and random blood glucose level were measured. After completing a visit, physicians wrote the patient's diagnosis and prescribed the necessary medications on the same file. Diagnoses were determined by three well-trained general practitioners from Southwest Washington Medical Center and Family Medicine of Albemarle.

From the 560 files collected from ACTTS, the medical charts of local Jordanians who attended were excluded. Moreover, charts with incomplete data or hard-to-interpret information were excluded by the author. The number of analysed charts was 375.

Sample size was calculated based on a confidence level of 95%, confidence interval of 5%, and an estimated population size of 1 million. The results indicated the need for including 385 participants. The difference was considered minor.

When the files were collected after the free medical days, the diagnosed diseases were classified into eight categories according to the International Classification of Diseases (ICD-10), with slight modifications. The ICD-10 is a widely used tool in disease classification in similar studies^{5,6,7,8}.

Diseases were classified as follows: diseases of the musculoskeletal system, diseases of the respiratory system, mental disorders, skin diseases, injuries, infectious diseases, parasitic diseases, cardiovascular diseases and gastrointestinal diseases. Rare cases that were not diagnosed were referred to specialists and classified as "unknown diagnosis". Drug prescriptions were recorded and analysed qualitatively according to their therapeutic use and quantitatively according to the number of medications dispensed per prescription.

Data Analysis:

Data entry and statistical analysis were done with SPSS v20 software. Basic descriptive statistics were used to characterise age groups and gender outcomes. Cross-tabulation was performed to analyse age groups, diseases and medication categories and their percentages. To study the association between chronic diseases and the number of medications consumed, a multiple regression analysis with an odds ratio (OR) was performed. *P*-values lower than 0.05 were considered statistically significant.

RESULTS

Demographic Data:

Data were collected and analysed from 375 refugees. Most refugees recruited were aged between 0 and 10 years (*n* = 123, 33%) and female (*n* = 213, 56.8%). All age and gender distributions of the study population are provided in Figure 1.

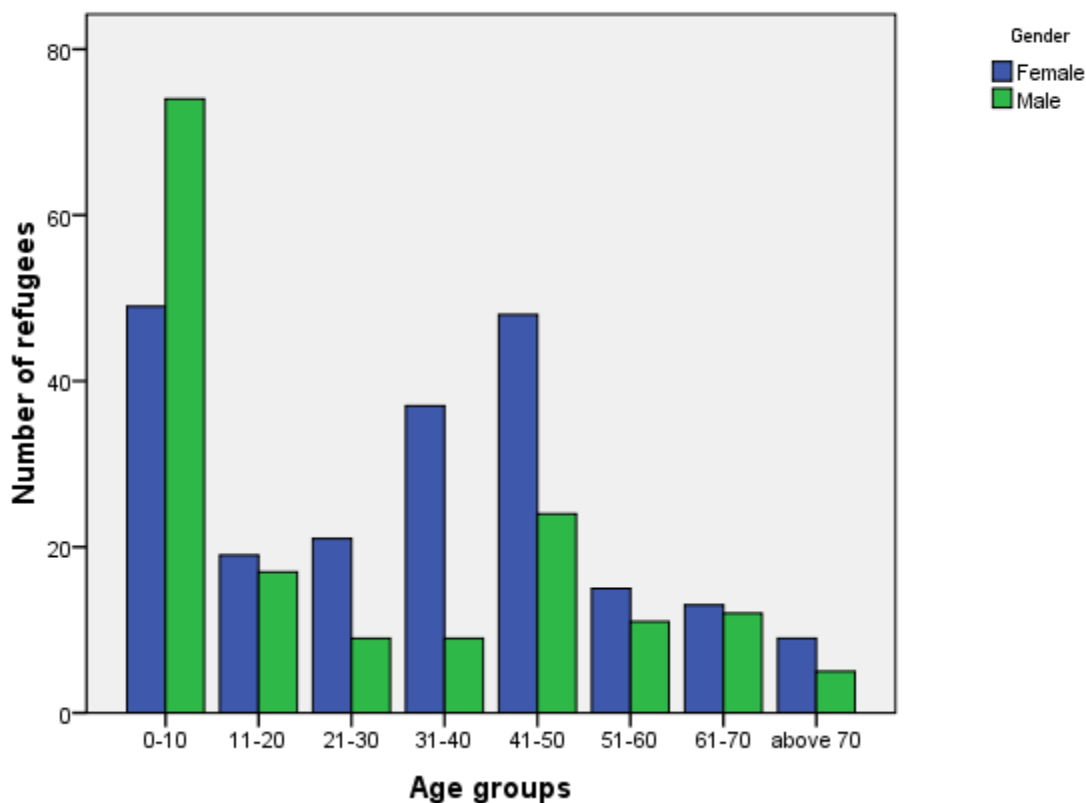
Medical Complaints:

Patients' medical complaints were as follows: pain (*n* = 116, 31.5%) independent of gender, cough (*n* = 53, 14%), sore throat (*n* = 41, 10.9%), gastrointestinal symptoms (*n* = 37, 9.9%), shortness of breath (*n* = 29,

7.7%), skin rash (n=25,6.7%), fever (n=14, 3.7%), dizziness (n = 10, 2.7%), general weakness (n = 8, 2.1%),

anxiety symptoms (n = 5, 1.3%), dental problems (n = 5, 1.3%) and vision problems (n = 5, 1.35%).

Figure 1: Age groups and gender distribution in the study population



Diagnosed Diseases according to the ICD-10:

Diseases were classified according to the ICD-10, with slight modifications. Infectious diseases were the most common (n=115, 30.7%), followed by cardiovascular diseases (n=62, 16.2%), musculoskeletal diseases (n=57, 15.2%), gastrointestinal diseases (n=45, 12%), respiratory diseases (n=38, 10.1%), skin diseases (n=25, 6.7%) and unknown diseases (n=10, 2.7%).

Chronic Diseases:

Chronic diseases were present in the study sample (n=113, 30%) Of importance, among refugees with chronic diseases, hypertension was present (n=56, 14.9%), independent of gender. Males had a higher likelihood of

developing chronic diseases (CDs) compared to females (OR=1.36, p<0.05). We report the presence of one hepatitis B viral (HBV) case in our study population.

Medications Dispensed:

A total of 281 prescription were dispensed. Although no difference in medication consumption was recognised between genders in the whole cohort (p>0.05), age stratification revealed that females of the age group 21–30 years received more medications compared to age matched males (p<0.01). Quantitatively, 52% of total prescriptions contained one medication, 32% contained two medications and 16% contained three or more medications. More females above 40 years consumed

more than two medications compared to age matched males ($p < 0.007$). Refugees with CDs were two times more likely to receive monotherapy (OR 2.24, $p < 0.05$) and three times more likely to receive two or more medications compared to refugees without CDs (OR 3.2, $p < 0.003$). Moreover, refugees above 40 years, regardless of CDs, were more likely to receive two or more medications compared to refugees aged below 40 years (OR 2.89, $p < 0.001$).

Medications dispensed were also analysed qualitatively according to their therapeutic use. According to our findings, NSAIDs, anti-infective drugs and anti-hypertensive drugs were the most dispensed medications representing 20%, 19% and 11% of prescriptions, respectively.

Analgesics were the most consumed medications by participants aged 21–50 years. According to prescriptions, the most prescribed NSAIDs were acetaminophen, ibuprofen and diclofenac. Analgesics were mainly used in adults to relieve pain such as headache, back pain and musculoskeletal pain. Also, they were prescribed as antipyretics in combination with antibiotics for children.

Anti-infective drugs came second with 19% of total prescriptions. This therapeutic class occupied 33% of total prescriptions of the age group 0–10 years and 25% of total prescriptions of the age group 11–20 years. The vast majority of anti-infective prescriptions consisted of oral antibiotics, namely amoxicillin to treat upper respiratory tract infections (URTIs).

The third most used medications were anti-hypertensive agents, occupying 11% of total prescriptions. Moreover, 18% of the 41–50 years age group, 42% of the 51–60 years age group and 36% of the 61–70 years age group used this class of drug. The distribution of the most dispensed medications is broken down by age group in Table 1.

DISCUSSION

The predominant complaint made by patients was pain. Commonly found pain types were neck pain, lower

back pain, headache, musculoskeletal disorders, or, according to patients, “whole body pain”. Pain is regularly experienced by refugees^{7,9}. Possible causes may include lack of comfortable sleeping conditions or an uncomfortable lifestyle i.e. exhaustive manual work, malnutrition or stress^{10,11}.

Other featured complaints were cough and sore throat. Taking into consideration that these symptoms were recorded mainly in children below 10 years in a winter season where respiratory symptoms normally prevail, our findings seem to be lower than in similar studies demonstrating higher rates of respiratory symptoms; for instance, data from three refugee camps in Sri Lanka¹² revealed high prevalence of respiratory symptoms such as cough and sputum. It can be suggested that respiratory symptoms reflect current URTIs that could be mostly of viral origin. Influential factors for respiratory distress include age, immune status, winter and living in crowded refugee camps, and all are predisposing factors for development of respiratory tract diseases^{4,12,13}.

The most frequent diagnosis in the cohort studied was infectious diseases, mainly URTIs, which were found in more than one third of the population and half of the children below 10 years. These findings are relatively high compared to those of similar studies; for example, a study conducted on Iraqi refugees in Jordan and Albanian refugees in Italy reported low prevalence rates of URTIs^{14,15}. The high prevalence of infectious diseases can be explained mainly by the large vulnerable age group (0–10 years), the seasonal influenza viruses that peak between November and February¹⁶, the low hygiene standards, unpleasant living conditions and malnutrition^{10,17}. The rate of use of anti-infective agents was similar to the rate in other similar studies¹².

Obviously, the burden of infectious diseases in refugees globally lies in the prevalence of certain serious infections associated with high mortality such as hepatitis B, HIV, malaria and tuberculosis (TB).^{18,19,20} In this context, it is worth noticing that the WHO, UNICEF, the UNHCR and the MOH carried out routine vaccination campaigns and screening for serious contagious diseases. For example, 90,000 refugees were immunised against

measles ¹. These collaborative efforts minimise disease outbreaks as in high-income countries where post-arrival screening measures are routinely conducted ²¹.

Table 1. Disease classification according to the (ICD-10) among different age groups

| Disease Classification | | Age groups | | | | | | | | Total |
|---------------------------|--------------------|------------|--------|-------|-------|-------|-------|-------|----------|--------|
| | | 0-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | above 70 | |
| Unknown diagnosis | Number | 2 | 4 | 2 | 0 | 1 | 0 | 1 | 0 | 10 |
| | % within Diagnosis | 20.0% | 40.0% | 20.0% | .0% | 10.0% | .0% | 10.0% | .0% | 100.0% |
| Musculoskeletal disorders | Number | 5 | 6 | 8 | 12 | 15 | 2 | 4 | 5 | 57 |
| | % within Diagnosis | 8.8% | 10.5% | 14.0% | 21.1% | 26.3% | 3.5% | 7.0% | 8.8% | 100.0% |
| Respiratory diseases | Number | 18 | 4 | 2 | 6 | 4 | 2 | 0 | 2 | 38 |
| | % within Diagnosis | 47.4% | 10.5% | 5.3% | 15.8% | 10.5% | 5.3% | .0% | 5.3% | 100.0% |
| Mental diseases | Number | 2 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 6 |
| | % within Diagnosis | 33.3% | .0% | 33.3% | .0% | 16.7% | .0% | .0% | 16.7% | 100.0% |
| Skin diseases | Number | 15 | 2 | 3 | 0 | 3 | 1 | 0 | 1 | 25 |
| | % within Diagnosis | 60.0% | 8.0% | 12.0% | .0% | 12.0% | 4.0% | .0% | 4.0% | 100.0% |
| Injuries | Number | 3 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 5 |
| | % within Diagnosis | 60.0% | .0% | .0% | .0% | 20.0% | 20.0% | .0% | .0% | 100.0% |
| Infectious diseases | Number | 65 | 16 | 4 | 10 | 13 | 2 | 4 | 0 | 114 |
| | % within Diagnosis | 57.0% | 14.0% | 3.5% | 8.8% | 11.4% | 1.8% | 3.5% | .0% | 100.0% |
| Cardiovascular diseases | Number | 0 | 0 | 2 | 5 | 25 | 16 | 11 | 3 | 62 |
| | % within Diagnosis | .0% | .0% | 3.2% | 8.1% | 40.3% | 25.8% | 17.7% | 4.8% | 100.0% |
| Gastrointestinal diseases | Number | 8 | 1 | 6 | 12 | 9 | 2 | 5 | 1 | 44 |
| | % within Diagnosis | 18.2% | 2.3% | 13.6% | 27.3% | 20.5% | 4.5% | 11.4% | 2.3% | 100.0% |
| Menstrual period | Number | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | % within Diagnosis | .0% | 100.0% | .0% | .0% | .0% | .0% | .0% | .0% | 100.0% |
| Total | Number | 121 | 34 | 29 | 46 | 72 | 26 | 25 | 13 | 366 |
| | % within Diagnosis | 33.1% | 9.3% | 7.9% | 12.6% | 19.7% | 7.1% | 6.8% | 3.6% | 100.0% |

Chronic diseases were recorded in subjects older than 40 years. It is well established that CDs contribute to refugee mortality even in high-income countries²². The most-recorded CDs in our study population were HTN, DM, asthma and COPD.

Hypertension is a widely spread CD worldwide. Indeed HTN is known to be induced by chronic activation of the adrenergic system that triggers Renin-Angiotensin-Aldosterone System (RAAS). Stressful conditions may stimulate the adrenergic system to cause HTN. Psychologically stressing factors are not only present during migration, however, they persist post-migration. To study whether post-migration stressors increased HTN prevalence in Syrians or not, HTN prevalence in this study was compared with HTN prevalence in the normal Syrian population residing in Syria before the crisis²³. Surprisingly, the prevalence rates were close²³. However, one article showed that HTN prevalence in Syrian refugees residing in Sweden²⁴ was higher than the results of the current study. Therefore, it can be inferred that post-migration stressors did not induce HTN in Syrians residing in Jordan or that post-migration stressors in Jordan could be less grave than in other countries. Another factor of interest is that the vast majority of participants included in our study is from the south rural areas of Syria, which are supposed to have lower prevalence of CDs compared to Syrian urban areas.

The exact causes behind CDs spread in refugee populations compared to normal populations are still unclear, pre- or post-migration stressors seem to play a fundamental role in inducing CDs²². The importance of controlling CDs and their risk factors remains a medical and economic challenge²⁵. Beside drug therapy, one strategy to manage CDs is to implement social awareness campaigns in refugee communities; this includes seeking advice from health care professionals (HCPs), increasing awareness of the free medical services provided by the MOH and NGOs, and improving compliance to medications and avoiding risk factors that may exacerbate refugees' conditions. This could be an applicable and potential approach, since there are no cultural or linguistic barriers exist between refugees and HCPs²⁶.

The drug classes used by refugees were analgesics, anti-infective agents and anti-hypertensive drugs.

In similar studies, analgesics were highly consumed by refugees²⁷ to treat various types of pain. In our study, the vast majority of analgesics were consumed by the age group 21–50 years to treat tension headache, joint pain, neck and back pain and other musculoskeletal pain.

Anti-infective drugs (prominently antibiotics) were consumed markedly. Oral suspensions were frequently used to treat URIs, including pharyngitis, tonsillitis and acute otitis media in children below 10 years. Unlike in western countries, antibiotics are easily accessible medications in Jordan; this will facilitate bacterial resistance in future, especially in refugee communities, where bad hygiene practices and crowded residences augment the incidence of infectious diseases. This will certainly lead to dangerous complications in Jordanian society as well as Syrian refugee populations.

Study limitations and future prospective study:

The study contained some limitations. For instance, demographic data were not comprehensive; for example, refugees' socioeconomic conditions, duration of stay in Jordan and educational levels were not covered. Due to financial limitations, infectious disease diagnoses were conducted by physicians mainly via physical examination and clinical symptoms reported, no sputum swabs were obtained from and no laboratory analysis was made for candidates. Also, the study did not focus on the mental health and food security status of refugees. Furthermore the study sample was limited. After characterisation of refugees' physical health, one future prospective study could conduct a multi-centre investigation to evaluate refugees' mental health status such as depression and post-traumatic stress disorder.

CONCLUSION

It can be concluded that the medical challenges experienced by the Syrian refugees are quite challenging since they have an impact of the quality of life, well being and are associated with morbidity and mortality in

particular chronic diseases. At the same time these medical complaints were found to be similar with other refugee populations worldwide. Efforts of HCP via

awareness and medication supplies are crucial to reduce medical complaints in fragile population.

REFERENCES

- (1) Gavlak, D. Syrians flee violence and disrupted health services to Jordan. *Bulletin of the World Health Organization*, 2013; 91 (6): 394-5. doi: 10.2471/BLT.13.020613.
- (2) Davis, R., & Taylor, A. Syrian refugees in Jordan and Lebanon: a snapshot from summer 2013; 1-24.
- (3) Burki, T. Infectious diseases in Malian and Syrian conflicts. *The Lancet Infectious Diseases*, 2013; 13 (4): 296-297. doi: 10.1016/S1473-3099(13)70089-6.
- (4) Murshidi, M. M., Hijjawi, M. Q. B., Jeriesat, S., & Eltom, A. Syrian refugees and Jordan's health sector. *Lancet*, 2013; 382 (9888), 206-7. doi: 10.1016/S0140-6736(13)61506-8.
- (5) McKenzie ED, Spiegel P, Khalifa A, Mateen FJ. Neuropsychiatric disorders among Syrian and Iraqi refugees in Jordan: a retrospective cohort study 2012-2013. *Confl Health*. 2015; 29; 9:10.
- (6) Bischoff, A., & Denhaerynck, K. What do language barriers cost? An exploratory study among asylum seekers in Switzerland. *BMC Health Services Research*, 2010; 10, 248. doi: 10.1186/1472-6963-10-248.
- (7) Norredam, M., Olsbjerg, M., Petersen, J. H., Laursen, B., & Krasnik, A. Are there differences in injury mortality among refugees and immigrants compared with native-born? *Injury Prevention: Journal of the International Society for Child and Adolescent Injury Prevention*, 2013; 19 (2): 100-5. doi: 10.1136/injuryprev-2012-040336.
- (8) Bischoff, A., Schneider, M., Denhaerynck, K., & Battegay, E. Health and ill health of asylum seekers in Switzerland: an epidemiological study. *European Journal of Public Health*, 2009; 19 (1): 59-64. doi: 10.1093/eurpub/ckn113.
- (9) Warfa, N., Curtis, S., Watters, C., Carswell, K., Ingleby, D., & Bhui, K.. Migration experiences, employment status and psychological distress among Somali immigrants: a mixed-method international study. *BMC Public Health*, 2012; 12: 749. doi: 10.1186/1471-2458-12-749.
- (10) Jamil, H., Hakim-Larson, J., Farrag, M., Kafaji, T., Jamil, L. H., & Hammad, A. Medical complaints among Iraqi American refugees with mental disorders. *Journal of Immigrant Health*, 2005; 7 (3): 145-52. doi: 10.1007/s10903-005-3671-z.
- (11) Polonsky, J. A., Ronsse, A., Ciglenecki, I., Rull, M., & Porten, K. High levels of mortality, malnutrition, and measles, among recently-displaced Somali refugees in Dagahaley camp, Dadaab refugee camp complex, Kenya, 2011. *Conflict and Health*, 2013; 7 (1): 1. doi: 10.1186/1752-1505-7-1.
- (12) Sheikh, M., Pal, A., Wang, S., MacIntyre, C. R., Wood, N. J., Isaacs, D., Gunasekera, H., et al. The epidemiology of health conditions of newly arrived refugee children: a review of patients attending a specialist health clinic in Sydney. *Journal of Paediatrics and Child Health*, 2009; 45 (9): 509-13. doi: 10.1111/j.1440-1754.2009.01550.
- (13) Watanabe, H., Batuwanthudawe, R., Thevanesam, V., Kaji, C., Qin, L., Nishikiori, N., Saito, W., et al. Possible Prevalence and transmission of acute respiratory tract infections caused by Streptococcus pneumoniae and Haemophilus influenzae among the internally displaced persons in tsunami disaster evacuation camps of Sri Lanka. *Internal Medicine*, 2007; 46 (17): 1395-1402. doi: 10.2169/internalmedicine.46.0149.
- (14) Turner, C., Turner, P., Cararra, V., Eh Lwe, N., Watthanaworawit, W., Day, N. P., White, N. J., et al. (. A high burden of respiratory syncytial virus associated pneumonia in children less than two years of age in a South East Asian refugee population. *PLoS One*, 2012; 7 (11): e50100. doi:10.1371/journal.pone.0050100.

- (15) Mateen, F. J., Carone, M., Al-Saedy, H., Nyce, S., Ghosn, J., Mutuerandu, T., & Black, R. E. Medical conditions among Iraqi refugees in Jordan: data from the United Nations Refugee Assistance Information System. *Bulletin of the World Health Organization*, 2012; 90 (6): 444-51. doi: 10.2471/BLT.11.097048.
- (16) Sañé Schepisi, M., Gualano, G., Fellus, C., Bevilacqua, N., Vecchi, M., Piselli, P., Battagin, G. et al. Tuberculosis case finding based on symptom screening among immigrants, refugees and asylum seekers in Rome. *BMC Public Health*, 2013; 13 (1), 872. doi: 10.1186/1471-2458-13-872.
- (17) Ahmed, J. A., Katz, M. A., Auko, E., Njenga, M. K., Weinberg, M., Kapella, B. K., Burke, H., et al. Epidemiology of respiratory viral infections in two long-term refugee camps in Kenya, 2007–2010. *BMC Infectious Diseases*, 2012; 12 (1): 7. doi: 10.1186/1471-2334-12-7.
- (18) Connolly, M. A., Gayer, M., Ryan, M. J., Salama, P., Spiegel, P., & Heymann, D. L.. Communicable diseases in complex emergencies: impact and challenges. *Lancet*, 2004; 364 (9449): 1974-83. doi: 10.1016/S0140-6736(04)17481-3.
- (19) Chai, S. J., Davies-Cole, J., & Cookson, S. T. Infectious disease burden and vaccination needs among asylees versus refugees, District of Columbia. *Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America*, 2013; 56 (5): 652-8. doi: 10.1093/cid/cis927
- (20) Chaves, N. J., Gibney, K. B., Leder, K., O'Brien, D. P., Marshall, C., & Biggs, B. A.. Screening practices for infectious diseases among Burmese refugees in Australia. *Emerging Infectious Diseases*, 2009; 15 (11): 1769–72. doi: 10.3201/eid1511.090777
- (21) Feikin, D. R., Adazu, K., Obor, D., Ogwang, S., Vulule, J., Hamel, M. J., & Laserson, K. Mortality and health among internally displaced persons in western Kenya following post-election violence, 2008: novel use of demographic surveillance. *Bulletin of the World Health Organization*, 2010; 88 (8): 601-8. doi: 10.2471/BLT.09.069732
- (22) Paxton, G. A., Sangster, K. J., Maxwell, E. L., McBride, C. R. J., & Drewe, R. H. Post-arrival health screening in Karen refugees in Australia. *PLoS One*, 2012; 7 (5): e38194. doi:10.1371/journal.pone.0038194
- (23) Hollander, A. C., Bruce, D., Ekberg, J., Burström, B., Borrell, C., & Ekblad, S. Longitudinal study of mortality among refugees in Sweden. *International Journal of Epidemiology*, 2012; 41 (4): 1153-61. doi: 10.1093/ije/dys072
- (24) Barakat, H., Barakat, H., & Baaj, M. K. CVD and obesity in transitional Syria: a perspective from the Middle East. *Vascular Health and Risk Management*, 2012; 8: 145-50. doi: 10.2147/VHRM.S28691
- (25) Taloyan, M., Wajngot, A., Johansson, S. E., Tovi, J., & Sundquist, J. Cardiovascular risk factors in Assyrians/Syrians and native Swedes with type 2 diabetes: a population-based epidemiological study. *Cardiovascular Diabetology*, 2009; 8: 59. doi:10.1186/1475-2840-8-59
- (26) Geltman, P. L., Dookeran, N. M., Battaglia, T., & Cochran, J. Chronic disease and its risk factors among refugees and asylees in Massachusetts, 2001–2005. *Preventing Chronic Disease*, 2010; 7 (3): A51.
- (27) Eckstein, B. Primary care for refugees. *American family physician*, 2011; 83 (4): 429-36. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/21322519>
- (28) Parmentier, H., Golding, S., Ashworth, M., & Rowlands, G. Community pharmacy treatment of minor ailments in refugees. *Journal of Clinical Pharmacy and Therapeutics*, 2004; 29 (5): 465-9. doi: 10.1111/j.1365-2710.2004.00591.

وصف أولى للحالة الصحية واستعمال الأدوية لدى 375 لاجئاً سورياً مقيماً في شمال الأردن

عمر سالم قموه¹

¹ دكتوراه علم الأدوية، قسم الصيدلة، كلية العلوم الصحية، الجامعة الأمريكية في مأدبا.

ملخص

ينزح السوريون بشكل مستمر إلى البلدان المجاورة جراء الحرب الدائرة. يعد الأردن من الدول المضيفة لأعداد كبيرة من اللاجئين السوريين واللذين يقيمون في مختلف مناطق المملكة ولا سيما في الشمال. تهدف هذه الدراسة لوصف الأعراض الطبية وتحديد استعمال الأدوية لدى مجموعة من اللاجئين الذين حضروا للاستفادة من بعض الأيام الطبية المجانية في بلدة الحصن بالتعاون مع منظمات إنسانية وهيئات طبية. قام بتقديم الخدمات الطبية وفد من الأطباء الأجانب ترافقهم مجموعة من الممرضات والمترجمين المحليين. حيث قام الباحث بعد انتهاء الأيام الطبية بتجميع وتحليل 375 ملفاً لمرضى من اللاجئين المراجعين بأثر رجعي كما وتم تصنيف الأعراض المرضية والأمراض المُشخصة وتم دراسة استهلاك الأدوية الموصوفة وفقاً للفئات العمرية المختلفة.

وخلصت الدراسة إلى أن 30% من العينة تعاني من الأكم الجسدي والأمراض الالتهابية المعدية والأمراض المزمنة. أما بالنسبة للأدوية فتم صرف 280 وصفة طبية جلها من المضادات الحيوية والمسكنات وأدوية ارتفاع ضغط الدم.

ويمكن أن نخلص إلى أن الحالة الصحية التي يعاني منها اللاجئين السوريين مماثلة لحالات اللاجئين في جميع أنحاء العالم بما يمثل تحدياً طبياً للبلد المضيف.

الكلمات الدالة: اللاجئين السوريين، الأردن، الأمراض، الأدوية.