

An Analysis of the Applications Made to a Dermatology Outpatient Clinic by Syrian Migrants Under Temporary Protection: A Retrospective Cross-Sectional Study

Bir Dermatoloji Polikliniğine Geçici Koruma Kapsamındaki Suriyeli Göçmenler Tarafından Yapılan Başvuruların İncelenmesi: Retrospektif Kesitsel Bir Çalışma

¹Hanife Merve AKÇA^a, ²Kevser TUNCER KARA^b

^aDepartment of Dermatology and Venereal Diseases, Karamanoğlu Mehmetbey University Faculty of Medicine, Karaman, Türkiye

^bDepartment of Public Health, Fırat University Faculty of Medicine, Elazığ, Türkiye

ABSTRACT Objective: Globally, the number of immigrants is increasing, and they bring with them many health problems. In this study, we examined the applications of Syrian immigrants under temporary protection to a dermatology polyclinic by comparing them with those of local people. **Material and Methods:** This cross-sectional study was conducted retrospectively. Applications made to the Konya City Hospital Dermatology Polyclinic in March-May 2021 were reviewed. SPSS 22.0 software was used in the analysis of the data. Percentage and median (minimum-maximum) are given in descriptive statistics. Chi-square and Mann-Whitney U tests were used according to the characteristics of the data. A p-value <0.05 was accepted as the significance level. **Results:** The median age of the patients was 22 (1-81) years. It was determined that 85.2% of those who applied to the polyclinic were residents and 64.0% of these applications were women. When the polyclinic applications were examined, no significant difference was found between the settled population and the Syrian immigrants under temporary protection in terms of age and gender. The results showed that Syrian immigrants under temporary protection visited the dermatology polyclinic proportionately more often than residents. Dermatitis was the most common reason for the visit among Syrian immigrants under temporary protection, residents, and overall, and acne was the second most common complaint. **Conclusion:** It has been determined that immigrants have more problems in terms of dermatological diseases than the local people. Protective measures should be taken in terms of dermatological diseases, and interventions should be made to improve living conditions.

Keywords: Immigration; dermatitis; acne vulgaris; quality of life

ÖZET Amaç: Küresel anlamda göçmen sayısı giderek artmakta ve sağlık sorunlarını da beraberinde getirmektedir. Bu çalışmada, geçici koruma kapsamındaki Suriyeli göçmenlerin dermatoloji polikliniğine başvurularının yerli halk başvuruları ile kıyaslanarak incelenmesi amaçlanmıştır. **Gereç ve Yöntemler:** Bu kesitsel çalışma geriye dönük olarak yapılmıştır. Konya Şehir Hastanesi Dermatoloji Polikliniğine Mart-Mayıs 2021 tarihleri arasında yapılan başvurular incelendi. Verilerin analizinde SPSS 22.0 yazılımı kullanılmıştır. Tanımlayıcı istatistiklerde yüzde ve medyan değerleri (minimum-maksimum) verilmiştir. Verilerin karakteristik özelliklerine bağlı olarak ki-kare ve Mann-Whitney U testleri kullanıldı. Anlamlılık düzeyi olarak p değeri <0,05 kabul edildi. **Bulgular:** Hastaların ortalama yaşı 22 (1-81) idi. Polikliniğe başvuranların %85,2'sinin yerli halk olduğu ve bu başvuruların %64,0'ını kadın hastaların oluşturduğu belirlendi. Poliklinik başvuruları incelendiğinde, yerleşik nüfus ile geçici koruma kapsamındaki Suriyeli göçmenler arasında yaş ve cinsiyet açısından anlamlı bir farklılık bulunamadığı görüldü. Sonuçlar, geçici koruma kapsamındaki Suriyeli göçmenlerin, dermatoloji polikliniğine yerleşik halka göre oransal olarak daha sık başvurduklarını ortaya koymuştur. Geçici koruma kapsamında bulunan Suriyeli göçmenler, yerleşik halk ve genel olarak tüm başvurular incelendiğinde; polikliniğe en sık başvuru nedeni dermatit, 2. en yaygın başvuru sebebi ise akne olarak belirlendi. **Sonuç:** Çalışmada, göçmen hastaların yerel halka göre dermatolojik hastalıklar açısından daha fazla sorun yaşadıkları belirlenmiştir. Dermatolojik hastalıklar açısından koruyucu önlemlerin alınması ve yaşam koşullarının iyileştirilmesine yönelik müdahaleler yapılmasının önemli olduğu düşünülmektedir.

Anahtar Kelimeler: Göç; dermatit; akne vulgaris; yaşam kalitesi

Immigration on a global scale has emerged as people migrate from their places of residence to other places due to situations such as war and famine. As a

result of mixed migration movements, due to various reasons, the number of migrants globally has reached 280.6 million according to 2020 global migration in-

Correspondence: Hanife Merve AKÇA

Department of Dermatology and Venereal Diseases, Karamanoğlu Mehmetbey University Faculty of Medicine, Karaman, Türkiye

E-mail: h.merveakca@yahoo.com



Peer review under responsibility of Türkiye Klinikleri Journal of Dermatology.

Received: 08 Jan 2022

Received in revised form: 16 Mar 2022

Accepted: 22 Mar 2022

Available online: 24 Mar 2022

2146-9016 / Copyright © 2022 by Türkiye Klinikleri. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

dicators.¹ By mid-2021, the number of internally displaced persons due to conflict and violence had increased to approximately 50.9 million.² While the number of immigrants continues to increase, Türkiye has been the country hosting the highest number of refugees worldwide. The data show that 3.7 million Syrian refugees are now registered and hosted by Türkiye within the scope of the United Nations High Commission for Refugees.²

There were 728,083 immigrants entering Türkiye between 2019 and 2021.³ Although Türkiye receives immigration from many countries, it has received a large number of immigrants due to the civil war occurring in Syria, Türkiye's neighbour. Konya is among the top 10 cities with the highest number of Syrian immigrants in Türkiye. As of June 2021, 119,653 Syrian immigrants were reported to be under temporary protection in Konya.⁴

Migration is a change of place of residence. This change is important for health.⁵ Migration and health interact with each other. Changing environmental conditions can affect health. Due to the changing environmental conditions, problems are experienced in terms of hygiene and accommodation, and physical and psychological violence can be experienced before, during, and after migration.⁶ All of these are known factors contributing to infectious diseases, chronic diseases, psychological disorders, and dermatological problems.^{5,7,8} Nutritional disorders, bad living conditions, stress and trauma can trigger infections, increase the frequency of chronic diseases, and cause psychological disorders as well as dermatological disease.⁹⁻¹¹ In recent years, the frequency of immigrants seeking medical help due to dermatological disorders has attracted much attention.⁹

Türkiye is the country with the highest number of immigrants in the world. Given that dermatological diseases are among the problems most frequently experienced by immigrants, in this study, we examined the immigrant applications made to a dermatology outpatient clinic and compared them with those of the local residents.

MATERIAL AND METHODS

The demographic data of immigrant patients who applied to the Konya City Hospital Dermatology Poly-

clinic in March and May 2021 were examined; the number of applications from immigrant patients were compared with those of the population living in the centre of Konya. The population of Konya province was obtained from the website of the Ministry of the Interior, and the population of Syrian immigrants under temporary protection in Konya was obtained from the website of the General Directorate of Migration Management.^{12,13} The study was conducted retrospectively. In the study, all patient diagnoses were recorded as dermatitis, acne, urticaria, viral diseases, bacterial dermatoses, alopecia, and/or scabies. Diagnoses other than these classifications were evaluated in the "other" section. SPSS Statistics Pack version 22.0 (IBM, Armonk, NY) was used in the data analysis. Normality analysis was conducted using a Kolmogorov-Smirnov test; notably the results did not show a normal distribution. Percentage and median (minimum-maximum) are given by descriptive statistics. Chi-square and Mann-Whitney U tests were used according to the characteristics of the data. A p-value <0.05 was accepted as the significance level. Ethical approval was obtained for the research from the Human Research Ethics Committee of Aksaray University Rectorate (date: September 7, 2021, no: E34183927). Our study was carried out in accordance with the principles of the Declaration of Helsinki.

RESULTS

A total of 283 applications were made to Konya City Hospital Dermatology Outpatient Clinic between March and May 2021. It was observed that age did not comply with the normal distribution (KS, $p < 0.001$). The median age of the patients was 22 (range, 1-81 years) years. Of those who applied to the polyclinic, 85.2% (241 people) were residents and 64.0% (181 people) of these applications were women. When the outpatient clinic applications were examined, no significant difference was found between the settled population and the Syrian immigrants under temporary protection in terms of age or gender ($p > 0.05$) (Table 1).

Our results showed that women applied to the polyclinic at a higher rate than men in the local population applications ($p < 0.001$); however, the difference was not found to be significant ($p = 0.537$).

TABLE 1: Comparison of Syrian migrants under temporary protection and residents in terms of demographic characteristics (line percentages are used in the table).

	Residents in terms n (%) or median (minimum-maximum)	Migrants n (%) or median (minimum-maximum)	Total n (%) or median (minimum-maximum)	p value
Applications*	241 (85.2%)	42 (14.8%)	283 (100%)	
Age	22 (1-81)	21 (1-70)	22 (1-81)	0.109 ¹
Sex**				0.179
Female	158 (65.6%)	23 (54.8%)	181 (64.0%)	
Male	83 (34.4%)	19 (45.2%)	102 (36.0%)	

*Line percentages; **column percentages; ¹Mann-Whitney U; ²chi-square.

Dermatitis was the most common reason for application among Syrian immigrants under temporary protection, residents, and overall, and acne was the second most common. Compared to residents, Syrians applied significantly more due to dermatitis, acne, and viral warts. It was determined that Syrian immigrants under temporary protection applied to the dermatology outpatient clinic proportionately more often than did residents ($p < 0.001$) (Table 2).

The results showed the applications due to dermatitis of Syrian migrant women under temporary protection were higher than those of men ($p = 0.012$, single-sample chi-square). Likewise, women were more likely to be admitted due to dermatitis among local residents and in total admissions ($p < 0.001$, single sample chi-square).

DISCUSSION

It is known that dermatological problems are among the main health problems experienced by immigrants.⁷ The applications made to the dermatology polyclinic due to dermatological diseases, which are among the health problems of Syrian immigrants under temporary protection in Türkiye, were examined by comparing them with those of local people. There was no difference in age or gender between the residents who applied to the polyclinic and the Syrian immigrants under temporary protection. Women applied at a higher rate than men, and there was a significant difference in domestic applications; however, the difference was not significant. In our study, dermatitis was the most common reason for admission among Syrians under temporary protection and

among residents overall, and acne was the second most common. There are studies indicating that the average age of dermatological applications has increased in recent years worldwide.¹⁴ In our study, the average age was 22 years in resident patients and 21 years in immigrant patients. We think that this result was due to the high number of patients diagnosed with acne in the study, as well as the inclusion of pediatric patients. Adışen et al. examined the applications made to their hospital for dermatological problems; they found that women (60%) had a higher rate than men (40%).¹⁵ In the same study, the mean age of the patients was 37.9 years and the most common diagnosis was fungal disease. Similar to this study, in our study, women (64%) applied more than men (36%) in both groups. This is in contrast to our study, where dermatitis group diseases were found to be the most common reason for admission, followed by acne (20.5%). Eczema is a condition that manifests with itching, edema, redness, dandruff and watering on the skin caused by external or internal factors. Eczema is also used with names such as “yeast” and “dermatitis.”¹⁶ Although the diagnoses of dermatitis and eczema are often used for the same purpose, dermatitis covers all clinical conditions accompanying cutaneous inflammation.

In a study examining the applications made to the immigrant health centre where primary health care services are provided, it was stated that women applied more than men.¹⁷ In the same study, when the applications were examined according to the reason, the rate of women in the applications due to dermatitis was found to be higher than that of men.

TABLE 2: Frequency of referrals by diagnosis (column percentages are used in the table).

	Residents in terms	Migrants	Total applications	p value*
Dermatitis	64 (26.6%)	16 (38.1%)	80 (28.3%)	<0.001
Acne	46 (19.1%)	12 (28.6%)	58 (20.5%)	<0.001
Urticaria	6 (2.5%)	0	6 (2.1%)	-
Fungal infections	16 (6.6%)	2 (4.8%)	18 (6.4%)	0.238
Viral warts	22 (9.1%)	4 (9.5%)	26 (9.2%)	0.043
Herpes simplex	6 (2.5%)	1 (2.4%)	7 (2.5%)	0.310
Impetigo	12 (5.0%)	1 (7.7%)	13 (4.6%)	0.498
Alopecia	12 (5.0%)	2 (4.8%)	14 (4.9%)	0.161
Scabies	5 (2.1%)	0	5 (1.8%)	-
Others	52 (21.6%)	4 (9.5%)	56 (19.8%)	0.328
Total applications	241 (100%)	42 (100%)	283 (100%)	<0.001

*Applications within a given population were evaluated using the chi-square test.

Similarly, in our study, immigrant women were more common than men in admissions due to dermatitis. This result, which was similar in both studies, suggests that migrant women are more likely to encounter dermatitis than men. Acne vulgaris is a multifactorial condition affecting the pilosebaceous unit. It is the most common skin disease, seen in 85% of the young population. Although it is more likely to occur in adolescence, it can also occur during the newborn and infancy periods, prepubertal period, and with advanced age.¹⁸⁻²⁰ Stress encountered at an early age increases the likelihood of developing depression and anxiety disorders in adolescence and young adulthood.²¹ Khamis in his study with 1,000 Syrian migrant children and adolescents aged 8-18 living in Lebanon and Jordan, stated that 45.6% of the children developed post-traumatic stress disorder.²² In the same study, an increase was observed in the stress level of children and adolescents with age. It is known that stress is a condition that triggers an increase in acne lesions; numerous retrospective studies support this view.²³ Patients with mild to moderate acne often have stress and anxiety, and this patient group may experience psychological problems similar to the patient group with severe acne.²⁴ The fact that proportionately more immigrants applied to a dermatology polyclinic due to acne than did local people in our study is consistent with the studies showing that the stress level of asylum seekers increases. We think that the absence of scabies and urticaria diagnosis in Syrian immi-

grants in our study may be due to the fact that the study was conducted with a small group. In a study conducted in another country, it was emphasized that 56% of women who were not registered as immigrants had difficulty in accessing health centres and the rate of benefiting from care services was low.²⁵ In our study, it is noteworthy that Syrian immigrants under temporary protection applied to the dermatology polyclinic in greater numbers than did the resident population, as a proportion of their own population. We think that the fact that immigrants experience more dermatological problems than local people may be related to their living conditions. Changing the place of residence can also be a dermatological factor, potentially indicating the inadequacy of immigrants' access to health services.

CONCLUSION

In conclusion, studies with a larger series are needed to understand more fully the applications in dermatological diagnosis and treatment practice, and to examine the health problems of immigrant populations.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Hanife Merve Akça; **Design:** Kevser Tuncer Kara; **Control/Supervision:** Hanife Merve Akça, Kevser Tuncer Kara; **Data Collection and/or Processing:** Hanife Merve Akça; **Analysis and/or Interpretation:** Kevser Tuncer Kara; **Literature Review:** Hanife Merve Akça; **Writing the Article:** Hanife Merve Akça, Kevser Tuncer Kara.

REFERENCES

- IOM [Internet]. © 2021 International Organization for Migration. [Cited: December 30, 2021]. Global Migration Indicators 2020. Available from: [\[Link\]](#)
- UNHCR. Mid-Year Trends 2021. Cited: December 30, 2021. Available from: [\[Link\]](#)
- Ministry of Interior Presidency of Migration Management [Internet]. © 2021 Presidency of Migration Management. [Cited: December 30, 2021]. Immigrant Entry to Turkey. Available from: [\[Link\]](#)
- Ministry of Interior Presidency of Migration Management [Internet]. © 2021 Presidency of Migration Management. [Cited: December 30, 2021]. Temporary protection. Available from: [\[Link\]](#)
- Mishori R, Aleinikoff S, Davis D. Primary care for refugees: challenges and opportunities. *Am Fam Physician*. 2017;96(2):112-20. [\[PubMed\]](#)
- The Lancet Public Health. No public health without migrant health. *Lancet Public Health*. 2018;3(6):e259. [\[Crossref\]](#) [\[PubMed\]](#)
- Pavli A, Maltezou H. Health problems of newly arrived migrants and refugees in Europe. *J Travel Med*. 2017;24(4). [\[Crossref\]](#) [\[PubMed\]](#)
- Reavell J, Fazil Q. The epidemiology of PTSD and depression in refugee minors who have resettled in developed countries. *J Ment Health*. 2017;26(1):74-83. [\[Crossref\]](#) [\[PubMed\]](#)
- Rosenthal T. Immigration and acculturation: impact on health and well-being of immigrants. *Curr Hypertens Rep*. 2018;20(8):70. [\[Crossref\]](#) [\[PubMed\]](#)
- Zaenglein AL, Pathy AL, Schlosser BJ, Alikhan A, Baldwin HE, Berson DS, et al. Guidelines of care for the management of acne vulgaris. *J Am Acad Dermatol*. 2016;74(5):945-73.e33. Erratum in: *J Am Acad Dermatol*. 2020;82(6):1576. [\[Crossref\]](#) [\[PubMed\]](#)
- Engelman D, Yoshizumi J, Hay RJ, Osti M, Micali G, Norton S, et al. The 2020 International alliance for the control of scabies consensus criteria for the diagnosis of scabies. *Br J Dermatol*. 2020;183(5):808-20. [\[Crossref\]](#) [\[PubMed\]](#) [\[PMC\]](#)
- Republic of Turkey Ministry of Interior [Internet]. © Republic of Turkey Ministry of Interior. Population of Konya Province. [Cited: December 30, 2012]. Available from: [\[Link\]](#)
- Ministry of Interior Presidency of Migration Management [Internet]. © 2021 Presidency of Migration Management. [Cited: December 30, 2021]. Immigrant Population. Available from: [\[Link\]](#)
- Stern RS. Dermatologists and office-based care of dermatologic disease in the 21st century. *J Investig Dermatol Symp Proc*. 2004;9(2):126-30. [\[Crossref\]](#) [\[PubMed\]](#)
- Adışen E, Güner MA, Keseroğlu Ö. Patient profile in dermatology. *Turkderm-Turk Arch Dermatol Venereol*. 2008;42(3):82-6. [\[Link\]](#)
- Turanli AY. Ekzema. Tuzun Y, Kotoğyan A, Aydemir EH, Baransu O, editörler. *Dermatoloji*. 2. Baskı. İstanbul: Nobel Tıp Kitabevleri; 1994. p.266-79.
- Oğuz Öncül AF, Tuncer Kara K. Evaluation of applications made to a migrant health center in Elazığ. *Journal of Migrant Studies*. 2021 7(1):60-74. [\[Link\]](#)
- Zaenglein AL, Thiboutot DM. Acne vulgaris. In: Bologna JL, Jorizza JL, Rapini RP, eds. *Dermatology*. 2nd ed. Spain: Mosby Elsevier Inc; 2008. p.495-508.
- Rapp DA, Brenes GA, Feldman SR, Fleischer AB Jr, Graham GF, Daley M, et al. Anger and acne: implications for quality of life, patient satisfaction and clinical care. *Br J Dermatol*. 2004;151(1):183-9. [\[Crossref\]](#) [\[PubMed\]](#)
- Tom WL, Friedlander SF. Acne through the ages: case-based observations through childhood and adolescence. *Clin Pediatr (Phila)*. 2008;47(7):639-51. [\[Crossref\]](#) [\[PubMed\]](#)
- Espejo EP, Hammen CL, Connolly NP, Brennan PA, Najman JM, Bor W. Stress sensitization and adolescent depressive severity as a function of childhood adversity: a link to anxiety disorders. *J Abnorm Child Psychol*. 2007;35(2):287-99. [\[Crossref\]](#) [\[PubMed\]](#)
- Khamis V. Posttraumatic stress disorder and emotion dysregulation among Syrian refugee children and adolescents resettled in Lebanon and Jordan. *Child Abuse Negl*. 2019;89:29-39. [\[Crossref\]](#) [\[PubMed\]](#)
- Bhate K, Williams HC. Epidemiology of acne vulgaris. *Br J Dermatol*. 2013;168(3):474-85. [\[Crossref\]](#) [\[PubMed\]](#)
- Akça HM, Tuncer Kara K. Akne vulgaris hastalarında aknenin klinik tipinin yaşam kalitesi ile ilişkisi [The correlation between clinical type of acne and quality of life in acne vulgaris patients]. *Türkiye Klinikleri J Dermatol*. 2020;30(2):44-8. [\[Crossref\]](#)
- Schoevers MA, van den Muijsenbergh ME, Lagro-Janssen AL. Self-rated health and health problems of undocumented immigrant women in the Netherlands: a descriptive study. *J Public Health Policy*. 2009;30(4):409-22. [\[Crossref\]](#) [\[PubMed\]](#)