

## ORIGINAL RESEARCH

## Protracted emergency in Turkey – supporting provision of essential health services to Syrians under temporary protection

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### ABSTRACT

**Introduction:** Turkey is currently hosting the largest number of refugees in the world. Over 3.4 million Syrians are under temporary protection in Turkey. The Ministry of Health and the World Health Organization are working together to ensure all Syrian refugees are ensured increased access to quality and affordable essential health services. This is being achieved by training and positioning Syrian doctors, nurses and medical translators to serve in primary health care. The World Health Organization supports the adaptation training of all these professionals, with funding from the European Union.

**Methods:** We analysed data from pre- and post-test scores of 984 Syrian doctors, 538 nurses and 298 translators, and 233 Syrian and Turkish doctors providing mental health services, trained between November 2016 and June 2017. The data collected was analysed using paired t-tests. Health service utilization data from seven refugee health training centres, measured as number of consultations and reported monthly, were analysed for trends.

**Results:** Training evaluation data indicated a statistically significant increase in the post-test scores of Syrian health professionals, which was attributable to the training process supported by the World Health Organization. Health service utilization data shows an increase in the number of primary health care consultations in the seven refugee health training centres during 2017, with the exception of the month of June due to the holy month of Ramadan.

**Conclusions:** Training and employment of Syrian health professionals, renovation of facilities, provision of equipment, increased availability of health services and increased accessibility of such services provided for free to Syrian refugees under temporary protection in Turkey has led to improved access to quality and affordable essential health services. This model – tested in the protracted emergency situation in Turkey – is documented and may be a useful example to similar situations worldwide.

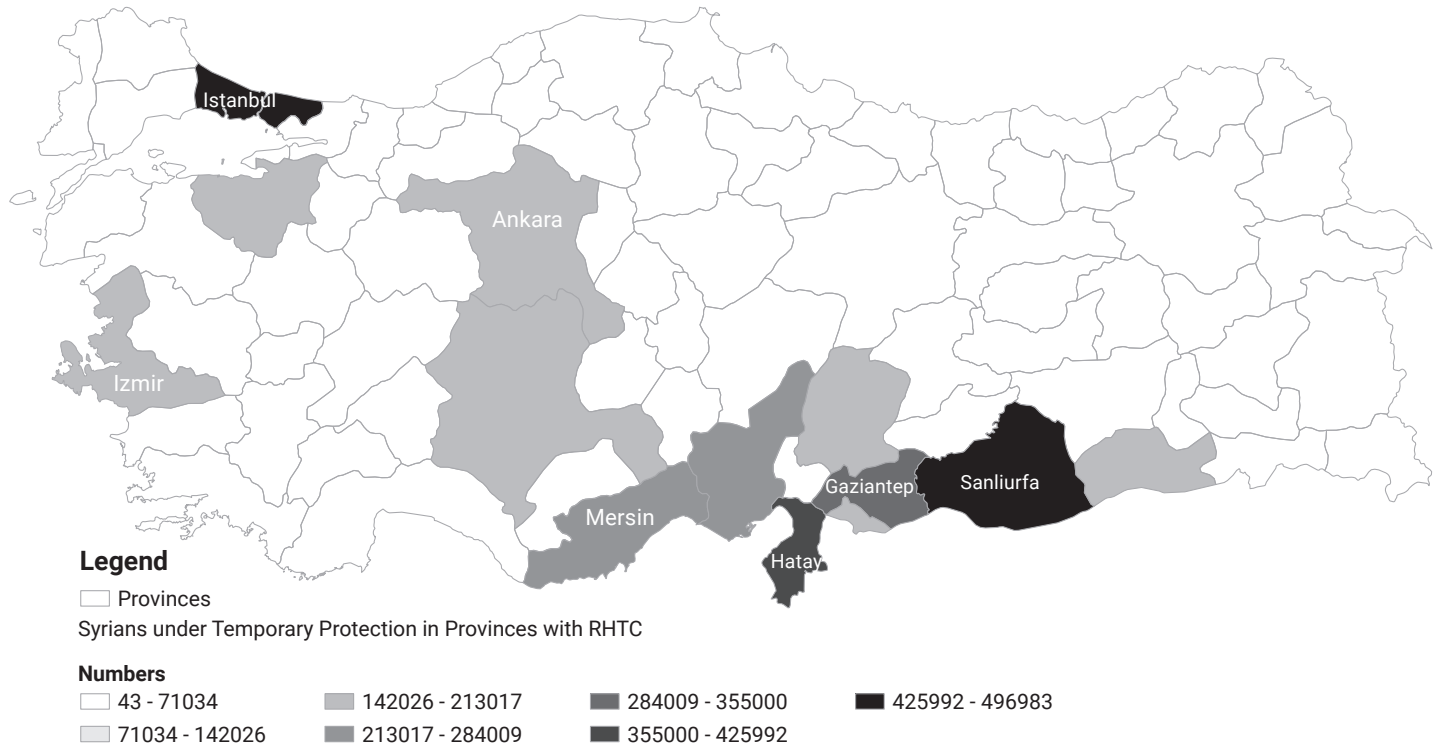
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### INTRODUCTION

Since 2011, over 3.4 million Syrians fleeing from the raging conflict in their homeland sought refuge in Turkey (1) and have been offered temporary protection by the Government of Turkey (2). Seven per cent are cared for in temporary hosting shelters, while the rest have spread to all 81 provinces in Turkey and are living among host communities (see Fig. 1). The Government and the coalition of United Nations (UN) agencies, donors and partners (including nongovernmental organizations (NGOs) have put concerted efforts to extend support to the Syrians under temporary protection: providing shelter, food and equitable access to quality and affordable services.

Efforts in the health sector are led by the Turkish Ministry of Health and supported by the World Health Organization (WHO) and several other UN agencies, donor and partners. The humanitarian work is coordinated and implemented under the Regional Refugee and Resilience Plan (3RP) (3) as part of the Whole of Syria operation. The health support is based on refugee population health needs and gaps identified through a series of surveys and rapid assessments conducted in past years. The surveys focused on assessing health status and also identifying risks from communicable and noncommunicable diseases (4). The findings were used by the Ministry of Health and partners to design public health interventions in support of vaccination campaigns (that reached over 365 000 Syrian children under five

FIG. 1. DISTRIBUTION OF SYRIANS UNDER TEMPORARY PROTECTION IN TURKEY, 2017



years of age) (5) and mental health and psychological support programs (6) aimed at both the refugees and host communities (see Fig. 2).

WHO supported the Ministry of Health to design and provide essential health services to the Syrian refugees during this protracted emergency (7) by improving access to quality and affordable services and by designing and implementing adaptation training of Syrian doctors, nurses, medical

translators, mental health and psychosocial workers (8). The professionals – trained with support from generous multi-donor funding – are planned to be hired by the Ministry to serve largely in primary health care. Improved access would come primarily by direct access to linguistically and culturally sensitive services delivered by Syrian providers. Improved quality of service was assured by providing direct support to the renovation, staffing and provision of equipment and medical supplies to seven refugee health training centres (9), located in the seven provinces with the highest concentration of Syrian refugees.

FIG. 2. SYRIAN CHILD RECEIVING A CONSULTATION AT REFUGEE HEALTH TRAINING CENTRE



Photo by WHO

The model of service provision implemented in these seven centres was used by the Ministry of Health to design and establish 42 extended migrant health centres as part of a larger network of 178 such centres, consisting of 790 migrant health units (each staffed by one Syrian doctor and one nurse) under the auspices of the, “Improving the health status of the Syrian population under temporary protection and related services provided by Turkish authorities” (SIHHAT) project (10), funded under a direct grant under the Facility for Refugees (11) in Turkey, with European Union (EU) funding. It is the vision of the Ministry to employ Syrian health professionals in Turkey, as part of the Turkish health system, to ensure that all Syrians under temporary protection are provided the same universal health coverage (12) as the Turkish citizens. The integration of the Syrian health professionals, increased coordination and efficiency in service provision, improved access (13) and quality of essential services for refugees has also led to reduced burden on the Turkish secondary health

care (hospital) sector. Overall, the health measures taken at all levels have led to increased health system resilience that is better adapted to serve the needs of both the refugee population and the host communities, thus further reducing the tensions stemming from the arrival of large numbers of refugees over a short period of time. Furthermore, the employment of the Syrian health professionals by the Ministry of Health in Turkey has also provided further opportunities for socioeconomic development of the Syrian population, improved health in the long term and eased full integration into Turkish society (14).

Data from current training indicated that half of the graduates are specialist doctors, who are making use of the WHO supported training and SIHHAT employment opportunities to work in primary health care settings. Should the Ministry of Health decide to include Syrian health professionals in secondary health care in the future, additional training will be needed to meet health needs at all levels of care. Future training efforts will be focused on both strengthening the adaptation training, complemented with Turkish language and IT skills, but also continuous medical education training on a semi-annual basis.

## METHODS

The aim of this paper is to provide evidence on the efficacy of WHO implemented activities in Turkey, in support of the Ministry of Health's efforts to provide essential health services to the Syrian refugees. The first way we propose to do this is to look at the knowledge gained through the theoretical part of the training of Syrian doctors, nurses, translators and mental health and psychosocial workers. We compared pre- and post-test results of 984 Syrian doctors, 538 nurses and 298 translators, and 233 Syrian and Turkish doctors providing mental health services.

The pre- and post-tests were designed and conducted by Turkish universities with experience in providing training to doctors, nurses and translators for medical terminology. The pre- and post-tests took place within one week of each other, before and after five days of the theoretical part of the adaptation training. The questionnaires included questions linked to the topics taught in each of the training curricula by specialty. The theoretical part of the training aimed to provide knowledge to Syrian health professionals on how the Turkish health system is set up, policies and procedures (including referrals) and names of pharmaceuticals in Turkey.

The pre- and post-test scores were reported for each cohort of trainees, starting from November 2016 until June 2017. The data was entered in Excel 2010 and analysed with Stata 14

for Windows. We used paired t-tests to analyse whether the observed differences in pre- and post-test scores were statistically significant, in an attempt to determine whether any observed difference was attributable to our training program or had in fact happened by chance.

The second way we propose to look at improvements in health service delivery is to assess the health service utilization data, primarily the reported number of primary health care consultations at the seven refugee health training centres in the seven Turkish provinces with the highest number of refugees. These centres are used as training grounds for the practical on-the-job rotation of Syrian doctors, nurses and mental health and psychosocial workers. The primary health care model supported by WHO in these seven centres included provision of primary health care services, complemented with a range of additional services, for example mental health and psychosocial support; sexual and reproductive health services; safe spaces for women and girls etc. The refugee health training centres are located in accessible areas of the provinces of Istanbul, Izmir, Ankara, Mersin, Gaziantep, Hatay and Sanliurfa, all with a high density of Syrian refugees. Public transportation to reach the centres is available, and transportation and translation for referral services (to hospitals) was also provided. The centres were renovated with WHO support, and equipment and medical supplies were provided to cover the needs of primary health care.

The renovated centres have a waiting area, patient guides/translators that help new patients reach the necessary provider in the facility and information services that record the patient demographics and their reason for the consultation. All the services in these centres are provided for free to all Syrian refugees, by Syrian doctors and nurses. The activity of the trainees undergoing their on-the-job clinical rotation is directly supervised by Turkish doctors who make use of Arabic-Turkish translators. The data collected at the facility level is entered in the Turkish health information system by all general practitioners. Facility level aggregate data is shared by the Turkish Ministry of Health with WHO on a monthly basis.

As of July 2017, over 980 Syrian doctors and over 500 nurses had completed the theoretical part of the adaptation training and over 600 doctors and 400 nurses had completed the practical on-the-job clinical rotations. Over 300 translators were trained in medical terminology. The number of Syrian health professionals employed through the SIHHAT project was reported to be 484, with the number increasing every month. The estimated number of clinical consultations provided to the Syrian refugees by the strengthened seven health centres amounts to 360 000 every year.

The joint efforts between the Ministry of Health and WHO showed progress in increased training numbers and also in improved knowledge and enhanced service.

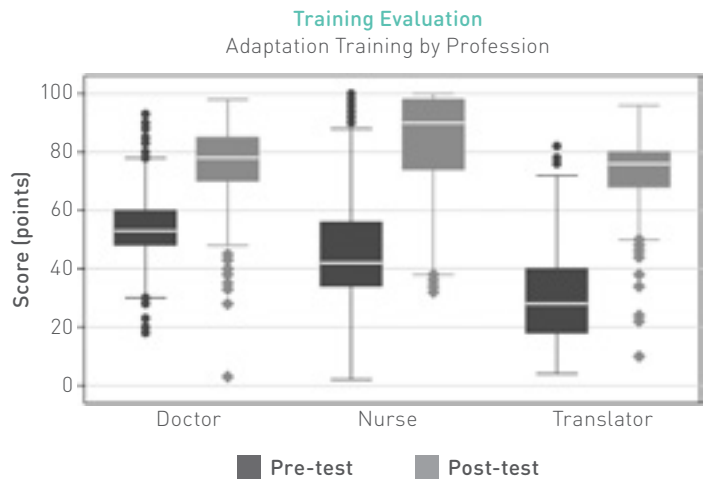
## RESULTS

The results from statistical testing comparing the pre- and post-test scores of Syrian doctors, nurses and translators showed an increased number of correct answers in the post-test. These increases vary from 24 (out of 100) points for doctors, 39 points for nurses and 43 points for translators. The t-test results are listed in Table 1. All these results were statistically significant at the  $P < 0.05$  level. Fig. 3 is a box plot graph of the same training evaluation data for doctors, nurses and medical translators.

The majority of doctors trained through the Mental Health Gap Action Programme (mhGAP), a WHO training program and toolkit designed to assist primary care physicians identify, diagnose, treat and refer cases needing mental health and psychosocial support, are now serving in the network of refugee/migrant health centres.

The t-test results for the Turkish and Syrian doctors trained in mhGAP show increases in post-test scores that are 4.4 points for Turkish and 16 points for Syrian doctors. These results are significant at  $P < 0.005$  (Table 2). Figs. 4a and 4b show the boxplot graph of the same results.

FIG. 3. THE PRE- AND POST-TEST SCORES BOXPLOT GRAPH FOR DOCTORS, NURSES AND TRANSLATORS



The reported number of primary health care consultations in the seven centres supported by WHO was measured and reported monthly to the Turkish Ministry of Health. The health information management working group, co-chaired by WHO Country Office in Turkey, meets monthly and analyses the health service utilization data. Fig. 5 shows the monthly number of consultations provided by the seven refugee health training centres, from January to December 2017. Despite the drop observed in June, linked to the holy month of Ramadan, the data suggests an increasing trend. The increased utilization of services, measured as number of consultations, is linked to increased access of health services and likely due to improved quality, better information and improved management of services.

TABLE 1. COMPARISON OF PRE- AND POST-TEST SCORES FOR SYRIAN DOCTORS, NURSES AND TRANSLATORS

Doctors	Observed	Mean	Standard Error	Standard deviation	95% confidence interval
Post-test score	984	77.304	0.335	10.524	76.646 –77.962
Pre-test score	984	53.061	0.319	10.019	52.434 –53.688
Difference	984	24.243	0.375	11.758	23.507 –24.978

Nurses	Observed	Mean	Standard Error	Standard deviation	95% confidence interval
Post-test score	538	84.790	0.657	15.241	83.499 –86.081
Pre-test score	538	45.678	0.827	19.183	44.054 –47.303
Difference	538	39.112	0.861	19.970	37.420 –40.803

Translators	Observed	Mean	Standard Error	Standard deviation	95% confidence interval
Post-test score	298	73.057	0.724	12.491	71.633 –74.481
Pre-test score	298	29.628	0.889	15.344	27.878 –31.377
Difference	298	43.430	0.904	15.609	41.650 –45.209

TABLE 2. COMPARISON OF PRE- AND POST-TEST SCORES FOR TURKISH AND SYRIAN DOCTORS TRAINED IN MHGAP

Turkey	Observed	Mean	Standard Error	Standard deviation	95% confidence interval
Post-test score	103	77.243	0.878	8.910	75.501–78.984
Pre-test score	103	72.816	0.912	9.261	71.006–74.625
Difference	103	4.427	1.251	12.698	1.946–6.909

Syria	Observed	Mean	Standard Error	Standard deviation	95% confidence interval
Post-test score	130	88.677	0.591	6.740	87.507–89.847
Pre-test score	130	72.308	0.957	10.908	70.415–74.200
Difference	130	16.369	1.030	11.738	14.332–18.406

FIGS. 4A AND 4B. THE PRE- AND POST-TEST SCORES BOXPLOT GRAPH FOR SYRIAN AND TURKISH WHO MENTAL HEALTH GAP ACTION PROGRAMME (MHGAP) TRAINED DOCTORS



Student's Paired T-test was significant at  $p < 0.000$ ;  $N = 130$   
Source: MoH/WHO - Oct 2017



Student's Paired T-test was significant at  $p < 0.003$ ;  $N = 103$   
Source: MoH/WHO - Oct 2017

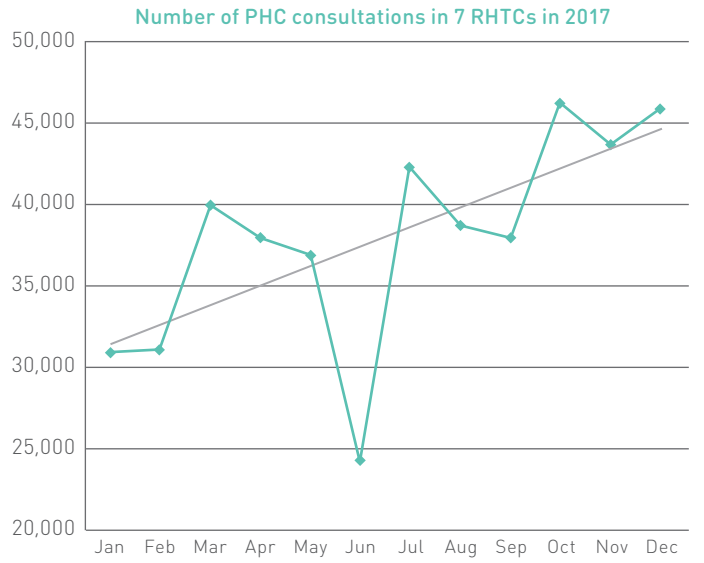
## CONCLUSIONS

Turkey hosts the largest number of refugees since the Second World War. The Turkish Ministry of Health has taken concrete steps to provide cultural and linguistic barrier-free services to Syrians under temporary protection in Turkey, by training Syrian doctors, nurses and translators with WHO support. Once trained, health personnel are hired to serve their Syrian people in Turkey, with support from the EU.

WHO has provided support in the adaptation training of thousands of Syrian health personnel and translators, with funding from the EU. Training evaluation data shows that there is an increase in the knowledge of trainees that is attributed to the training process.

Health service utilization data indicates an increase in the utilization of services, linked to increased availability of services (in addition to the regular primary health care services).

FIG. 5. NUMBER OF PRIMARY HEALTH CARE CONSULTATIONS IN THE SEVEN REFUGEE HEALTH TRAINING CENTRES SUPPORTED BY WHO COUNTRY OFFICE IN TURKEY



Improvements to the refugee health training centres (located in accessible areas with easy transportation) due to renovation, provision of equipment, better coordination, waiting areas and direction of patients – as well as the provision of free health services by Syrian health professionals – has led to the increased accessibility, affordability and acceptability of these services by Syrian refugees.

In the future, we plan to conduct patient satisfaction surveys to complement the data we have so far on training evaluation and health service utilization.

This model – developed and tested in conditions of protracted emergencies – has proven successful for Turkey, and the evidence may be useful in other similar situations.

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## REFERENCES

1. Statistical data on Syrians under temporary protection. Ministry of Interior of Turkey, Directorate General of Migration Management. ([http://www.goc.gov.tr/icerik/temporary-protection\\_1024\\_4748](http://www.goc.gov.tr/icerik/temporary-protection_1024_4748), accessed 1 February 2018).
2. Temporary protection in Turkey. UN Refugee Agency in Turkey. (<http://help.unhcr.org/turkey/information-for-syrians/temporary-protection-in-turkey/>, accessed 1 February 2018).
3. 3RP Regional Strategic Overview 2018–2019. The UN Refugee Agency and United Nations Development Programme. (<http://www.3rpsyriacrisis.org/>, accessed 1 February 2018).
4. Health Status Survey of Syrian Refugees in Turkey. Ministry of Health of Turkey. (<https://sbu.saglik.gov.tr/Ekutuphane/kitaplar/suriyeli%20m%C3%BClteci%20ingilizce.pdf>, accessed 1 February 2018).
5. WHO supports polio vaccination campaign for nearly 200 000 Syrian children from Turkey, 2017. Copenhagen: WHO Regional Office for Europe (<http://www.euro.who.int/en/countries/turkey/news/news/2017/10/who-supports-polio-vaccination-campaign-for-nearly-200-000-syrian-children-from-turkey>, accessed 1 February 2018).
6. Helping Syrians cope with depression, 2017. Copenhagen: WHO Regional Office for Europe (<http://www.euro.who.int/en/media-centre/events/events/2017/04/world-health-day-2017-depression-lets-talk/news/news/2017/03/helping-syrians-cope-with-depression>, accessed 1 February 2018).
7. From emergency operations to recovery and development, 2016. Copenhagen: WHO Regional Office for Europe (<http://www.euro.who.int/en/countries/turkey/news/news/2016/09/from-emergency-operations-to-recovery-and-development>, accessed 1 February 2018).
8. Video - WHO training enables Syrian doctors and nurses to provide health care in Turkey. Copenhagen: WHO Regional Office for Europe (<http://www.euro.who.int/en/health-topics/emergencies/syria-crisis-health-response-from-turkey/health-services-for-syrian-refugees-in-turkey/video-who-training-enables-syrian-doctors-and-nurses-to-provide-health-care-in-turkey2>, accessed 1 February 2018).
9. Inauguration of Refugee Health Training Centre in Turkey, 2017. Copenhagen: WHO Regional Office for Europe (<http://www.euro.who.int/en/countries/turkey/news/news/2017/05/inauguration-of-refugee-health-training-centre-in-turkey>, accessed 1 February 2018).
10. Delegation of the European Union in Turkey. Largest EU-funded health project in Turkey launched today - "SIHHAT". (<https://www.avrupa.info.tr/en/pr/largest-eu-funded-health-project-turkey-launched-today-sihhat-6768>, accessed 1 February 2018).
11. European Neighbourhood Policy and Enlargement Negotiations. The EU Facility for Refugees in Turkey. ([https://ec.europa.eu/neighbourhood-enlargement/news\\_corner/migration\\_en](https://ec.europa.eu/neighbourhood-enlargement/news_corner/migration_en), accessed 1 February 2018).
12. Turkey promotes universal health coverage, 2013. Copenhagen: WHO Regional Office for Europe (<http://www.euro.who.int/en/countries/turkey/news/news/2013/06/turkey-promotes-universal-health-coverage>, accessed 1 February 2018).
13. World Refugee Day: WHO training enables Syrian doctors and nurses to provide health care in Turkey, 2017. Copenhagen: WHO Regional Office for Europe (<http://www.euro.who.int/en/health-topics/emergencies/syria-crisis-health-response-from-turkey/news/news/2017/06/world-refugee-day-who-training-enables-syrian-doctors-and-nurses-to-provide-health-care-in-turkey>, accessed 1 February 2018).
14. European Commission. "Turkey: Labour Market Integration and Social Inclusion of Refugees". (<http://www.europarl.europa.eu/supporting-analyses>, accessed 1 February 2018).