

# Dental Care for Refugees: The German Experience

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## Abstract

**Introduction:** The refugee crisis has become a problem that all European Union (EU) Member States are facing. In addition to administrative and social issues, it has led to healthcare challenges involving all social groups and refugees in particular. The fact that the Federal Republic of Germany has an adequately structured and well-functioning healthcare system in the field of dental medicine is widely recognized.

**Aim:** A study on dental care for refugees in Germany. **Material and Methods:** The study was performed on a sample of 100 refugees examined and diagnosed in Germany between 2015 and 2017 according to German standards and a total of 150 dental practitioners in Baden-Württemberg, Federal Republic of Germany.

**Conclusion:** Dental care for refugees in Germany is organized by the government and can be delivered at any dentist's office.

**Keywords:** refugees, dental treatment, Germany

## Introduction

According to the annual reports of the United Nations High Commissioner for Refugees (UNHCR), the number of refugees rose to 26 million in 2009 to reach more than 60 million people by mid-2015. The number of asylum-seekers in Europe increased with nearly 70 percent in the first half of 2015 alone, making the refugee crisis an issue for all Member States (1,2,3).

The flow of asylum-seekers to the European Union reached a peak in 2014, with Germany as top destination hosting 202,700 or 32 percent of all refugees. Of all 122,800 Syrians who filed asylum claims with the European Union in 2014, 60 percent were registered in two Member States: Germany (41,100)

and Sweden (30,800), falling into the following age ranges: 0-34 years – 73 percent; 35-64 years – 20 percent; and 64 plus – 17 percent. According to statistical data, the refugee flow fell by more than 50 percent in 2016. In 2015 and 2016 Germany was still the country to have hosted the greatest numbers of refugees: 58,125 in October 2015 and 76,540 in January 2016 (4).

The massive migration of people belonging to different social classes to European countries has raised healthcare issues in addition to administrative and social ones involving all age groups and refugees in particular. A UNHCR study on refugees performed in October 2014 revealed that about 15 percent of Syrians aged 18 + presented with at least one chronic disease. The main conditions diagnosed in transit migrants included HIV infection/AIDS, hepatitis, tuberculosis, respiratory infection, diabetes, and cardiovascular diseases, as well as lack of vaccinations and need for psycho-social support (5,6,7,8,9,10).

According to § 62 of the German refugee act, all asylum seekers in Germany are required to undergo a medical examination for infectious diseases, as well as an X ray of the respiratory system. In case a disease or pathogen induced infection is suspected, the results are communicated to the Federal Service according to § 6 and § 7 of the Protection against Infection Act.(11,12,13).

**The scope of study includes:**

- A physical examination to evaluate the individual's general condition and detect signs of a contagious disease;
- A medical check for respiratory tuberculosis;
- Serological analysis for HIV or hepatitis B infection;
- Tests for bacterial typhoid and paratyphoid fever, enteritis and dysentery pathogenic microorganisms.

In 2016, the German Ministry of Health (BMG) insisted on the amendment of the psychotherapeutic protocol by introducing psychotherapist consultation for refugees. The amendments came into force on 16 June 2016. Psychotherapist consultation is at the basis of the structural reform in outpatient psychotherapy. Such consultations allow for a timely detection of disorders. The decision whether consultation is required or not is made by the psychotherapist. A standard documentation has been introduced for outpatient psychotherapy. Both patient and doctor are asked to fill in a questionnaire at the beginning and at the end of therapy. The use of psychometric tests for all patients is mandatory (14,15,16,17).

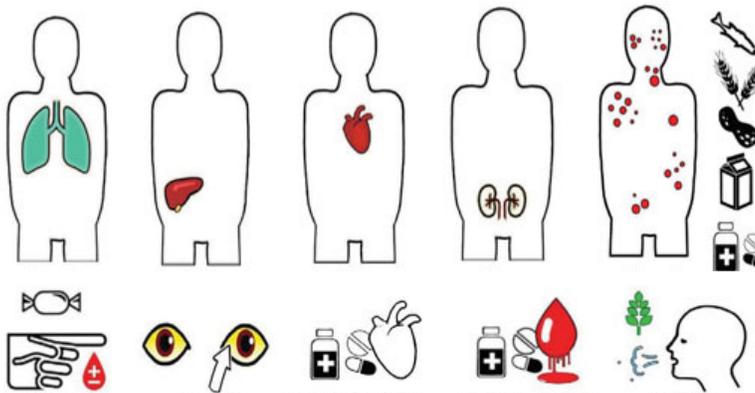
On 10.02.2016, the Charité Hospital Berlin created a Psychology Clearing Center at the State Department of Health and Social Care in Berlin. The purpose of this center is to grant refugees a focal point for all unspecific issues covering the whole scope or psychological conditions.

With the inflow of migrants, a multitude of communication problems resulting from the language barrier arose in the Balkan countries and the countries of Central and Western Europe. This involves the risk of errors in medical history, diagnosis, and choice of treatment method, and may impede or delay treatment. In this respect, Germany can be cited as a pioneer in adopting a communication standard in dental care facilities.

A protocol of action applied to first-visit refugee dental patients in Germany is presented below:

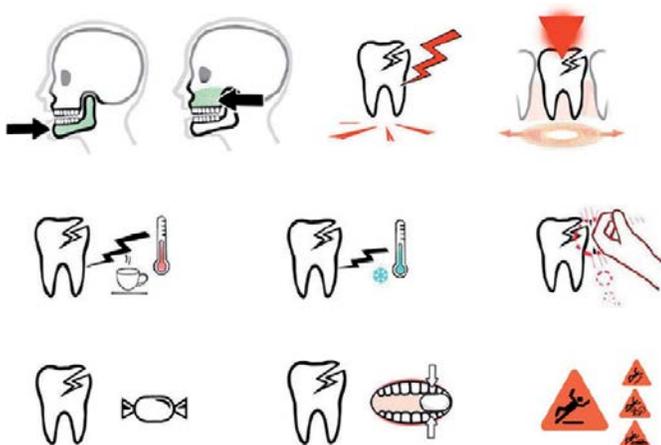
1. Language information (native language, foreign language - European or other). On this basis, the practitioner obtains information about the patient's reading and writing skills. This step has proven necessary since a great many refugees cannot read and write. To facilitate the dentist's task, written questionnaires in different languages have been developed.
2. Medical history chart in the patient's language or using pictograms (Fig.1)

**Fig.1 Part of a medical history chart using pictograms (18)**



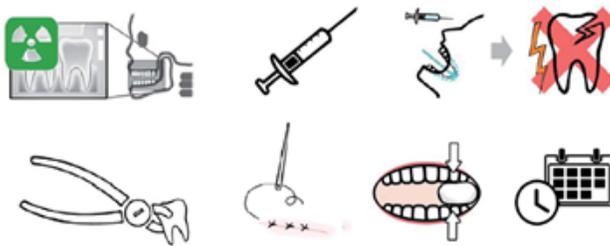
3. History presenting complaint (HPC) based on medically relevant complaints reported by the patient. For illiterate patient's pictograms are used. (Fig.2)

**Fig.2 Pictograms used to record HPC (18)**



4. Treatment plan and information on specific compulsory medical procedures formulated in the patient's language or presented using pictograms (Fig.3)

**Fig.3 Dental extraction pictograms (18)**



5. Post-treatment and home treatment recommendations formulated in the patient's language or presented using pictograms

The purpose of this protocol of action is to ensure that the choice of treatment plan is adequate and meets the patient's expectations.

The three leading dental care organizations in Germany – the German Society of Oral and Craniofacial Surgery (DGZMK), the German Dental Association (BZÄK), and the National Association of Statutory Health Insurance Dentists (KZBV) have launched a common project aimed at the assessment of oral hygiene of refugees in Germany, including children, teenagers, and adults. In Germany, dental care for refugees is organized by the government and can be performed at any dentist's office. Dental services paid by health insurance funds in Germany cover emergencies alone.

## Aim

A study of the experience of dental practitioners in Germany in treating refugees at outpatient medical facilities

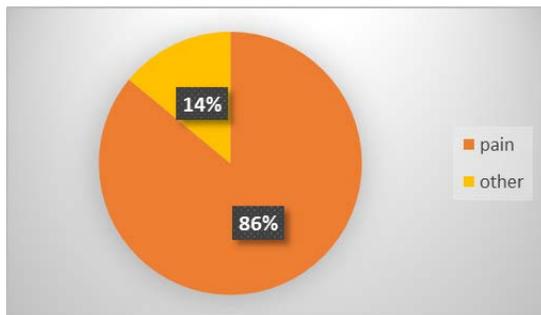
## Material and Methods

The clinical study covers 100 refugees aged 5 to 75 having been examined and diagnosed according to the German standards at outpatient dental clinics in Baden-Württemberg, Federal Republic of Germany, in the period between 2015 and 2017. The investigation results were classified into the following groups: reason for first visit; number of patients having received a sector X-ray; cavity obturation; and/or endodontic treatment and extraction; cause of endodontic treatment and number of teeth treated.

<p>The study was performed between 2015 and 2017 on a total of 150 dental practitioners from outpatient medical facilities in Baden-Württemberg, Federal Republic of Germany based on the following questionnaire:</p>	
1.	<p>Have you performed dental treatment of migrants?  <input type="checkbox"/> Yes    <input type="checkbox"/> No</p>
2.	<p>Which teeth are most damaged in this patient group?  <input type="checkbox"/> Incisors and canines    <input type="checkbox"/> Premolars and molars    <input type="checkbox"/> Wisdom teeth</p>
3.	<p>Do you manage to overcome the language barrier when treating migrants?  <input type="checkbox"/> Yes    <input type="checkbox"/> No</p>
4.	<p>Do you need more time to make diagnosis in migrants?  <input type="checkbox"/> Yes    <input type="checkbox"/> No</p>
5.	<p>Do you think that you or your staff might be at risk when treating migrants?  <input type="checkbox"/> Yes    <input type="checkbox"/> No</p>
6.	<p>Do you manage to get general health information from these patients prior to treatment?  <input type="checkbox"/> Yes    <input type="checkbox"/> No</p>
7.	<p>Do you think that additional protection measures are needed when treating migrants?  <input type="checkbox"/> Yes    <input type="checkbox"/> No</p>
8.	<p>What difficulties do you find when working with this patient group?                  .....</p>
9.	<p>Do you think that medical history charts developed in Syrian vernacular, Arabic, Kurdish or other languages may facilitate your work with migrants?  <input type="checkbox"/> Yes    <input type="checkbox"/> No</p>
10.	<p>Please make recommendations about how the work with this patient group could be improved.....</p>

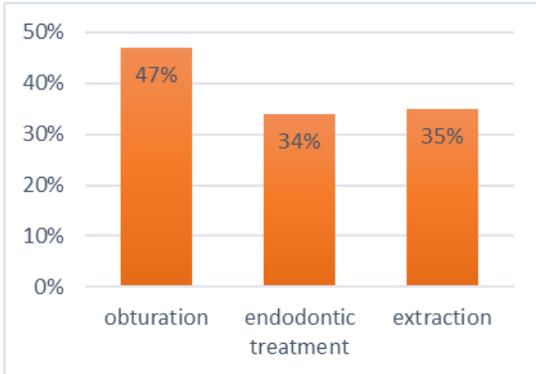
**Results**

Fig.4 Reason for first visit



Of all refugees examined, 86 percent sought dental aid because of pain and 14 percent had oral cavity complaints.

Fig.5 Number of patients having undergone dental procedures: obturation, endodontic treatment, extraction



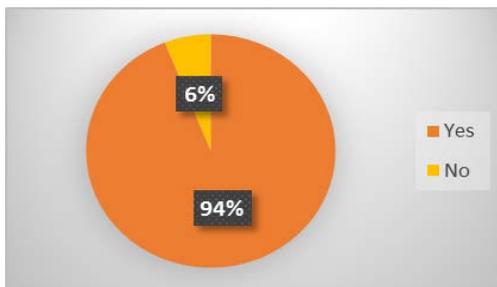
Cavity obturation is the most common dental procedure delivered refugees followed by extractions and endodontic treatment. Remark: The overall number of patients is 100 but since some of them received more than one type of treatment, treatment procedures amount to 116.

Of all 34 endodontic patients, 21 (62 percent) presented with acute or chronic inflammation of dental pulp tissue (pulpitis) without bone tissue involvement, and 13 (38 percent) had periodontitis with localized or diffuse damage to the apical periodontium.

The most frequently treated teeth in refugees included the first and second molars - 65 teeth (38 percent), followed by premolars - 55 (33 percent), front teeth - 34 (20 percent) and the third molars - 16 (9 percent).

Of all 100 treated refugee patients, 89 received one or more sector radiographs.

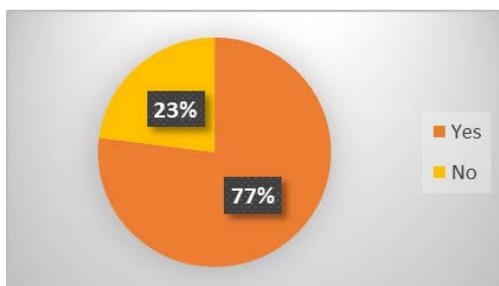
Fig.6 Answers to question № 1: Have you performed dental treatment of migrants?



Question № 1 was answered by 150 practitioners, with 94 having given a positive answer.

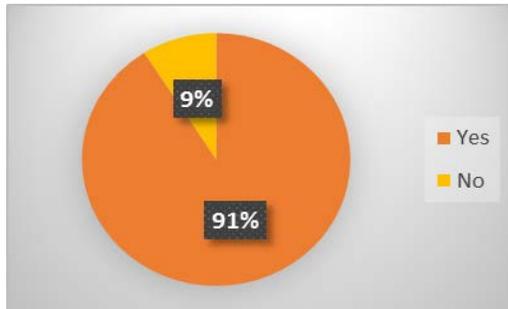
In their answers to question №2, all dental practitioners reported that premolars and molars were the most damages teeth in refugee patients.

Fig.7 Answers to question № 3: Do you manage to overcome the language barrier when treating migrants?



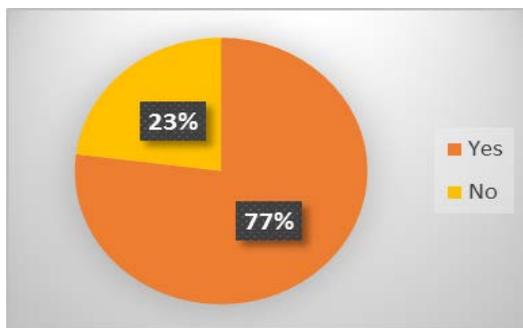
Question № 3 was answered by 141 practitioners, of whom 77 percent responded positively.

Fig.8 Answers to question № 4: Do you need more time to make diagnosis in migrants?



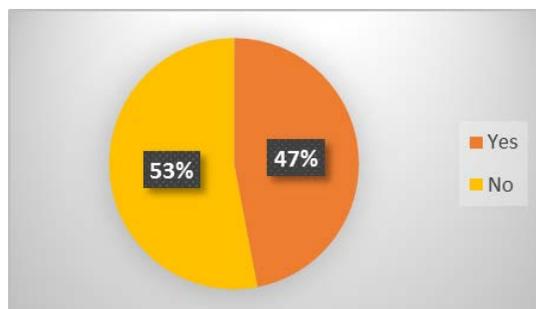
Question № 4 was answered by 141 practitioners, of whom 91 percent think that more time is needed to diagnose migrants.

Fig.9 Answers to question № 5: Do you think that you or your staff might be at risk when treating migrants?



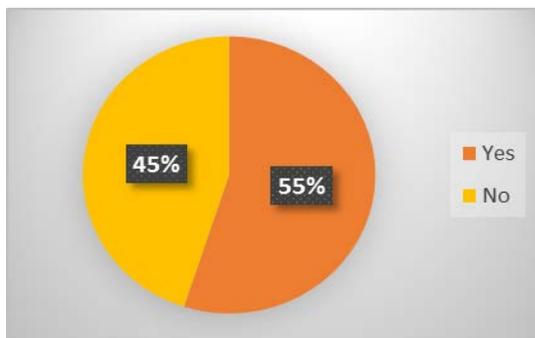
Question № 5 was answered by 141 practitioners, of whom 77 percent gave a positive answer.

Fig.10 Answers to question № 6: Do you manage to get general health information from these patients prior to treatment?



Question № 6 was answered by 141 practitioners, of whom 47 percent gave a positive answer.

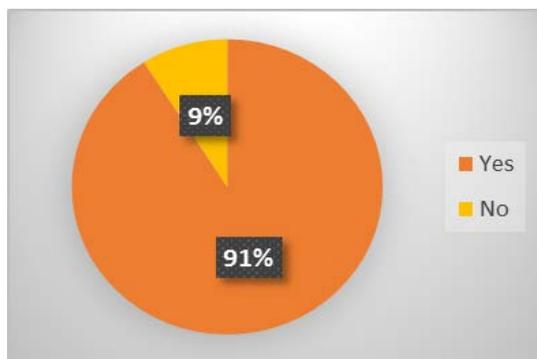
Fig.11 Answers to question № 7: Do you think that additional protection measures are needed when treating migrants?



Question № 7 was answered by 141 practitioners, of whom 55 percent gave a positive answer.

Answers to question № 8 include mainly: the language barrier, difficulty in informing the patient, and difficulty to ensure safety to the dental team.

Fig.12 Answers to question №9: Do you think that medical history charts developed in Syrian vernacular, Arabic, Kurdish or other languages may facilitate your work with migrants?



Question №9 was answered by 141 practitioners, of whom 91 percent gave a positive answer

Answers to question № 10: Please make recommendations about how the work with this patient group could be improved

Recommendations are as follows:

- Presence of an interpreter;
- Presence of at least 2 dental nurses for safety reasons in case a patient becomes aggressive;
- More procedures covered by the health insurance fund;
- Keeping written records of past diseases.

## Conclusion

As much as 94 percent of all dental practitioners interviewed report to have treated refugee patients. Dental care for refugees in Germany is organized by the government and can be delivered at any dentist's office. Dental services paid by health insurance funds in Germany cover emergencies alone. The major difficulties in treating refugee patients as identified by dental practitioners in Germany include: the language barrier, difficulty in informing the patient, and ensuring abidental team safety. The protocol of action applied to refugee dental patients on a first visit to a dentist's office in Germany makes working with these patients easier.

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