



Project Report **Picturise**

Team

Caroline Adam
Lena Appel
Christoph Dehner
Sonja Fuchs
Rupert Heindl
Philipp Marzak
Franz Seitz
Jasmin Sowa
Benedict Zillinger
Martin Zirngibl

Tutor

Roland Fuchsberger
Elisabeth Gleisinger
Maximilian Schreieck

Mentor

Felix Mayer
Prof. Dr. Walter Timo de Vries
Dr. Manuel Wiesche

Picturise: A picture is worth more than a thousand words!

September 2015 – Eighteen-year-old refugee Hamedullah¹ has lived in Germany for two months. He still has difficulties in understanding the German language and many things are new to him. One day, he felt a pounding, throbbing pain in his head as, from time to time, he suffers from headaches. This time the pain was overwhelming, so he tried to seek help. Other refugees told him to call 112 for medical-related issues. Thus he called the emergency line. Although he sought only for painkillers, he found himself hospitalized a few minutes later. The next day, volunteers from Hamedullah's refugee shelter in Neufahrn reviewed the events with him. They tried to explain that he should only call the emergency line in case of a genuine emergency and that, in non-emergency cases, he should call the physician on duty. But the language barrier made things complicated. They gesticulated. They sketched. They called for other refugees, who helped to translate. Eventually Hamedullah understood, but it had taken a long time². Since misunderstandings like this arise regularly, how could such a topic be best explained to refugees? Or, rather, how could such a misunderstanding be prevented right from the beginning?

Ask Picturise for help!

Picturise is a project, established by a group of students, which develops high quality information material to support the everyday life of refugees like Hamedullah in Germany. The approach is simple: The information material focuses on easily understandable pictograms and contains only a minimum of text. The explanations should help refugees from various backgrounds to avoid obstacles in their new home country and show them how Germany works.

When Hamedullah arrived in Germany and the project began, the Germans faced the refugee crisis with mixed feelings. At the central train station in Munich, for example, people welcomed the newly arrived refugees euphorically. Several meters further away, provisional emergency tents showed the sheer futility of the at-

tempt to provide essential things to the huge number of refugees. Federal chancellor Angela Merkel repeatedly stressed: "We can do it!" – but many German citizens did not feel as confident as she did. This topic did not lose topicality over time and the question popping up more and more is: Can we really do it? Can we really cope with the high number of refugees who have to find their way in everyday life in Germany?

The case of Hamedullah is an example how difficult this can be. He is literate in his native language, but learning German is very challenging. The language barrier can cause problems in everyday life and misunderstandings easily arise if the common regulations are unknown. Hamedullah's experiences in dealing with medical issues are proof enough of this. "Many things are new in the beginning and one has to inform oneself", confirmed Faris, another refugee, who originally came from Sudan and now studies construction engineering at TUM. Germany offers a vast amount of flyers and information websites in an attempt to address the most pressing issues for refugees and their most frequently asked questions. But these written information resources are hardly used, since they often work with long texts that many refugees do not understand. Therefore, refugees prefer oral information given directly by the social workers and volunteers who support them in everyday life situations. But according to a statement of the Caritas organization, one social worker in Munich has to care for 100–150 refugees – a task that is almost impossible. Immediate help when a problem occurs, like in Hamedullah's case, is rare.

Picturise wants to change that!

The student group first conducted a survey of refugees and helpers to establish the precise areas of life where problems for refugees typically arise and where they would most benefit from appropriate information material. Based on this research, the project group started to develop pictogram-based posters that were iteratively

¹ This name has been altered and does not relate to any real person.

² Although the happenings presented here are based on real events, the actual setting and course of happenings have been altered.

improved together with refugees themselves. Up to now, Picturise has produced posters on the topics *Basic hygiene rules*, *Principles of solidarity*, *Emergencies*, *Opening and Use of a bank account* that can either stand alone or be used in workshops

Based on the proverb: “A picture is worth 1000 words!”, meaningful pictograms and reduced text on the developed information material helps many refugees to understand even complex topics. Picturise is now testing its posters in a pilot project in cooperation with several refugee shelters – with success! All participating partners have appreciated the information materials and have readily used them for their own particular needs. At the end of the pilot project, anybody will be able to order the information materials!

Since understanding is the first step toward successful integration, the work of Picturise does not only support refugees in their orientation within Germany, but also helps them to find their place in society; just like Hamedullah who will soon complete his schooling in Germany. What he wants to do afterwards, he still does not know. But a future information poster of Picturise, dealing with the education system, could probably help him with his decision.

Finally, it is important to stress that the main aim of the project group is to explain to refugees the range of possibilities they have in Germany – and not to force the same norms on everybody. During the project every member of the project group was able to learn at least as much from refugees as they will learn from the information posters in the future. A colorful society – as the colorful faces on the group photo symbolize – in which people treat others with respect and tolerance, is an enrichment for us all. To say it in the words of António Guterres, the UN commissioner for refugees: “Diversity is richness, not a problem.”

Abstract

Refugees arriving in Germany have to master various problems of everyday life. Currently, suitable information material that supports them is either not available or not fully comprehensible to them. To close this information gap, we identified the information demand of refugees and developed pictogram-based information material that was quickly adopted by refugee shelters and other related support groups.

1. Background

In August 2015 the German chancellor Angela Merkel stated: “The migration crisis will define this decade.”¹ In that year, more than one million migrants and asylum seekers arrived in Europe by crossing the Mediterranean Sea – more than a fourfold increase compared to previous years.² This many people and other migrants crossing the border to Europe on the land route caused a “European refugee crisis.” European countries struggled with the high influx of migrants and politically argued about the resettlement of refugees within Europe.

During the crisis, Germany was the main destination of refugees.³ The number of asylum applications in Germany in the years 2015 and 2016 reached the highest level since the beginning of documentation in 1950.⁴ All in all, 1.1 million refugees were recorded in Germany in 2015.⁵

To interpret data of the refugee crisis correctly, it is important to distinguish between the term *refugee* and *migrant*. According to the UN Refugee Agency, a *refugee* flees from armed conflicts or persecution and therefore cannot return home safely. In contrast to that, *migrants* choose to leave their home country voluntarily to improve their life and can return without safety risks.⁶

Despite a common definition for the word *refugee*, refugees are not a homogeneous group, as was underlined by studies of the Federal Office for Migration and Refugees (BAMF) in 2016. They come, for example, from different countries like Syria (42 %), Afghanistan (17 %) and Iraq (14 %) and have various reasons for their migration.⁴ Furthermore, they differ in terms of their educational background. About 30 % of the refugees in Germany have only attended school for four years at the most – or not at all. In con-

trast to that, many refugees are highly skilled, since about 40 % attended a high school or a university.⁷ Nevertheless, according to another educational study in 2015, many pupils from the main origin countries like Syria and Albania are classified as functional illiterates. This indicates that they are able to read and write but fail to understand simple texts.⁸

Differences in education and other factors – like the knowledge of foreign languages, the individual open-mindedness, emotional constitution, individual initiative or availability of technical support – can impede information transfer to refugees.⁵ According to the BAMF, knowledge of social, cultural and economic life is essential to find one’s bearings in a new surrounding.⁹ Furthermore, positive experiences with the understanding of information can motivate people to search actively for information by themselves. Frustration in this process, on the other hand, can cause isolation.⁵ Access to understandable information, therefore, is crucial for a successful social inclusion of refugees.¹⁰ Although there is a high availability of written information, refugees mainly use oral information resources such as persons of the same origin or social workers. Posters and brochures are only used if they are easy to understand⁵. Since one social worker in Munich has to support up to 100 persons¹¹ and other refugees sometimes translate information incorrectly, it is not always possible for refugees to obtain high quality information. Therefore, it is crucial to develop effective ways to transfer information to this special target group.

2. Goal and Methods

Goal

The main goal of Picturise is the development of pictogram-based information material explaining relevant aspects of everyday life to refugees in Germany. In contrast to existing information material, we aim to use mainly pictograms and to avoid text. Thereby, our posters should be able to overcome linguistic, cultural and educational barriers and as a result address the whole heterogeneous group of refugees.

Methods

First, it was important to analyze the situation of refugees. By doing an extensive literature search, we collected information about the political situation, the legal basics and existing refugee projects in Munich. Subsequently, semi-structured qualitative interviews

with 25 persons and institutions, who support refugees in different ways, were performed. Our interview partners were asked standardized questions concerning their personal experience in working with refugees. The composition of the respondents is listed below.

- Refugee Shelters (Bayernkaserne, Mc Graw Kaserne, shelter in Neufahrn and five shelters run by Caritas)
- Ebru Turgut (Hochschule München)
- Hilfe von Mensch zu Mensch e.V.
- Munich Law School
- Caritas
- Innere Mission
- Buddies for Refugees
- Bayerischer Flüchtlingsrat
- Flüchtlingshilfe e.V.
- Münchner Volkshochschule
- Prof. Brenner (TUM)
- Campus for Change e.V
- Münchner Flüchtlingsrat
- A.I.D.A
- Pastinaken
- Lighthouse Center
- SchlaU Schule
- Vocational School

In a second step, we analyzed the content of our interviews and identified relevant problems of refugees in their everyday life. In order to get a better overview, the detected problems were grouped according to their complexity and time of appearance during the integration process.

The relevance of the problem areas for the target group was evaluated by conducting a quantitative survey with 32 migrants of seven different nations in cooperation with a shelter run by Caritas. The composition of the sample group of this survey is represented in table 1. In order to gain results of high quality, questions on the same problem area were asked multiple times to determine the need of information.

Considering the new insights of the survey, we started to develop posters on the most urgent problems. To improve their compre-

Origin countries	Eritrea (12), Pakistan (3), Afghanistan (2), Nigeria (2), Somalia (3), Senegal (2), Mali (1), no statement (7)
Age	17-71 (mean: 25)
Duration of stay in Germany	4-9 months (mean: 7 months)

Table 1: Sample composition (n =32) of the evaluation of everyday problems

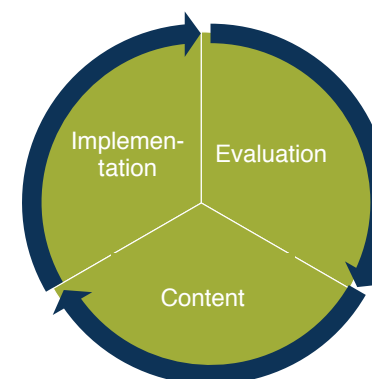


Figure 1:
Iterative process
of improvement

hensibility, we used an iterative process as shown in figure 1. As a first improvement, all members of Picturise evaluated the drafts. In a second step, a participant of Buddies for Refugees who was born in Sudan, helped us to optimize the posters – especially regarding the Arabic language and possible misunderstandings due to cultural differences. In the end the posters were tested in refugee shelters. Afterwards we collected feedback in semi-structured qualitative interviews with social workers, who used the information material together with refugees, to further improve the comprehensibility. For our first poster, on the topic *emergencies*, an additional survey was carried out with 16 refugees from five different nations (Syria, Afghanistan, Mali, Nigeria, Eritrea) living in two separate refugee shelters.. In doing this, we tried to get an insight into what kind of symbols might be well understood by them.

The sample group was asked about their general impression as well as their understanding of pictograms, symbols and colors. Two different posters on the same topic were presented each time in order to validate various representations of the same content.

The last step of the project included a pilot phase to further optimize the information material and to get insight into how it would be used under real-world conditions (suitable sizes for the posters, frequency of usage, manner of usage). In order to assure the high quality of our material, a portfolio, with all posters printed in a suitable size, was created. Additionally, accompanying texts with extra information were included to support the personnel who would use our materials in workshops. The portfolio was handed over to five different refugee shelters each of which then gave us feedback on their usage of the posters.

3. Outcome and Discussion

3.1 Problems of Refugees

24 semi-structured qualitative interviews with institutions and persons working with refugees as well as literature research identified a need for high-quality information in relation to the following topics:

- Household
- Basic hygienic rules
- Public transport
- Social system
- Emergencies
- Shopping
- Healthcare
- Postal service
- Educational system
- Asylum process
- Bank accounts
- Mobile phone contracts
- Food and water
- Job search, professions
- Public institutions
- Rules and authorities
- Apartment search
- Contact to Germans
- Waste separation
- Language courses
- Free time activities

We were able to confirm the relevance of the topics detected for the target group by conducting a quantitative survey among 32 refugees. Respondents rated questions concerning all problem areas on a scale from 1 (no problem/ no need for information) to 5 (big problem/ great need of information). On average, the sample group showed a high interest in information about all topics detected (see figure 2). However, large standard deviations indicate a high level of disagreement among the heterogeneous refugee group on some topics. Therefore, we identified an urgent need for action where there were high interest values but low standard deviations. Topics conforming to this kind of specification are represented by green bars in figure 2. Furthermore, frequent recommendations for information material by social workers were also taken into account and highlighted in light blue.

3.2 Clustering of Problems

In order to structure the various identified problems, we defined clusters that can describe the diversity of problems concerning refugees and their mutual dependencies. Depending on the educational background, language skills, duration of stay in Germany, country of origin, age and the cultural background, refugees face

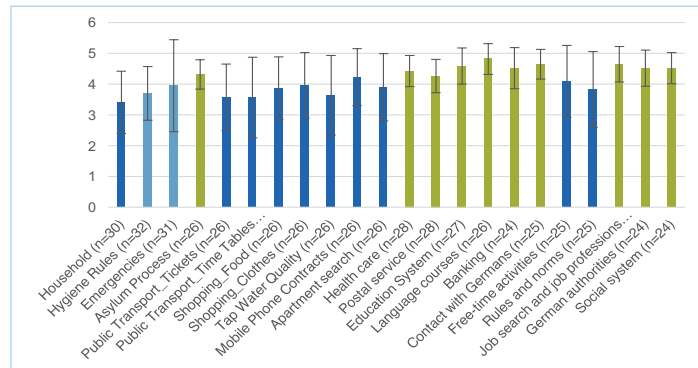


Figure 2: Information needs for refugees. Number of questions in total: 34. The figure depicts a subset of 22 questions. The number of refugees who answered the questions on the topics, shown above, is indicated in brackets.

problems of differing complexity. Five clusters could be distinguished: *Personal needs*, *Surroundings*, *Social Space*, *Rules & Norms* and *Culture* (see figure 3).

Dealing with *Personal needs* is important in order to orientate oneself in a refugee shelter – one's new residence. Possible information material for this problem area deals with basic hygiene rules, acting in emergency situations or with the use of household appliances. A person who has been accommodated in such a shelter will participate in the everyday life around his or her residence as a second step. This problem field, labelled *Surroundings*, includes, for example, using public transport or visiting a doctor. If the per-

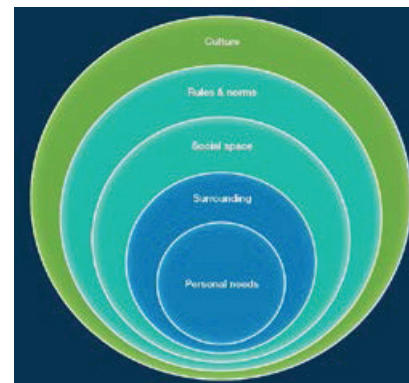


Figure 3: Problem areas of refugees

son gets along in everyday life, free-time activities and interaction with other people will become more and more important, which are topics of the cluster *Social Space*. A further crucial element for the integration process is the understanding of *Rules & Norms* like the education system or the principle of solidarity. Finally, a refugee should learn about German *Culture*, including customs or habits, to be able to fully integrate in Germany.

Apart from the linear pattern described above, the problem areas also overlap with one another and, problems categorized in less basic clusters like the asylum process in *Rules & Norms* can affect persons in more basic clusters. This is implied by the visualization of clusters in overlapping circles.

3.3 Development of Information Material

Overview

Interviews with social workers and brain-storming in our group confirmed posters as a suitable and versatile tool to convey information to refugees. For instance, posters can be hung up at the place where they are needed and thereby communicate information instantly, or they can be used as a support for personal consultation. Moreover, they can address the whole refugee group because they do not need technical devices.

Based on the need for information determined through our survey, we developed posters on five different topics (see table 2, figure 4). The posters depict certain sub-aspects of problem fields proved to be interesting for refugees (see section 3.1). Depending on the complexity of the topic, some posters can stand alone, whereas others have to be used in workshops.

Design

In the design process, many decisions had to be made – on, for instance, the general structure and design of pictograms, colors, language of the texts, depiction of humans, simplicity and neutrality of the posters.

In this context, the design features that most refugees were found to understand well were initially identified by conducting a survey concerning our first poster on the topic of *emergencies*. The following figures exemplify the design specifications that were derived from this survey and that were similarly reused in subsequent pos-

Topic	Aim of the poster(s)	Means of information transfer
Emergencies	<ul style="list-style-type: none"> • Information about emergency numbers (112, 110) • Distinction between emergencies and other health problems 	Can stand alone Workshops are possible
Basic Hygiene Rules	<ul style="list-style-type: none"> • Instructions for showering, hand washing, dental hygiene and toilet use • Reminder to keep the bathroom clean 	
Social System	<ul style="list-style-type: none"> • Explanation about the principle of solidarity 	Workshop
Banking	<ul style="list-style-type: none"> • Explanation of how to open a bank account • Explanation of why a bank account is needed • Information about how to use the bank account • Warning of possible dangers 	

Table 2: Overview over posters (Topic, aim and means of information transfer)

ters. All examples are taken from the *emergencies* poster since this was used during the survey.

Regarding the structuring of information on the posters, flowcharts as used in figure 7 offer a suitable way to describe a decision-making process. Furthermore, the survey gave us a good insight into how to design understandable pictograms. To illustrate time a digital display as well as calendar symbols are advisable. A moon and a sun as pictogram for day and night also function well (see figure 5). Moreover, refugees preferred symbols that they use and see in everyday life. For example, a smartphone as a pictogram was preferred over a corded telephone as it is used on many German brochures. Other examples for such pictograms are a police car or the pharmacy symbol (see figure 6). When it comes to color

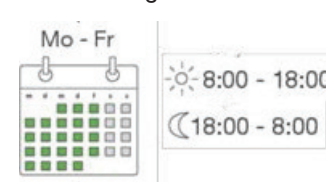


Figure 5: Example for time symbols

Moreover, refugees preferred symbols that they use and see in everyday life. For example, a smartphone as a pictogram was preferred over a corded telephone as it is used on many German brochures. Other examples for such pictograms are a police car or the pharmacy symbol (see figure 6). When it comes to color

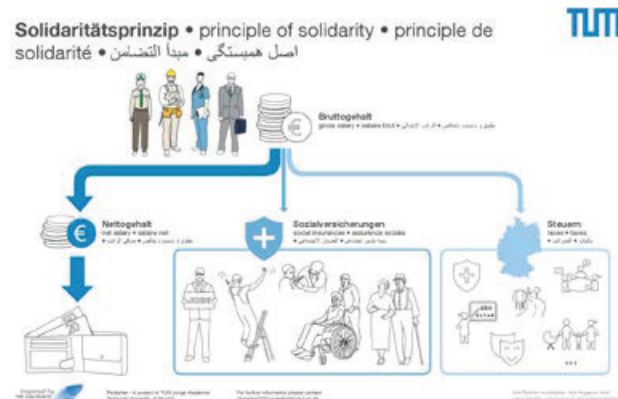
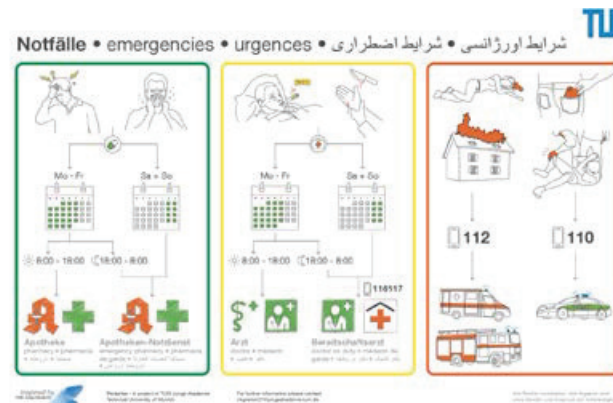
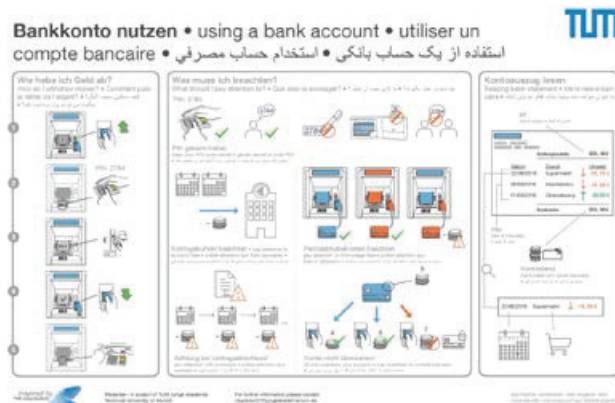
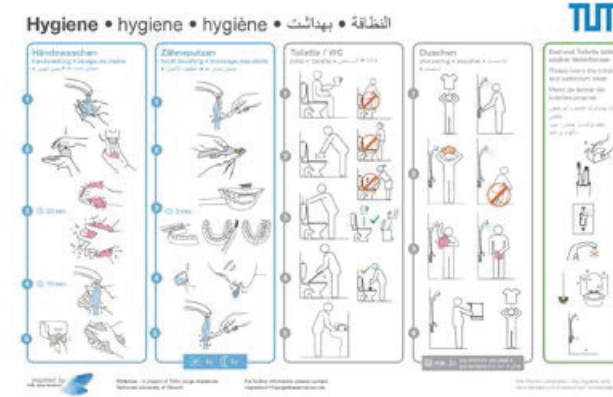
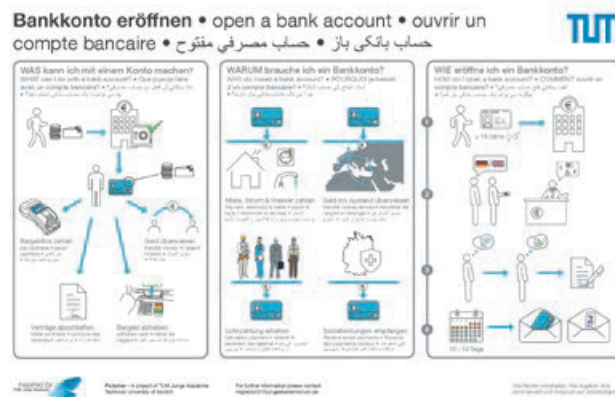


Figure 4: Overview over posters

design, colors as they are used in traffic lights can differentiate between aspects of differing importance. According to our survey, the poster *emergencies* transferred information well without much text.

For the few texts needed, refugees preferred Arabian, Persian, French, English and German language. Since, according to current numbers of the BAMF for the year 2016, about 50 % of refugees speak Arabic and 7 % Persian as their native language, a large part of the refugee group can be addressed using these languages.⁷ English, French and German are also the mother tongue or a familiar foreign language for numerous refugees (Kenya, Eritrea) – according to social workers. Furthermore, single German words on the posters can support refugees in the language learning process. During our interviews our sample group could also choose between two possible alternatives of the *emergencies* poster each of which

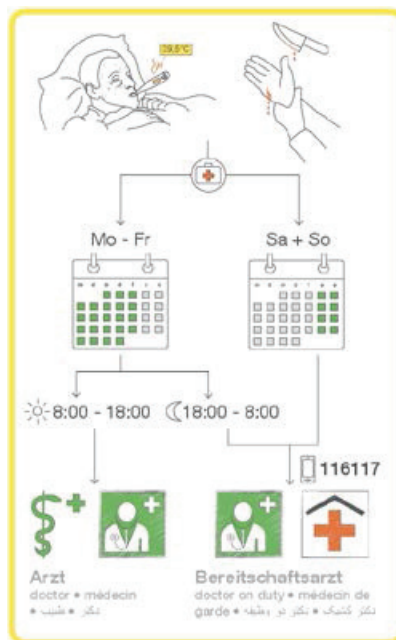


Figure 7: Impression from the poster “emergencies”



Figure 6: Example for everyday symbols

differed in the amount of information presented on the poster. About 80 % preferred the alternative with more information. This underlines that in the design of posters it is important to achieve an appropriate balance in the amount of information presented according to one’s aims and intended target audience. In this example, it became clear that oversimplified material would not be effective.

In addition to the results of our survey, we defined other requirements for the information material that we or social workers considered to be important.

According to these specifications, we established that the pictorial language should be very calm and that only important aspects should be stressed with color. This provides several advantages: everybody can see what is important at first glance and less ink is needed so that printing is cheap. Furthermore, our information material is designed as neutrally as possible. Advertisements as well as stereotypes are avoided. Humans mostly are depicted genderless as simple silhouettes unless a more precise illustration of humans was needed. A balanced mixture of male and female depictions was used if gender is depicted at all. Both genders are equally shown in disadvantageous situations as well as in typical and untypical professions. Thereby, implicit messages can also be conveyed – for example: “Both genders have the same rights, possibilities, and status in Germany” (see figure 8). Concerning the structure of our posters, we chose a vertical orientation for the information presented (for example see figure 7, figure 9, figure 10) since reading from left to right is not common in every refugee’s country of origin and therefore some people might orientate themselves differently when looking at posters. Furthermore, sub-aspects of certain topics are organized in building blocks. Every block can also be used alone and information can be adapted to special needs of refugee shelters (see figure 7, figure 9, figure 10).



Figure 8: Human depiction

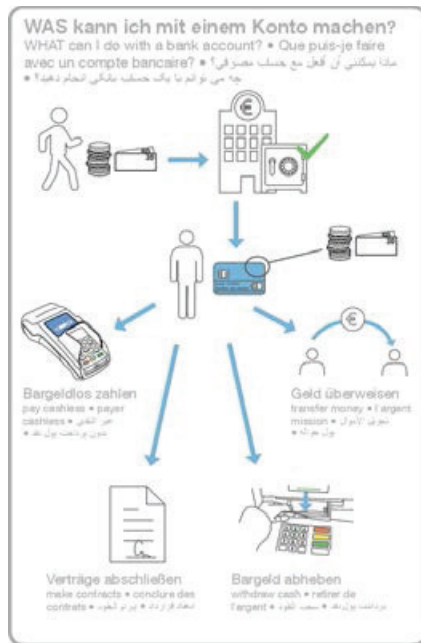


Figure 9: Impression of the poster "How to use a bank account"

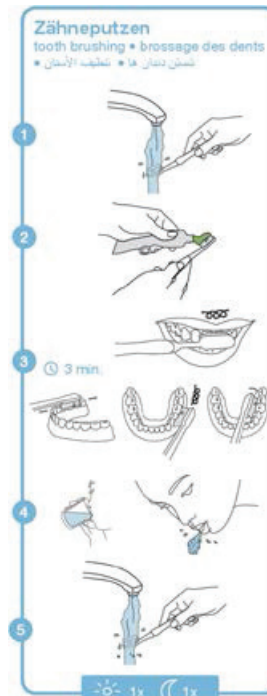


Figure 10: Impression of the poster „Basic Hygiene Rules“

4. Summary and future goals

Our project demonstrates that information transfer to refugees can be realized efficiently with pictograms as they offer a suitable way to overcome linguistic and cultural barriers. All in all, we determined a high need for understandable information among the group of refugees and developed information material on topics of differing complexity – hygiene rules, emergencies, banking, and the social system. Since our posters deal with a broad ran-

ge of different information, our experiences in creating them can be useful for many institutions to develop understandable information material. Furthermore, all the refugee shelters with whom we collaborated successfully used our posters and consistently gave us positive feedback. Since access to relevant and easily comprehensible information is essential for successful social inclusion,¹⁰ Picturise effectively contributed to the integration process.

Many interesting topics for refugees could not be considered during the short time of our project. Therefore, official bodies or volunteers should be encouraged to do further work on these topics. For us, it is crucial to achieve a wide distribution of the information material that we developed in order to address as many refugees as possible. This is why our main goals for the near future include the analysis of the feedback of our pilot project as well as the development of effective marketing strategies.

Acknowledgements

Many people besides our team contributed to our project and supported us in various ways. Without this kind of help, our project would not have been successful. Therefore, we would like to thank the following people:

- Our mentors: Prof. Dr. Walter Timo de Vries, Felix Mayer, Dr. Manuel Wiesche
- Our tutors: Roland Fuchsberger, Elisabeth Gleisinger, Maximilian Schreieck
- Anna Várnai for graphically designing our posters
- Faris Hamadto for helping us to improve our posters
- All refugees and social workers participating in our surveys
- All refugee institutions supporting us during our project

References

- 1 UK *Guardian* (08/2015).
- 2 UNHCR (2015). *Global Trends: Forced Displacement in 2015*.
- 3 EASO (2015). *Annual Report on the Situation of Asylum in the European Union*.
- 4 BAMF (2016). *Aktuelle Zahlen zu Asyl, Issue Juli/2016*.
- 5 H.Brückner et al. (2016). *Geflüchtete Menschen in Deutschland: eine qualitative Befragung. IAB-Forschungsbericht*.
- 6 UNHCR (2016). <http://www.ssi.org.au/faqs/refugee-faqs/148-what-is-the-difference-between-a-refugee-and-a-migrant>, visited: 26.08.16.
- 7 A. Rich (2016). *Asylantragsteller in Deutschland im Jahr 2015. Sozialstruktur, Qualifikationsniveau und Berufstätigkeit*, Kurzanalysen des Forschungszentrums Migration, Integration und Asyl des Bundesamtes für Migration und Flüchtlinge. Issue 3.
- 8 OECD (2015). *Universal Basic Skills: What countries stand to gain*. OECD Publishing.
- 9 BAMF (2007). *Integration in Germany: Support, Networking, Dialogue*
- 10 A. Andrade, B. Doolin (2016). *Information and communication technology and the social inclusion of refugees*. MIS Quarterly. 40(2), 405-416.
- 11 Süddeutsche (2016). <http://www.sueddeutsche.de/muenchen/landkreismuenchen/fluechtlinge-die-herausforderung-1.2922591>, visited: 30.08.16