HEALTH LITERACY OF MIGRANTS AND REFUGEES IN TRANSITION COUNTRIES - BOSNIA AND HERZEGOVINA

Tina Rashadatjou[1], Josip Šimić[2], Vladimir Ruf[3], Sanja Brkić[2]

[1] Save the Children in North West Balkans, Ljubljanska 16, 71 000 Sarajevo, Bosnia and Herzegovina

[2] Faculty of Health Studies, University of Mostar, 88 000 Mostar, Bosnia and Herzegovina

[3] Faculty of Humanities and Social Sciences, University of Mostar, 88 000 Mostar, Bosnia and Herzegovina

Received on 10.10.2024. *Reviewed on 24.10.2024.* *Accepted on 11.11.2024.*

ABSTRACT

Introduction: Bosnia and Herzegovina is a country in the western part of the Balkan Peninsula. It borders Croatia to the north, south, and west and Serbia and Montenegro to the east. The research was conducted in Bosnia and Herzegovina, specifically in the Una-Sana Canton within the camps.

Objective: The main objective of the research was to investigate the level of health literacy of migrants and refugees in transition countries with a focus on Bosnia and Herzegovina.

Subjects and methods: The research was conducted among migrants and refugees in Bosnia and Herzegovina, within the Borići and Lipa temporary reception centers in the Una-Sana Canton during June 2022. Inclusion criteria are migrant or refugee status at the time of the research. As a research instrument, a questionnaire prepared based on literature and available questionnaires dealing with similar topics was used. The research was conducted in Bosnia and Herzegovina among 120 adult refugees and migrants who speak Arabic, Farsi, Bosnian, English and Urdu, and the questionnaire was translated into these languages.

Results: This research shows that the level of health literacy among migrants and refugees does not depend on the level of education. Furthermore, there is no significant difference between the more and less educated in understanding the doctor's instructions. The data we obtained through the obtained results do not prove that health literacy varies from the country of origin to the country of transition. This study has a limited sample size so reading the findings of this sample should be approached with caution.

Conclusion: There is no statistically significant difference between these two groups, which gives us the conclusion that the level of health literacy does not change on the way from the country of origin to the country of transit. This research is of great importance both for the countries of destination of the respondents and for the countries of transit, since migrants and refugees are part of the public health of the country in which they are located. In accordance with the changes within the transition countries from which refugees and migrants come,

more similar studies need to be conducted in order to obtain a comprehensive picture of health literacy.

Keywords: health literacy, migrants, refugees, transition countries, Bosnia and Herzegovina

Corresponding author: Tina Rashadatjou, MA of Physiotherapy; tinatorke1996@gmail.com

INTRODUCTION

International migration is a complex phenomenon of increasing importance in the era of growing globalization, because, more than ever before, international migration touches all countries and affects all areas of everyday life. According to the United Nations High Commissioner for Refugees (UNHCR) and Convention on the Status of Refugees from 1951, refugees are considered to be persons who have left their country of origin due to a well-founded fear of persecution, conflict, general violence, because of their race, religion, nationality, belonging to a certain social group or political opinion or other circumstances that have seriously disturbed public order and which, as a result, require international protection (1). UNHCR also defines the following basic terms of migration: immigrant, economic migrant, asylum seeker, internally displaced persons, stateless persons. Immigrant is someone who obtains permanent residence in a country other than his original homeland; an economic migrant is a person who leaves his country of origin for financial reasons, not for refugee reasons (2). Persons without citizenship or apatris (according to the Greek word *patris* - homeland), are defined as those persons "who are not considered citizens of any country according to the laws"(3).

The definition of "migrant" does not exist in international law, however, according to the International Organization for Migration (IOM), a migrant is considered a person who moves away from his usual place of residence, either within the country or across an international border, temporarily or permanently, and for several reasons (4). According to recent research, it is estimated that every day 37,000 people leave their homes and join 258 million migrants (5) who live in a different country than the one in which they were born. (6) The number of people forcibly displaced globally has increased by 167.6%, from 41.1 million in 2010 to 110 million in mid-2023 (7). Vos et al. introduced the comprehensive category of "crisis migration" - which is more expansive and comprehensive than the categories of refugees and asylum seekers. (8) In particular, crisis migrants are fleeing civil wars, natural disasters, dictatorial or repressive governments and other emergencies and seek refuge in all countries willing to accept them. In many cases, crisis migration involves long journeys through dangerous areas or crossing large or dangerous bodies of water. (9) Bosnia and Herzegovina, as a country of transition and at the same time a transit country for migrants and refugees, periodically since the beginning of the migrant crisis in Europe in 2015 faces various difficulties in accessing the migrant and refugee population, and therefore it is necessary to work on improving the health literacy of migrants and refugees, which would improve their communication with health professionals and enable access to the necessary resources to support their health, which

would have implications for their psychological and mental well-being.

Health literacy, according to Sørensen, is a concept closely related to literacy, which includes the knowledge, motivation and competence to access, understand, evaluate and apply health information to make decisions regarding health care, disease prevention and the promotion of maintaining quality of life throughout life (10) and is usually defined as "the degree to which individuals have the ability to acquire, process, and understand basic health information and services necessary to make appropriate health decisions" (11). According to research, improving the health literacy of asylum seekers and refugees can improve their communication with health professionals and enable them to access the necessary resources (e.g. financial resources) to support their health, all of which have implications for their psychological and mental well-being. (12, 13) Previous research confirms that there is a lack of knowledge about refugees' access to health care and the health system. (13, 14) According to the "Healthy People" research conducted in 2010, low health education is closely related to low health and early death. (15) Also, recent research confirms that the level of health literacy is related to factors such as poor health, language barriers, misunderstanding of health insurance schemes and refraining from seeking health care, namely in Sweden (16), the Netherlands (14), Germany (17), Spain (18) and Canada (19). Correlations between health literacy and the length of stay in a certain area have also been observed (18, 20) and studies conducted after programs aimed at promoting health literacy report improvements in health literacy. (19, 21) It is also important to mention how targeted interventions can improve health literacy, behaviors and clinical outcomes in various health problems and migrant populations. (22) In order to understand, evaluate and access health information, it is necessary to examine the level of health literacy among several groups of migrants. This research aimed to examine the understanding of the concept of health literacy among migrants and refugees in Bosnia and Herzegovina. Migrants and asylum seekers are often grouped together within each country they migrate to, even though their cultures and countries are unfamiliar to each other. The main goal of the research was to investigate the level of health literacy of migrants and refugees in transition countries with focus on Bosnia and Herzegovina.

RESEARCH METHODS

The research was conducted among migrants and refugees in the transition country Bosnia and Herzegovina, within reception centers during June 2022. The sample consists of people on the move who are currently in one of the transition countries. Inclusion criteria are migrant or refugee status at the time of the research. A questionnaire prepared based on literature and available questionnaires dealing with similar topics was used as a research instrument. To reach a larger number of respondents, the questionnaire was translated into languages that this population understands: Bosnian, English, Farsi, Urdu and Arabic. The research was conducted in Bosnia and Herzegovina among 120 adult refugees and migrants who speak Arabic, Farsi, English and Urdu.

During the survey, the respondents were in one of the camps on the territory of the Una-Sana Canton in Bosnia and Herzegovina. The research was conducted in two camps in the area of USC: Transition Center Borići and Transition Center Lipa (TRC Borići and Lipa). The level of health literacy was measured using the aforementioned questionnaire. All respondents were given the questionnaire in a language they understood.

Education in Afghanistan and Iran takes place in two parts: primary education and secondary education. Within that, we include two cycles of basic education from the first to the sixth class, and from the sixth to the ninth class. Secondary education takes place in one cycle from the tenth to the twelfth class (22). After reviewing the level of education of the respondents, we can separate two groups within this data. The lower educated, those who had education up to the 7th class of primary school, accounted for 19.2% of the total number of respondents. Within the group of those who are considered to be more educated, there are respondents who completed more than 7 classes of primary school and they make up to 80.8%.

In order to better understand the respondents' perception of the definition of health literacy, two quotes will be presented: "Everyone needs to know what they can about health and how to improve it" U15, "Health is wealth", and "Health literacy means being doctor" F 27. These two completely opposite opinions serve as proof of the diversity of attitudes, knowledge and understanding of what the concept of health literacy represents for the participants.

Respondents who met the eligibility criteria were invited to answer the questionnaire during their stay in one of the transit reception centers in Bosnia and Herzegovina. The survey questionnaire, which is divided into several parts, has been translated into languages that the respondents understand. While conducting the survey, the respondents were supported by a translator to clarify possible ambiguities.

Statistical data processing

Statistical data processing was carried out in the Microsoft Excel program (Office 2016 version) and the statistical program SPSS. The results are presented in tables and suitable graphs (vertical single and multiple columns). The results of the nominal features of the statement by absolute (f) and relative (%) frequencies.

RESEARCH RESULTS

Analysis of research samples

In the survey, which was conducted on the territory of Bosnia and Herzegovina in several camps, among the countries of origin of refugees and migrants, the countries of the Middle East and Africa stand out. During the months of July and August, the respondents were in the territory of the transit country BiH.

Countries represented include: Afghanistan, Iran, Pakistan, India, Bangladesh, Burundi, Cameroon, Sri Lanka, Ivory Coast, Congo, Mali, Guinea, Iraq, Syria and Egypt. The respondents were divided into four groups, according to linguistic and cultural affiliation. The first group includes Afghanistan and Iran (Farsi), the second group consists of Bangladesh, India and Pakistan (Urdu), the third Burundi, Cameroon, Sri Lanka, Ivory Coast, Congo, Mali and Guinea (English) and the fourth Iraq, Syria and Egypt

(Arabic). 120 respondents participated in the research.

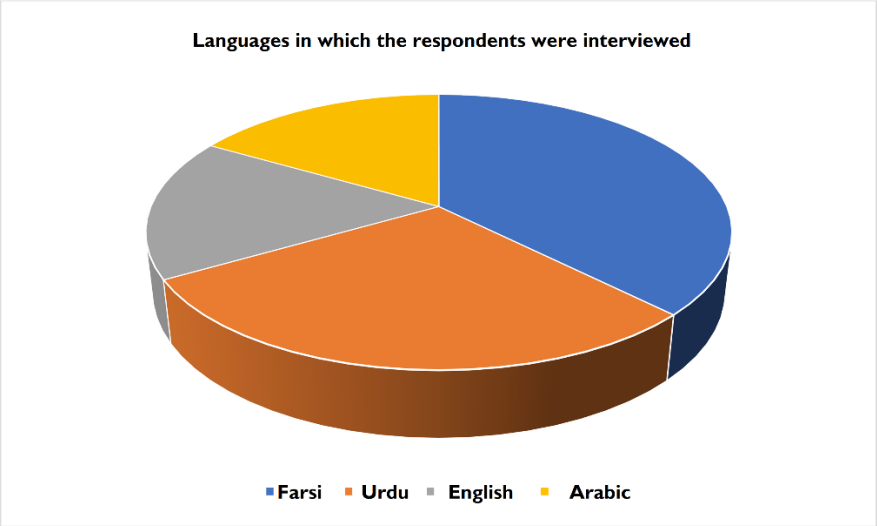

Figure 1. *Graphic representation of the language in which respondents were interviewed*

The research was conducted in two transit reception centers, one of which was for families and the other for singles. Regarding the country of origin, the most represented country was Afghanistan (24.2% of respondents), followed by Pakistan (20.8%), Iran (13.4%), India (6.7%) and Burundi (6.7%). In addition to the mentioned groups, the research was also carried out on the countries that were part of the groups of Arabic, Urdu and English-speaking areas.

The countries of the Middle East, which represents the political-geographical name for the area of Northeast Africa and Southwest Asia, include Turkey, Syria, Lebanon, Cyprus, Israel, Jordan, Egypt, Iraq and all the countries of the Arabian Peninsula, as well as Iran and Afghanistan (24).

Table 1. *Sociodemographic characteristics*
Research results

Variable (n=120)	**All**	**Urdu**	**Farsi**	**English**	**Arabic**
	N (%)	35 (29,2 %)	45 (37.5%)	20 (16,6%)	20 (16,6%)
Gender					
Male	83 (69%)	27 (22,5 %)	32 (26,6%)	12 (10%)	12 (10%)
Female	37 (31%)	8 (6,6%)	13 (10,9%)	8 (6,7%)	8 (6,7%)
Age					
18-23	38 (31,6%)	12 (10%)	17 (14,1 %)	7 (5,8%)	2 (1,5%)
24-38	54 (45%)	16 (13,5%)	17 (14,1 %)	12 (10%)	9 (7.5%)
38-58	28 (23,4%)	7 (5,8%)	11 (9,2%)	1 (0,8%)	9 (7.5%)
Education					
None	6 (5%)	3 (2.5%)	2 (1,5%)	0 (0%)	1 (0,8%)
1-6 classes	20 (16,6%)	6 (5%)	5 (4,1%)	2 (1,5%)	6 (5%)
7-12 classes	76 (63,3%)	22 (18,3%)	33 (27.5%)	14 (11,6%)	7 (5,8%)
More than 12 classes	19 (15,8%)	4 (3,3%)	7 (5,8%)	2 (1,5%)	6 (5%)
Length of their migration					
Less than 1 year	40 (34,8%)	12 (10,5%)	22 (19,1%)	5 (4,4%)	1 (0,9%)
1-3 years	42 (36,5%)	9 (7,8%)	13 (11,3%)	10 (8,7%)	10 (8,7%)
More than 3 years	33 (28,7%)	13 (11,3%)	10 (8,7%)	1 (0,9%)	9 (7,8%)
Clarity of doctor's instructions within the country of origin					
Yes	88 (73,3%)	24 (20%)	32 (26,6%)	13 (10,9%)	19 (15,8%)
No	32 (26,7%)	11 (9,1%)	13 (10,9%)	7 (5,8%)	1 (0,8%)
Clarity of doctor's instructions within the country of transit					
Yes	85 (70,8%)	25 (20,8%)	34 (28,3%)	13 (10,9%)	13 (10,9%)
No	35 (29,2%)	10 (8,4%)	11 (9,2%)	7 (5,8%)	7 (5,8%)

Assessment of own physical health	**All**	**Urdu**	**Farsi**	**English**	**Arabic**
Very bad	21 (17.5%)	5 (4,1%)	6 (5%)	8 (6,7%)	2 (1,5%)
Bad	22 (18,3%)	8 (6,6%)	5 (4,1%)	5 (4,1%)	4 (3,4%)
Good	49 (40,8%)	10 (8,4%)	23 (19,1%)	6 (5%)	10 (8,7%)
Very good	26 (21,7%)	12 (10%)	11 (9,2%)	1 (0,8%)	4 (3,4%)
Assessment of own mental health					
Very bad	26 (21,7%)	6 (5%)	8 (6,6%)	11 (9,1%)	1 (0,8%)
Bad	22 (18,3%)	7 (5,8%)	9 (7,5%)	3 (2,5%)	3 (2,5%)
Good	42 (36,5%)	8 (6,6%)	20 (16,6%)	2 (1,5%)	12 (10%)
Very good	30 (25%)	14 (11,6%)	8 (6,6%)	4 (3,3%)	4 (3,3%)

The most represented age group of respondents was the age of 24 to 38 years, which makes up 45% of the total number of respondents, as many as 31.6% of respondents belonged to the group of 18 to 23 years, while older respondents who belonged to the group of 38 to 58 made up 23.4%. We found that migrants and refugees passing through the transit route at the given moment of conducting the research are mostly a younger age group. The total sample consisted of 69% men and 31% women. As for the level of education, respondents, 5% of the total number, did not go to school, and the skills of writing and reading were mastered along the way, as they state. 16.6% of respondents had lower primary education, which means primary school from 1st to 6th class. The most represented educational group of respondents was 63.3%, under which we include upper primary education from 7th to 12th class, while 15.8% had more than twelve classes.

Respondents from the Arabic-speaking area spend the longest time on the road, according to percentages, of the 100% who participated in the research, 50% are on the road from 1 to 3 years, while 45% of them are on the road for more than 3 years year. Furthermore, the respondents declared that they had no difficulties in communicating with healthcare workers both in the country of origin and in the country of transition. Percentage-wise, 70.8% of the respondents claim to understand the instructions of the doctor in the country of transition, while 73.3% of the respondents claim to understand the instructions of the doctor within their country of origin. This can confirm the fact that knowledge of the language is not a necessary criterion in understanding health instructions. In this statistic, it is important to note that within the Arabic-speaking group, 95% of respondents indicated that they clearly understood the instructions of the doctor in their country of origin. Questions about

self-assessment of physical health yielded the following results: 17.5% of respondents rate their health as very bad, 18.3% of them rate their health as bad, the largest percentage of respondents, 40.8%, see their physical health as good, while 21.7% see their health as very good. In comparison with the results of the self-assessment of mental health, the respondents indicated that 21.7% rated them as very bad, while 18.3% considered their mental health to be bad, and the largest percentage of participants stated that they see their mental health as good, while 25% of the respondents stated that their mental health is very good.

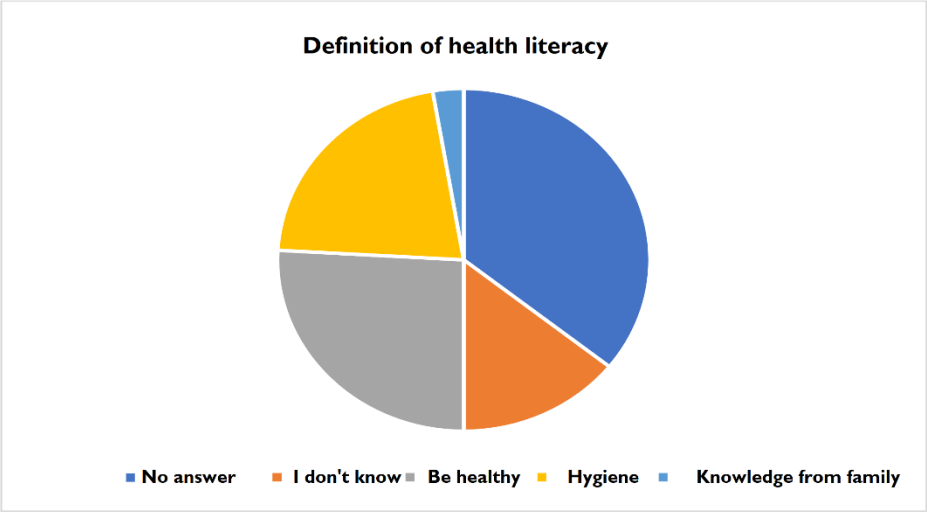

Figure 2. *Respondents' answers to the question about definition of health literacy*

Since the concept of health literacy is a relatively new concept, as many as 33.4% of respondents did not have an answer to the question about what health literacy is, 13.3% stated that they did not know the answer to that question, 24.2% stated that for them, the concept of health literacy means being healthy, 20% of respondents state that it is hygiene, under which they include both personal and general hygiene, and 2.5% of respondents stated that for them it represents knowledge learned from family. It is interesting that within each language group they state that health literacy represents hygiene for them.

Taking into account the fact that within the countries of transition, migrants and refugees use the services of translators, and there is no need for it in the home country, it is interesting that no significant differences were recognized in the understanding of the doctor's instructions regardless of where they were located.

Table 2. *Sociodemographic data*

Varijabla (n=120)	All	Urdu	Farsi	English	Arapski
	N (%)	35 (29,2%)	45 (27,5%)	20 (16,6%)	20 (16,6%)
Clarity of doctor's instructions in the country of origin					
Yes	88 (73,3%)	24 (20%)	32 (26,6%)	13 (10,9%)	19 (15,8%)
No	32 (26,7%)	11 (9,1%)	13 (10,9%)	7 (5,8%)	1 (0,8%)
Clarity of doctor's instructions within the country of transit					
Yes	85 (70,8%)	25 (20,8%)	34 (28,3%)	13 (10,9%)	13 (10,9%)
No	35 (29,2%)	10 (8,4%)	11 (9,2%)	7 (5,8%)	7 (5,8%)
Accessibility of health care in the relationship between the country of origin and the country of transit					
Yes	78 (65%)	21 (17,5%)	33 (27,5%)	17 (14,2%)	7 (5,8%)
It's the same approach	24 (20%)	10 (8,4%)	3 (2,5%)	2 (1,7%)	9 (7,5%)
No	18 (15%)	4 (3,4 %)	9 (7,5%)	1 (0,8%)	4 (3,4%)
Do you provide truthful information about your health history to the doctor					
Yes	91 (75,8%)	26 (21,7%)	40 (33,4%)	11 (9,2%)	14 (11,6%)
Sometimes	19 (15,8%)	4 (3,4 %)	4 (3,4%)	5 (4,2%)	6 (5%)
No	10 (8,4%)	5 (4,2%)	1 (0,8%)	4 (3,4%)	0 (0%)

It can be pointed to the fact that the level of health literacy did not change significantly along the route, since according to the above table 73.3% of the respondents state that they clearly understand the instructions of the doctor within the country of origin, while on the other hand 70.8% state that they understand the instructions of the doctor within transit countries in this case Bosnia and Herzegovina. The interesting data we received is that 95% of respondents within the Arabic-speaking group stated that they clearly understood the instructions of the doctor in their country of origin. 65% of the respondents indicated that their access to health care is more affordable compared to their country of origin, and 20% of the respondents indicated that their access to health care is the same as in their countries of origin. An interesting fact is that respondents from the Arabic-speaking area stated that their access to health care is the same in the largest number. 15% of respondents stated that it is not easier for them to get health care in the country of transit compared to the country of origin. An encouraging result is that 75.8% of

respondents state that they provide true information about their health history to the doctor. 15.8% declare that they sometimes do this depending on the doctor, and 8.4% of respondents state that they do not provide true information. Within the language groups, it is interesting that all respondents from Iran state that they always give truthful information to the doctor.

What this survey shows is that respondents who rate their mental health as better also rate their physical health as better. This was determined by correlation analysis, where the indicators indicate a significant moderate connection between the assessment of the mental and physical health of the respondents ($r=0.615$, $p<0.01$). Although the respondents are often in inadequate and extreme conditions on their journey, an interesting piece of information we received is that 50% of the total number of respondents stated that they developed some diseases on the journey that they did not have in their country of origin. The most common were skin, mental and heart diseases. One of the interviewees stated that he experienced as many as four heart attacks in the country of transit, due to the stress and extreme living conditions he encountered.

Table 3. *Level of education of all respondents*

Level of education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10 classes of primary school.	10	8,3	8,3	8,3
	11 classes of PS	6	5,0	5,0	13,3
	2 classes of PS	1	,8	,8	14,2
	3 classes of PS	1	,8	,8	15,0
	4 classes of PS	5	4,2	4,2	19,2
	5 classes of PS	4	3,3	3,3	22,5
	6 classes of PS	7	5,8	5,8	28,3
	7 classes of PS	4	3,3	3,3	31,7
	8 classes of PS	21	17,5	17,5	49,2
	9 classes of PS	1	,8	,8	50,0
	Bachelor’s Degree	18	15,0	15,0	65,0
	Gymnasium	36	30,0	30,0	95,0
	Master’s Degree	1	,8	,8	95,8
	No answer	2	1,7	1,7	97,5
	Only literate	3	2,5	2,5	100,0
	Total	120	100,0	100,0	

According to the obtained results, 65.2% of those with lower education understand the instructions of doctors in their country of origin, while 34.8% of them do not. Compared to the more educated, 74.2% of them understand the instructions, while 25.8% of them do not. After conducting a t-test for independent groups, it was not possible to find significant differences in the understanding of the doctor's instructions by those with higher and lower education ($p>0.05$). Considering that the respondents are currently in countries where they do not understand the language, and need the services of a translator, it is interesting that there was no significant difference in understanding the doctor's instructions ($p>0.05$), even in another language. In the group with lower education, 56.5% of them understand the instructions of the doctor in the country of transition, while 43.5% do not understand the instructions of the doctor. Among those who are more educated, 73.2% understand, while 26.8% do not understand medical instructions. Considering the factor of misunderstanding of the language and the health system within the country of transition, there is a significant difference in the understanding of the instructions between those who are more and less educated.

Table 4. *Length of the refugee journey*

Length of the refugee journey

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	48	40,0	40,0	40,0
	1,00	18	15,0	15,0	55,0
	1,50	2	1,7	1,7	56,7
	2,00	18	15,0	15,0	71,7
	2,50	2	1,7	1,7	73,3
	3,00	10	8,3	8,3	81,7
	4,00	9	7,5	7,5	89,2
	5,00	5	4,2	4,2	93,3
	6,00	4	3,3	3,3	96,7
	7,00	2	1,7	1,7	98,3
	8,00	1	,8	,8	99,2
	17,00	1	,8	,8	100,0
	Total	120	100,0	100,0	

According to the data from the questionnaire, when asked about the time duration of the journey from the countries of origin to the current country of the site, which is also the transit country, we noticed that the respondents, 81.7% of them, have been on the journey for less than three years, while 18.3% of respondents have been on the same journey for more than three years. Those who have been on the journey for more than 3 years understand the instructions of the doctor in the country of origin, 81.3%, while 18.2% do not understand the instructions. Of those who have been traveling for less than three years, 70.4% understand the instructions, while 29.6% do not understand the instructions within the country of origin. When asked about understanding the doctor's instructions in the transition country, 68.2% of those who have been on the journey for more than 3 years understand the doctor's instructions, while 31.8% of them do not understand the instructions. Of those who have been on the journey for less than 3 years, 70.4% understand the instructions while 29.6% do not. When it comes to the accessibility of health care in the country of origin and the country of transition, 63% of respondents who have been on their journey for more than one year state that it is easier to get health care in the country of transition. 20.3% of respondents stated that their access was the same, and 16.7% stated that they had easier access to health care within their own country.

DISCUSSION

With this research, we investigated the level of health literacy of migrants and refugees in Bosnia and Herzegovina. The research shows that low health literacy is present among migrants, which should be the basis for the development of interventions aimed at improving health literacy. Notable is the ignorance of the very term "health literacy", but also positive responses in terms of self-assessment of the understanding of health instructions.

What is noticeable is that 34.8% of the respondents spend less than a year on the trip, 36.5% are on the trip for one to three years, while 28.7% end their trip after three years. It's a fascinating claim by one interviewee who stated that even after 17 years, he still hasn't finished his journey.

According to a study conducted in Sweden (25), out of a total of 455 migrants and refugees, 12.5% of respondents did not attend primary school education, while 22.9% belonged to the group that completed classes 1 to 6, 33.2% declared that they finished from 7th to 12th class, while within the last group, which includes respondents who have more than twelve classes, there were 32.4% of the respondents, which is similar to our sample of respondents. The results of our research showed that 5% of the respondents out of the total number of 120 migrants and refugees did not have primary education, while 16.6% of the respondents indicated that they had graduated from 1st up to 6th class, 63.3% stated that they had completed 7th to 12th class, while 15.8% of respondents had more than 12th class. It is interesting that within each language group, migrants state that health literacy represents hygiene for them.

In a survey conducted in Lebanon, out of a total of 263 migrants and refugees, 11.8% said they were illiterate, 79.1% said they had finished school, while 9.1% said they had finished college. 35.7% stated

that they were insufficiently health literate, 45.6% were "problematically" health literate, and 18.6% were sufficiently health literate. (20). The low level of health literacy in our study is consistent with similar studies in countries in Asia and Europe (16, 26–28). In a study conducted in southern Spain, 65.1% of surveyed migrants showed an inadequate or problematic level of health literacy. Factors such as shorter stay in the host country and lower education are associated with these low levels of literacy (18).

The results within the research groups show that the difference is visible only within the group from 7th to 12th class and within the group of more than twelve classes. What we found with this research is that migrants and refugees who rate their mental condition as better also rate their physical condition as better. Respondents assess their mental state as very bad 21.7%, bad 18.3%, good 36% and very good 25%. Previous research points to the fact that migrants and refugees have higher rates of mental health problems compared to the host population. (29, 30).

Studies show that migrants with a shorter duration of stay in the host country often show a lower level of health literacy (28), which is in line with our results. Those who have been on the journey for more than 3 years understand the instructions of the doctor in the country of origin, 81.3%, while 18.2% do not understand the instructions. Of those who have been traveling for less than three years, 70.4% understand the instructions, while 29.6% do not understand the instructions within the country of origin.

Targeted interventions such as culturally appropriate education are crucial to address health literacy gaps among migrant communities, as health education programs need to be culturally sensitive. This includes using appropriate languages and considering cultural contexts in communication strategies. Policymakers should focus on integrating health literacy into public health strategies targeting migrants, ensuring equitable access to health services and resources (31).

The shortcoming of this research could be a relatively small sample, and further research should include qualitative research methods such as interviews. Additional support is provided through translators and cultural mediators who enable quality and reliable transmission of information and services. It is necessary to conduct more studies in order to better understand the level of health literacy of migrants and refugees in order to provide the best possible health care for all users.

The ability to understand and effectively use health information to make informed health decisions is very important for migrants because they face unique challenges. With this research, we pointed out the problem of low health literacy of migrants in Bosnia and Herzegovina and the need to adopt measures for interventions that should focus on improving health literacy, specially adapted to the needs of different groups of migrants depending on the language they speak and the region they come from.

CONCLUSION

Limited health literacy is increasingly recognized as a public health problem. The growing recognition of problems and the need for solutions creates an imperative for the field of health literacy research to identify effective interventions.

This research is of great importance both for the countries of destination of the respondents and for the countries of transit, since migrants and refugees are part of the public health of the country in which they are located. In accordance with the changes within the transition countries from which refugees and migrants come, it is necessary to conduct more similar studies to obtain a comprehensive picture of health literacy.

REFERENCES

1. Convention Relating to the Status of Refugees. 1951;189:137.
2. Nakeyar C, Frewen PA. Evidence-based care for Iraqi, Kurdish, and Syrian asylum seekers and refugees of the Syrian civil war: A systematic review. Psychologie canadienne. 2016;57(4):233–245.
3. Convention Relating to the Status of Stateless Persons. 1954;360:117.
4. IOM: About migration. [Internet] Grand-Saconnex: International Organization for Migration, 2024. [updated 2024; cited 2024 Oct 9]. Available from: https://www.iom.int/about-migration.
5. World Health Organization. Regional Office for Europe. (2018). Report on the health of refugees and migrants in the WHO European Region: No public health without refugee and migrant health. World Health Organization. Regional Office for Europe. https://iris.who.int/handle/10665/311347
6. Altschul JH, Kintigh KW, Aldenderfer M, Alonzi E, Armit I, Barceló JA et al. Opinion: To understand how migrations affect human securities, look to the past. Proc Natl Acad Sci U S A. 2020;117(34):20342-20345.
7. Amoah PA, Ameyaw EK, Fordjour GA. Interplay of sociocultural factors, health literacy and well-being among African asylum seekers and refugees in Asia: A systematic review. J Migr Health. 2024;10:100262.
8. Vos SR, Clark-Ginsberg A, Puente-Duran S, Salas-Wright CP, Duque MC, Herrera, IC et al. The family crisis migration stress framework: A framework to understand the mental health effects of crisis migration on children and families caused by disasters. New Dir Child Adolesc Dev. 2021;176:41-59.
9. Ertanir B, Cobb CL, Unger JB, Celada-Dalton T, West AE, Zeledon I et al. Crisis Migration Adverse Childhood Events: A New Category of Youth Adversity for Crisis Migrant Children and Adolescents. Res Child Adolesc Psychopathol. 2023;51(12):1871-1882.
10. Sørensen K, Van den Broucke S, Fullam J et al. Health literacy and public health: A systematic review and integration of definitions and models. BMC Public Health. 2012;(12)80.
11. Bennett IM, Chen J, Soroui JS, White S. The contribution of health literacy to disparities in self-rated health status and preventive health behaviors in older adults. Ann Fam Med. 2009;7(3):204-11.
12. Ying Liew Z, Yi Lim S, Hwa Sha K, Thing Sze W. Barriers limiting access to healthcare among refugees or asylum seekers in Asia in the recent years: a scoping review. J Public Hlth Dev. 2022;20(1):218-31.
13. Wångdahl J, Lytsy P, Mårtensson L et al. Health literacy and refugees' experiences of the health examination for asylum seekers – a Swedish cross-

sectional study. BMC Public Health 2015;1162(15).
14. Al-Tamimi A, Parić M, Groot W, Pavlova M. Yemeni refugees' health literacy and experience with the Dutch healthcare system: a qualitative study. BMC Public Health. 2023 18;23(1):902.
15. National Center for Health Statistics. Healthy People 2010 Final Review. Hyattsville, MD. 2012.
16. Wångdahl J, Lytsy P, Mårtensson L, Westerling R. Poor health and refraining from seeking healthcare are associated with comprehensive health literacy among refugees: a Swedish cross-sectional study. International journal of public health, 2018;63:409-419.
17. Biddle L, Menold N, Bentner M, Nöst S, Jahn R, Ziegler S, Bozorgmehr K. Health monitoring among asylum seekers and refugees: a state-wide, cross-sectional, population-based study in Germany. Emerg Themes Epidemiol. 2019; 7(16):3.
18. Poza-Méndez, M, Bas-Sarmiento, P, Erahmouni I, Fernández-Gutiérrez, M. Assessment of health literacy among migrant populations in Southern Spain: A cross-sectional study. Nursing Open, 2023;10:2600–2610.
19. Golesorkhi LZ. Health Literacy and Refugee Women During the COVID-19 Pandemic: Outlooks for ESL Classes. Refuge: Canada's Journal on Refugees, 2023;39(1):1–13.
20. Bouclaous C, Haddad I, Alrazim A, Kolanjian, H, El Safadi A. Health literacy levels and correlates among refugees in Mount Lebanon, Public Health, 2021;199:25-31.
21. Harsch S, Bittlingmayer U. Advancing the health literacy of migrants in second-language courses: Realist review. International Health Trends and Perspectives, 2024; 4(1): 40–67.
22. Fox S, Kramer E, Agrawal P, Aniyizhai A. Refugee and Migrant Health Literacy Interventions in High-Income Countries: A Systematic Review. Journal of Immigrant and Minority Health. 2021.
23. World Health Organization. Regional Office for Europe.Report on the health of refugees and migrants in the WHO European Region: No public health without refugee and migrant health. World Health Organization. Regional Office for Europe. 2018. https://iris.who.int/handle/10665/311347
24. United Nations High Commissioner for Refugees (UNHCR) Afganistan situation report. 2022. https://data.unhcr.org/en/situations/afghanistan
25. Wångdahl, J, Lytsy P, Mårtensson L et al. Health literacy among refugees in Sweden – a cross-sectional study. BMC Public Health. 2014;14:1030.
26. Gele AA, Pettersen KS, Torheim LE, Kumar B. Health literacy: the missing link in improving the health of Somali immigrant women in Oslo. BMC Public Health. 2016;16(1):1134.
27. Duong TV, Aringazina A, Baisunova G, Nurjanah, Pham TV, Pham KM et al. Measuring health literacy in Asia: Validation of the HLS-EU-Q47 survey tool in six Asian countries. J Epidemiol. 2017;27(2):80-86.
28. Medina P, Maia AC, Costa A. Health Literacy and Migrant Communities in

Primary Health Care. Front Public Health. 2022;9:798222.

29. Bhugra D, Gupta S, Bhui K, Craig T, Dogra N, Ingleby JD et al. WPA guidance on mental health and mental health care in migrants. World Psychiatry. 2011;10(1):2-10.
30. Lindert J, Ehrenstein OS, Priebe S, Mielck A, Brähler E. Depression and anxiety in labor migrants and refugees--a systematic review and meta-analysis. Soc Sci Med. 2009;69(2):246-57.
31. Maia AC, Marques MJ, Goes AR, Gama A, Osborne R, Dias S. Health literacy strengths and needs among migrant communities from Portuguese-speaking African countries in Portugal: a cross-sectional study. Front Public Health. 2024;12:1415588.

ZDRAVSTVENA PISMENOST MIGRANATA I IZBJEGLICA U ZEMLJAMA TRANZICIJE – BOSNA I HERCEGOVINA

Tina Rashadatjou[1], Josip Šimić[2], Vladimir Ruf[3], Sanja Brkić[2]
[1] Save the Children in North West Balkans, Ljubljanska 16, 71 000 Sarajevo, Bosna i Hercegovina
[2] Fakultet zdravstvenih studija, Sveučilište u Mostaru, 88 000 Mostar, Bosna i Hercegovina
[3] Filozofski fakultet, Sveučilište u Mostaru, 88 000 Mostar, Bosna i Hercegovina

SAŽETAK

Uvod: Bosna i Hercegovina je zemlja koja leži u zapadnom dijelu Balkanskog poluotoka. Graniči s Hrvatskom na sjeveru, jugu i zapadu, te Srbijom i Crnom Gorom na istoku. Provedeno je istraživanje u BiH, točnije na području Unsko-sanske županije unutar kampova.

Cilj: glavni cilj istraživanja bio je istražiti razinu zdravstvene pismenosti migranata i izbjeglica u zemljama tranzicije s osvrtom na Bosnu i Hercegovinu.

Ispitanici i metode: Istraživanje se provelo među migrantima i izbjeglicama u BiH, unutar prihvatnih centara Borići i Lipa na području Unsko-sanske županije tijekom lipnja 2022. godine. Kriteriji uključenja su status migranta ili izbjeglice u trenutku provedbe istraživanja. Kao instrument istraživanja je korišten anketni upitnik pripremljen na temelju literature te dostupni upitnici kojima se obrađuje slična tematika. Istraživanje je provedeno u BiH među 120 odraslih izbjeglica i migranata koji govore arapski, farsi, bosanski, engleski i urdu jezik, a na navedene jezike je preveden anketni upitnik.

Rezultati: Ovo istraživanje pokazuje da razina zdravstvene pismenosti kod migranata i izbjeglica ne ovisi o razini obrazovanja. Nadalje, ne postoji značajna razlika između više i niže obrazovanih u razumijevanju uputa liječnika. Podatci do kojih smo došli kroz dobivene rezultate ne dokazuju da zdravstvena pismenost varira od zemlje porijekla do zemlje tranzicije. Ovo istraživanje ima ograničen broj uzorka tako da se čitanje nalaza ovog uzorka treba pažljivo pristupiti.

Zaključak: Statistički nema značajne razlike između ove dvije skupine, što nam daje zaključak da se razina zdravstvene pismenosti ne mijenja na putu od zemlje porijekla do zemlje tranzita. Ovo istraživanje ima veliki značaj kako za zemlje odredišta ispitanika, tako i za zemlje tranzita, budući da su migranti i izbjeglice dio javnog zdravstva države u kojoj se nalaze. Sukladno promjenama unutar zemalja tranzicije iz kojih dolaze izbjeglice i migranti, potrebno je provesti više sličnih studija kako bi se dobila sveobuhvatna slika zdravstvene pismenosti.

Ključne riječi: zdravstvena pismenost, migranti, izbjeglice, zemlje tranzicije, Bosna i Hercegovina

Autor za korespodenciju: Tina Rashadatjou, mag. physioth.; tinatorke1996@gmail.com