TYPE Original Research
PUBLISHED 29 September 2022
DOI 10.3389/fpubh.2022.979751



OPEN ACCESS

EDITED BY Henrique Lopes, Portuguese Catholic University, Portugal

REVIEWED BY

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SPECIALTY SECTION

This article was submitted to Public Health Policy, a section of the journal Frontiers in Public Health

RECEIVED 27 June 2022 ACCEPTED 12 September 2022 PUBLISHED 29 September 2022

CITATION

Domaradzki J, Walkowiak D, Bazan D and Baum E (2022) Volunteering in the front line of the Ukrainian refugee crisis: A brief report from Poland. *Front. Public Health* 10:979751. doi: 10.3389/fpubh.2022.979751

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Volunteering in the front line of the Ukrainian refugee crisis: A brief report from Poland

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This study aims to analyse the experiences and motivations of volunteers who supported Ukrainian refugees who fled to Poland. Our study was conducted among 196 volunteers in Poznan, Poland who answered questions regarding their experiences with voluntary service during the current refugee crisis and the reasons they became involved in volunteer efforts. We found that although the Polish state had no prior experience in welcoming refugees on a mass scale, the Russo-Ukrainian War has resulted in the emergence of "spontaneous volunteers" who have offered their help and assistance to the flood of refugees sweeping in from its eastern neighbor. We also found that because many Polish citizens believe that helping those in need should not rest solely on the government there are two main motivations to volunteer: a general willingness to help and the willingness to volunteer on behalf of Ukrainian refugees. Finally, while this study highlights that in times of crisis, most people are primarily motivated by humanistic and democratic values, including altruism and public service, emotions also play an important role in influencing people's decision to engage in voluntary service.

KEYWORDS

experiences, motivations, Poland, volunteering, Ukrainian refugees, war refugees

Introduction

From the very first moment Russia invaded Ukraine on 24 February, 2022, the resulting warfare has caused many civilian casualties as well as the destruction of civilian infrastructure. Consequently, thousands of Ukrainians have been forced to flee from their homes and cross the borders of neighboring countries seeking safety, protection, and assistance. According to the United Nations High Commissioner for Refugees (UNHCR) up until 22 of June, 2022, from a total 7,703,857 individual refugees who have crossed the Ukrainian border 4,001,921 have fled to Poland, while 1,230,800 have gone to Russia, 782,742 to Hungary, 659,009 to Romania, 502,716 to Moldova, 510,014 to Slovakia, and 16,655 to Belarus (1). On the other hand, according to the Polish Border Guard this number is even higher and has reached 4,238,000 (2). In contrast, other European countries have registered 2,305,082 total refugees. Thus, because more than 7.5 million Ukrainians have fled the country and approximately one third of its population has been

displaced, the UNHCR Commissioner, Filippo Grandi, has argued that while it is "... the fastest growing refugee crisis in Europe since World War II" the Russian invasion has sparked "Europe's largest refugee crisis of the century" (3).

The problem is however, that even before the war started, Poland had received over a million Ukrainian labor immigrants who left their country after Russia's illegal annexation of the Crimean Peninsula in 2014 (4). However, the Polish state had had no previous experience in welcoming refugees. Thus, on the very first day that the war began Polish border crossing checkpoints were filled with the thousands of refugees in a state of distress and anxiety who were waiting in lines of cars reaching 20 kilometers. Most of these refugees consisted of women, children, and those with illnesses – all of whom were hungry, cold, and tired.

As a result of this huge influx of refugees, Ukrainians now constitute 8% of the total Polish population, and one in 10 people in Poland is now Ukrainian. Moreover, the population of most big cities have grown significantly. For example, in Rzeszów the population increased by 35%, in Katowice and Gdansk 25%, in Wroclaw 23%, in Cracow 19%, in Lublin 17%, in Poznan 14%, in Warsaw 13% and in Lodz 11% (5). Consequently, to ease this pressure many refugees are being urged to seek shelter in smaller provincial towns.

Significantly, from the first day of the invasion both the central government, local authorities, and various social actors who organized help and support have adapted an inclusive model of helping the refugees that differs significantly from the one that is common in other European countries and the UNHCR. According to Dr. Grazyna Firlit-Fesnak from the University of Warsaw, this model is characterized by:

- An openness to all Ukrainians fleeing from the war: it was guaranteed that every refugee who had chosen Poland as his or her destination and transit country would be accepted into the country,
- cooperation of the Polish nation and State: from the beginning help for the refuges has been organized both by the public and non-public entities of the State and civil society,
- inclusion and activation of refugees within Polish society and economy, and
- a policy of no mandatory relocation and resettlement (6).

From the moment the war began, Polish officials struggled to help all refugees arriving into the country. Consequently, various measures were imposed by the government, including the organization of web pages with information for the refugees, the establishment of registration points in all major

Abbreviations: HCP, healthcare professionals; PUMS, Poznan University of Medical Sciences; UNHCR, United Nations High Commissioner for Refugees.

Polish cities (the biggest registration center at the National Stadium was organized in Warsaw), and registration buses which traveled to refugee shelters where Ukrainians could apply for a Polish national identification number (PESEL) that is required by residents in order to access the labor market, health care system, and social benefits. Finally, on 12 March the government adopted a special law for people fleeing Ukraine which guaranteed that they could legally stay in Poland for up to 180 days. It also facilitated the legal employment of refugees without the need for them to obtain a work permit, thus enabling those without a job to register as unemployed, and allowing them access to all public health care services, as well as social and family benefits, and services for those seeking psychological assistance. Additionally, refugees whose stay in the country had been deemed legal were allowed to undertake their business activities on the same terms as Polish citizens. To achieve all of these goals the government has facilitated obtaining the PESEL (7).

Simultaneously, many Polish citizens has engaged in various voluntary services to support the refugees. Consequently, as never before, Poland has seen mass mobilizations of thousands of ordinary people and a true explosion of citizens' commitment to the cause of the refugees. For instance, railway workers helped to organize a mass deployment of refuges throughout Poland; owners of hotels and hostels along the border provided refugees free accommodation; and tens of thousands of volunteers filled their own private vehicles with collected food, medications, thermal blankets, warming supplies, diapers, infant formula, and baby wipes before crossing over the Ukrainian border to pass the supplies to the weary people of Ukraine waiting to enter Poland at the border. Many others offered their time and skills at train stations, refugee centers where they worked at reception points, help in administrative work, Polish translation services, legal advice, psychological support, material supplies, and the organization of transportation services. Moreover, countless Polish citizens have provided the Ukrainians with work and free private accommodation. These services are of special importance since no one was prepared for an international crisis such as this one and the entire Polish system has been seriously overwhelmed as a result. Thus, by engaging in ad hoc "crisis management" efforts, volunteers have contributed in helping to alleviate some of the stress placed on the national government.

Although previous research has analyzed volunteers' responses to various crises that have haunted Europe in recent years, including: the migration and refugee crisis in 2015 when a vast number of European citizens engaged in helping migrants and refugees (8–16) and the recent global health crisis when thousands of medical students volunteered to support healthcare professionals' fight against the COVID-19 pandemic (17–21), this study attempted to understand the motivations and experiences of Polish volunteers who supported Ukrainian refugees who fled from Russia's invasion in their homeland into Poland.

Materials and methods

The study was conducted between 15 March, and 15 May, 2022. Participants were volunteers enrolled in different voluntary services in Poznan, Poland. We used a selfdeveloped questionnaire with 36 questions of various types (yes/no, single and multiple choice, 5-point Likert scale of attitude). It consisted of four sections. The Introduction section gathered volunteers' demographic information regarding their sex, age, nationality, profession, marital status, permanent place of residence, religion, and self-perceived health status. The Materials and methods section included questions regarding the respondents' prior experiences with volunteering. The Results section focussed on respondents' experiences with volunteering during the Ukrainian refugee crisis. The Study limitations section of the questionnaire included questions regarding the main reasons volunteers initially became involved in helping refugees. In this section, respondents were also asked to rate on a scale from 1 (not significant) to 5 (very important) their various reasons for volunteering.

The process of editing and expanding the questionnaire followed the guidelines of the European Statistical System (ESS) (22). First, during an online focus-group meeting three researchers developed a list of important issues on volunteering, which resulted in a questionnaire which was assessed by an additional reviewer. Then, the questionnaire was pre-tested *via* an online platform with five volunteers. Based on our pilot study, two questions were added and four were reformulated. The final version of the questionnaire was approved by the Poznan University of Medical Sciences' Bioethics Committee which also granted its ethics and research governance approval (KB – 228/22).

After receiving final approval, we posted the questionnaire and an invitation to participate in the study on an online platform dedicated to volunteers engaged in helping the Ukrainian refugees in Poznan, Poland. Additionally, a snowball sampling was used as participants were asked to provide referrals to other potential subjects. This in turn helped to recruit additional volunteers. Volunteers were included if they were directly involved in voluntary service with Ukrainian refugees and were eager to participate in the study. Informed consent was obtained from all participants included in the study.

The data collected in the questionnaires were verified and checked for completeness, quality, and consistency and exported into the statistical package JASP (Version 0.16.3). The results are presented as descriptive statistics.

Results

While the total number of volunteers who offered their help to various NGOs and the local authorities in managing the crisis in refugee centers and reception points in Poznan is unknown, 196 volunteers completed the questionnaire. Our group consisted of 157 females and 39 males (Table 1), with an average age of 33.7 years. While 98% of volunteers were Polish, white-collar workers and students predominated the sample population (49 and 44.9% respectively). The majority of volunteers (54.6%) lived in large city and were either single (41.9%) or married (35.2%). While most of the volunteers were Roman Catholics (60.2%), 17.9% declared themselves to be atheists.

The majority of refugee helpers had various types of volunteer experience before the refugee crisis began (84.2%), and over one-third had been a volunteer more than 10 times (37.2%) (Table 2). Over a half of volunteers who declared themselves as having been engaged in voluntary services in the past were more engaged in occasional, episodic volunteering (55.1%), school volunteering (53.6%), individual volunteering (37.8%), and volunteering in hospitals or hospices (34.7%). At the same time, many respondents declared that apart from voluntary service they were helping those in need in many other ways, including donation of food and clothing organized by various charity collections (53.1%) and donation of one percent of their income tax for charity, as calculated in annual statements, to the selected public benefit organization (43.4%).

The predominant feelings in volunteers evoked by the Russo-Ukrainian War and the influx of refugees were compassion (79.1%), sadness (78.6%) and the willingness to act (75.5%) (Table 3). Simultaneously, many respondents felt anger (66.3%) and fear, either over their loved ones (58.2%), or that the war would also come to Poland (54.6%). For 52% of respondents the most important reason to engage in voluntary services during the refugee crisis was their belief that it is important to help others, while 27.5% believed that it was their moral duty, and 8.2% wanted to be a part of something important. Simultaneously, over a half of respondents did not consult their decision on engaging in voluntary service with anybody (53.6%), while 25% consulted with their friends, 23.5% with their partner, and 14.8% with their parents.

The largest group of refugee helpers organized material collections (73.5%), offered material support (52.6%), helped in logistics and transportation (18.4%), provided a flat or hosted refugees at home (16.3%), or provided child care to Ukrainian children (12.8%).

Interestingly, although many volunteers were concerned that different immunization schedules in Ukraine and overall lower vaccination rates among refugees could pose an epidemiological risk (54.1%), 67.3% were not afraid of the possibility of being infected with COVID-19 (Table 4). At the same time, of those who felt anxious about the possibility of contracting the novel coronavirus, 18.4% believed that in times of war it did not matter and for this reason they felt obliged to engage whatever the risk.

Although the vast majority of respondents declared that the voluntary service among Ukrainian refugees met their

TABLE 1 Socio-demographic characteristics of volunteers.

TABLE 2 Respondents' previous experience with the voluntary service.

N (%)

165 (84.2) 31 (15.8)

7 (4.3) 18 (11) 46 (28) 32 (19.5) 61 (37.2)

39 (19.9) 41 (20.9) 68 (34.7) 105 (53.6) 30 (15.3) 74 (37.8) 27 (13.8) 35 (17.9) 21 (10.7) 8 (4.1)

108 (55.1) 56 (28.6)

23 (11.7) 85 (43.4) 104 (53.1) 33 (16.8) 21 (10.7)

| Characteristics | $N\left(\% ight)$ | |
|---|-------------------|---|
| Sex | | Have you ever been engaged in voluntary service before? |
| Female | 157 (80.1) | Yes |
| Male | 39 (19.9) | No |
| Median age(years) | 28 | How many times have you volunteered before? |
| Mean age(years) | 33.7 | 1 |
| SD (years) | 14.3 | 2 |
| Minimum age(years) | 16 | 3–5 |
| Maximum age(years) | 81 | 6–10 |
| Nationality | | >10 |
| Polish | 192 (98) | What volunteer work have you done in the past?* |
| Ukrainian | 2(1) | Volunteering in response to COVID-19 |
| Other | 2(1) | Sports volunteering |
| Profession | | Volunteering in hospitals, hospices |
| Unemployed | 3 (1.5) | School volunteering |
| Pensioner | 6 (3.1) | Employee volunteering |
| Student | 88 (44.9) | Individual volunteering |
| Blue collar | 3 (1.5) | International volunteering |
| White collar | 96 (49) | NGO volunteering |
| Marital status | | Volunteering for seniors |
| Single | 82 (41.9) | Other |
| A partnership | 31 (15.8) | What type of volunteer work have you done in the past? |
| Married | 69 (35.2) | Action volunteering |
| Widowed | 3 (1.5) | Long-term volunteering |
| Divorced | 11 (5.6) | Apart from volunteering do you help in any other way?* |
| Place of residence | | I donate blood |
| Up to 10,000 inhabitants | 22 (11.2) | I donate 1 percent of tax for charity |
| 10-50,000 inhabitants | 17 (8.7) | I donate food and clothing for collection |
| 51-100,000 inhabitants | 14 (7.1) | I text messages for charity |
| 101-500,000 inhabitants | 36 (18.4) | No |
| Above 500,000 inhabitants | 107 (54.6) | |
| Religion | | *It was possible to give more than one answer. |
| Roman Catholic | 118 (60.2) | |
| Other Christian | 1 (0.5) | |
| Believer but not affiliated with any religion | 22 (11.2) | chaos (35.75), the number of duties (16.3 |
| Agnostic | 14 (7.2) | (11.7%), and long working hours (9.7%). A |
| Atheist | 35 (17.9) | of volunteers were afraid that their volun |
| Buddhist | 2(1) | not bring tangible results, while 11.7% were |
| Other | 2(1) | risk of contracting an infectious disease, inc |
| How do you perceive your health? | | (Table 5). |
| Very good | 66 (33.7) | Additionally, although almost half of the |

expectations (77%) and over 80% declared that it was not as hard as they had expected, still many felt burdened by their lack of knowledge of the Ukrainian language (42.9%), organizational

Good

Very bad

Bad

.3%), lack of sleep Additionally, 22.4% nteer efforts would e anxious about the cluding COVID-19

Additionally, although almost half of the volunteers had no worries related to voluntary service among the refugees (46.4%), nearly one-third were concerned over their qualifications which might be inadequate to their responsibilities (18.9%) or that they would not be able to handle the responsibility of volunteering (10.7%). Moreover, some were worried that volunteering would be too time consuming and that they would not have time for personal duties (15.8% apiece).

For all of these reasons some respondents declared that the biggest disadvantage of volunteering was a lack of time, either

118 (60.2)

11 (5.6)

1 (0.5)

TABLE 3 Voluntary service during the Ukrainian refugee crisis.

| | N (%) |
|--|-------------------|
| What were your feelings after hearing about the war in Ukraine and | d the wave |
| of refugees?* | |
| Sadness | 154 (78.6) |
| Existential anxiety | 101 (51.5) |
| Anxiety | 97 (49.5) |
| Fear that the war will also come to Poland | 107 (54.6) |
| Fear about my own future | 97 (49.5) |
| Fear for loved ones | 114 (58.2) |
| Anger | 130 (66.3) |
| Compassion | 155 (79.1) |
| Willingness to act | 148 (75.5) |
| Nothing, it was irrelevant to me | 1 (0.5) |
| Did you consult your decision on engaging into voluntary service w | ith anybody?* |
| Parents | 29 (14.8) |
| Siblings | 16 (8.2) |
| Partner | 46 (23.5) |
| Friends | 49 (25) |
| My fellow students | 19 (9.7) |
| Teacher | 1 (0.5) |
| Neighbors | 2(1) |
| A Priest | 1 (0.5) |
| Someone else | 6 (3.1) |
| No | 105 (53.6) |
| What was the main reason to engage in voluntary service during the | e refugee crisis? |
| I believe it is important to help others | 102 (52) |
| I believe it is my moral duty | 54 (27.5) |
| It gives me the opportunity to pay back for all I have received | 10 (5.1) |
| myself | |
| I wanted to be a part of something important | 16 (8.2) |
| To experience the adventure | 1 (0.5) |
| It gives me the opportunity to realize my passion | 2(1) |
| It is better than sitting at home and studying, or to be bored | 4(2) |
| To meet new people, make new connections and friends | 2(1) |
| To put my voluntary participation into my future application | 1 (0.5) |
| documents | |
| To gain experience needed in my future profession | 2(1) |
| To establish new connections that will be useful in the future | 0 |
| I was encouraged by a friend who also volunteered | 2(1) |
| What do you do during voluntary service?* | |
| I work at the reception point | 19 (9.7) |
| I work at the information point | 17 (7.6) |
| I work at the catering point | 21 (10.7) |
| I help in logistics and transport | 36 (18.4) |
| I organize material collections (sorting, packing and | 144 (73.5) |
| | |
| distribution of material supplies) | |
| distribution of material supplies) I help with the translation from Ukrainian/Russian/English | 10 (5.1) |

(Continued)

TABLE 3 (Continued)

| | N (%) |
|---|------------|
| I help in administrative and office work | 14 (7.1) |
| I provide a flat or host refugees at home | 32 (16.3) |
| I offer psychological support | 14 (7.1) |
| I offer legal support | 3 (1.5) |
| I offer material support | 103 (52.6) |
| I offer medical assistance | 18 (9.2) |
| I provide child care for Ukrainian children | 25 (12.8) |
| | |

^{*}It was possible to give more than one answer.

TABLE 4 Volunteers' opinions on the epidemiological risk related to the mass influx of refugees.

| | N(%) |
|---|----------------------|
| Do different immunization schedules (i.e. measles, vira | l hepatitis) and low |
| vaccination level among Ukrainians refugees pose epide | emiological risk? |
| Yes | 106 (54.1) |
| No | 26 (13.2) |
| I do not know | 64 (32.7) |
| Does the low vaccination level for COVID-19 among U | krainians makes you |
| feel sacred of contracting the various? | |
| Yes | 24 (12.3) |
| Yes, but in times of war it does not matter | 36 (18.4) |
| to me | |
| No | 30 (15.3) |
| No, because I am vaccinated for | 80 (40.8) |
| COVID-19 | |
| No, because I believe that currently the | 22 (11.2) |
| pandemic is no longer a risk | |
| I do not know | 4 (2) |
| | |

for educational or professional duties (25.5%), oneself (25.5%), or family and friends (19.9%). At the same time, benefits derived from helping the refugees were stressed much more often, as 86.7% declared that helping others provided them with the realization of the ideal of doing good while 52.6% declared that it helped them grow personally. For 44.9% it was a possibility to prove oneself and 44.4% argued that volunteering gave them a sense of accomplishment and agency.

Finally, more than 97% of volunteers declared having received positive reactions either from their families, fellow colleagues, or friends and very few regretted their decision to volunteer.

Volunteers were also asked to rate their various reasons for volunteering (Table 6). A detailed analysis enabled the identification of four main functions of volunteering among Ukrainian refugees: values, enhancement, career, and social. The values function ranked highest, with a mean of 3.84. Next was

TABLE 5 Respondents' experience with voluntary service during the Ukrainian refugee crisis.

| | N (%) |
|--|-----------|
| What is the hardest during your voluntary service?* | |
| Lack of knowledge of a language | 84 (42.9) |
| The pace of work | 10 (5.1) |
| Duration of work, long working hours | 19 (9.7) |
| The amount of duties | 32 (16.3) |
| Type of performed tasks | 10 (5.1) |
| Organizational chaos | 70 (35.7) |
| Sense of danger related to the risk of contracting | 23 (11.7) |
| infectious disease, including the COVID-19 | |
| Contacts with the unknown people | 18 (9.2) |
| Contacts with the refugees | 3 (1.5) |
| Lack of sleep | 23 (11.7) |
| Feeling that my work will not bring tangible results | 44 (22.4) |
| Lack of psychological support | 14 (7.1) |
| Are you anxious about anything during your voluntary service?* | |
| That I will not handle it | 26 (13.3) |
| That I do not poses sufficient skills and competences | 37 (18.9) |
| That the volunteering will negatively affect my | 21 (10.7) |
| studies/work | |
| That I will not have time for my family and friends | 19 (9.7) |
| That I will not have time for my personal duties | 31 (15.8) |
| I feared contacts with the strangers | 15 (7.6) |
| That my work input will not bring tangible results | 31 (15.8) |
| I feared the risk of contracting infectious disease, i.e., | 10 (5.1) |
| measles | |
| That I can get infected with COVID-19 | 14 (7.1) |
| I had no worries | 91 (46.4) |
| What reactions do you face as a volunteer (including those form your | |
| family, relives, friends)? | |
| Positive | 151 (77) |
| Rather positive | 40 (20.4) |
| Indifferent | 4 (2.1) |
| Rather negative | 1 (0.5) |
| Negative | 0 |
| Does voluntary service meet your expectations? | |
| Yes | 151 (77) |
| No | 6 (3.1) |
| I do not know | 39 (19.9) |
| What are the benefits of volunteering?* | |
| Feeling of being needed - increase in self-esteem and | 103 (52.6 |
| motivation | , |
| Sense of accomplishment and agency | 87 (44.4) |
| The possibility of helping those in need | 170 (86.7 |
| The opportunity to prove yourself | 88 (44.9) |
| Learning practical skills | 22 (11.2) |
| Strengthening of personal and social skills (learning | 20 (10.2) |
| patience, communication, cooperation) | 20 (10.2) |

(Continued)

TABLE 5 (Continued)

| | $N\left(\% ight)$ |
|--|-------------------|
| (First) work experience or enhancing one's | 59 (30.1) |
| professional skills | |
| New relationships, meeting interesting people | 12 (6.1) |
| Increase in self-help in society | 47 (24) |
| The opportunity to spend time usefully | 42 (21.4) |
| Learning about a new culture and language | 47 (24) |
| What are the disadvantages of volunteering?* | |
| Lack of salary | 15 (7.7) |
| Lack of time for family and friends | 39 (19.9) |
| Lack of time for oneself | 50 (25.5) |
| Negligence in educational or professional duties | 50 (25.5) |
| The risk of contracting infectious disease | 28 (14.3) |
| People's negative reactions | 6 (3.1) |
| I do not see any disadvantages | 83 (42.3) |
| Was volunteering harder than you expected? | |
| Yes | 21 (10.7) |
| No | 157 (80.1) |
| I do not know | 18 (9.2) |

^{*}It was possible to give more than one answer.

the enhancement function (M = 2.54), followed by social (M = 2.25), and career function (M = 2.00).

Significantly, the three most highly ranked motivations were altruistic/value-driven: the desire to help others (M = 4.78), the desire to give something back to the community (M = 4.18), and the desire to participate in something important (M = 3.38). Simultaneously, while the response "To help others" ranked with the highest score it differed significantly way from every other response. On the other hand, career-related motivations and those appealing to a social dimension of volunteering were among the lowest ranked reasons to volunteer: "To enhance my professional résumé" (M = 1.43), "To gain recognition of my professors, family, and friends" (M = 1.64) and "To fill free time" (M = 1.68).

Discussion

The Russian invasion of Ukraine has caused a great humanitarian crisis which has led to the displacement of a large number of people who have fled from their homes. At the same time, it has motivated an unprecedented number of Polish citizens to engage in practices to help this vulnerable population. More Polish citizens than ever before have engaged in helping these refugees in many different ways, ranging from working in reception centers, organizing logistics and collections of material supplies, to providing refugees with psychological and legal support. Additionally, they have offered language

courses and child care to Ukrainian children. Simultaneously, this study confirms the observation made by other studies that have demonstrated that the most common form of helping refugees is the organization of material collections and support. For example, a recent report conducted by one of the largest Polish NGOs, Noble Gift, showed that Poles were the ones primarily involved in providing these refugees with financial support (48%) as well as the organization of food and clothing collections (46 and 34% respectively) (23). Similarly, according to the Center for Public Opinion Research (24) the most popular form of helping these refugees has been the collection of food, clothing, and hygiene products (76%); monetary donations (57%); the provision to refugees of a flat or home (12%); involvement in the organization of various collections (12%); and assistance in official matters (11%) (24).

However, the most important finding from our study is that although volunteers' engagement with migrants and refugees has a long tradition, especially when it comes to third-sector organizations (25), what is new in the current Ukrainian crisis is that it has resulted in a social spurt of volunteering for refugees that has spread throughout the country. Thus, since many refugee helpers from this study believed that helping those in need should not rest solely on the government this "new volunteerism" is best characterized as "spontaneous volunteering" (11, 23, 24, 26-28). Indeed, while according to the Polish Economic Institute at the beginning of the war 70% of Polish citizens engaged in some form of refugee assistance, the majority of that help was ad hoc, as 65% of volunteers were helping up to 5h per week, while only 9% for more than 10 h. Additionally, most of these actions had a local impact (29).

Moreover, because most respondents stressed two main motivations to volunteering: a general willingness to help and willingness to volunteer on behalf of Ukrainian refugees, this research supports other findings that suggest that the majority of the newly engaged volunteers were motivated neither by religious nor political factors. Thus, they were not activists but "ordinary citizens" (23, 29–32).

This research is also in line with findings from other studies that have emphasized that volunteering serves different functions and motivations (33–36). However, while previous studies have suggested that many volunteers nowadays, young people in particular, are less orientated toward value-based volunteering and are more focused on their career and personal growth (37–47), this study demonstrated that in a time of crisis the majority of people have been primarily motivated by altruism and public service, while professional and social motivations for volunteering recorded much lower means. Most volunteers enrolled in this study declared that after hearing about the war in Ukraine and the influx of refugees, they felt a strong need to act and wanted to be a part of the solution. Thus, while they were driven by the idea of doing good and also by the ethical

imperative to help those who are disadvantaged, they ultimately stepped forward out of a sense of civic responsibility.

This should come as no surprise, because previous research has shown that although volunteers are aware of the personal benefits derived from volunteering, (i.e., gaining new knowledge and skills or making new contacts that might help them in the future), these are not their primary motivations but are rather additional benefits (40, 44–47). Similarly, most studies conducted among volunteers during the migration and refugee crisis in 2015 emphasized the importance of humanistic and democratic values over other motivations (8–16, 26–28, 48–50). On the other hand, recent studies conducted among volunteers who engaged in the fight against the COVID-19 pandemic demonstrated that in times of a global health crisis people's primary motivations for becoming involved in voluntary service were altruism and the ethical imperative to serve their community and their fellow citizens (17–21, 51).

Also, most volunteers enrolled in this study described helping refugees both as a moral imperative as well as a satisfying experience which made them feel proud and fulfilled. Additionally, many emphasized that volunteering increased their self-esteem, sense of accomplishment, and personal agency. This is in line with findings from other studies which have suggested that new volunteers often distance themselves from controversial activism for refugees and declare humanitarian reasons instead as the reason for their engagement (49, 50). Thus, while most participants from this study felt solidarity with the refugees, humanitarianism was the most often mentioned reason for volunteering (52). However, while other studies have also suggested that the primary motivation for volunteering among the refugees was altruism, our study showed that some volunteers' motivations were also related to personal enhancement, i.e., feeling good about oneself, increasing one's self-esteem, or avoiding feeling guilty (29).

What is equally important to know is that although the war began when the risk of the pandemic was still present and many COVID-19 restrictions were being enforced, most volunteers believed that helping the refugees was a moral duty. Thus, even though at the start of the war there were 5,015,994 confirmed COVID-19 cases and 112,452 deaths in Ukraine and the vaccination rate was very low (36.3%) (53), most respondents felt obliged to engage whatever the risk (20, 54).

However, although most volunteers who responded to the call for assistance were primarily motivated by altruism, still many were not fully aware of the demands that a refugee crisis could place on them, both personally and professionally. Consequently, they found some aspects of their service challenging, difficult, and somewhat frustrating. In particular, respondents were burdened by not knowing the Ukrainian language and culture which hindered their communication with the refugees and made them feel unable to address all the needs of the refugees (55–57). Additionally, as volunteers experienced greater pressure they were frustrated by organizational chaos,

TABLE 6 Volunteers' motivations.

| | 1 | 2 | 3 | 4 | 5 | Median | Mean |
|---|-----|----|----|----|-----|--------|------|
| To help others (Value) | 0 | 0 | 1 | 42 | 153 | 5 | 4.78 |
| To give something from myself to the community (Value) | 7 | 8 | 25 | 59 | 97 | 4 | 4.18 |
| To realize the duty of public service (Value) | 49 | 29 | 37 | 36 | 45 | 3 | 3 |
| To participate in something important (Value) | 25 | 31 | 40 | 44 | 56 | 4 | 3.38 |
| To do something important and feel proud and fulfilled (Enhancement) | 28 | 37 | 38 | 40 | 53 | 3 | 3.27 |
| To pursue the passion of helping others (Enhancement) | 30 | 45 | 41 | 36 | 44 | 3 | 3.1 |
| To experience the adventure and to tell in future that I was a part of it (Enhancement) | 103 | 27 | 29 | 18 | 19 | 1 | 2.1 |
| To fill free time (Enhancement) | 132 | 22 | 20 | 16 | 6 | 1 | 1.68 |
| To get new knowledge and skills (Career) | 62 | 35 | 35 | 36 | 28 | 3 | 2.66 |
| To gain professional experience (Career) | 114 | 31 | 19 | 16 | 16 | 1 | 1.92 |
| To enhance my professional résumé (Career) | 149 | 24 | 14 | 4 | 5 | 1 | 1.43 |
| To make new friends and establish new connections (Social) | 76 | 44 | 29 | 35 | 12 | 2 | 2.30 |
| To work with other people (Social) | 54 | 29 | 42 | 43 | 28 | 3 | 2.81 |
| To gain recognition of my professors, family and friends (Social) | 131 | 31 | 15 | 12 | 7 | 1 | 1.64 |

work overload, and long working hours which made them feel stressed and uncertain about the results of their work [55, 58]. Thus, it should come as no surprise that the majority of Poles believe that it is the government (30%), European Union (25%), and international humanitarian organizations (17%) that should help, while only 9% declared that everyone should be involved (23). Moreover, a recent study conducted by Szlachetna Paczka found that while 56% of Poles declared that they have been involved in helping the refuges since the war started, the majority believe that Ukrainians should be helped only up until the moment when they will be able to return to their country (69%), while 18% believe that they should be helped and allowed to settle down in Poland permanently (23). Similarly, according to a public research poll conducted in June 2022, the number of Poles who believe that Poland should still accept refugees is slowly decreasing (94% in March vs. 82% in June), while the number of those who are against it is increasing (from 7 to 12% respectively). However, 52% of Poles still declare that they are willing to help the refugees (24).

Finally, our research highlights the importance of emotions as a motivating factor for engaging in voluntary service (15). The majority of volunteers emphasized that feelings of compassion, anger, and a willingness to help have influenced their decision to engage. A similar observation was found by Doidge and Sandri (14) who found that while for most volunteers who helped in an informal refugee camp in Calais, France called the "Jungle", empathy was the initial motivator for action and also helped to sustain their voluntary service as volunteers and make sense of their emotions through working in the camp. Similarly, a survey conducted by the Center for Public Opinion Research demonstrated that the majority of Poles who engaged in volunteer efforts felt strongly

threated by the war (85% in March to 77% in June) (24). On the other hand, another survey showed that the most predominant feeling experienced by those who engaged in helping the Ukrainian refugees was compassion (60%), followed by sadness (45%), uncertainty (44%) and anger (39%) (23). Thus, our study confirms that it was primarily empathy and altruism that motivated Poles to volunteer even before the central government, local authorities, and various NGOs started to help.

Study limitations

Although to the best of our knowledge this is one of only a few studies conducted on the motivations and experiences of Polish volunteers during the Ukrainian refugee crisis, it has limitations which may have an impact on its generalizability and interpretation. Firstly, because this study utilized a relatively small sample size it reduces the power of the study and increases its margin of error. Consequently, it indicates the need for further investigation. However, it should be noted that many respondents refused to participate in our study due to a lack of time and/or work overload. Secondly, because the study took place when some COVID-19 restrictions still applied it might have hindered the recruitment process and reduced the number of respondents. Thus, it would be desirable to compare the findings to a larger group. Thirdly, since we analyzed responses from volunteers from only one Polish city, this study has a localized impact. Consequently, it would be desirable to compare our findings to other locations in the country. Fourthly, because this research represents solely the opinions of those volunteers who agreed to participate in the study the results cannot therefore be extrapolated to the entire population of

volunteers either in Poznan or in Poland as a whole, and more in-depth studies would be required. Another limitation resulted from non-random sampling which prevented an analysis of the socio-demographic, structural, and socio-cultural background of the issues discussed in the study. Finally, as this study is based on the quantitative method only, to better understand volunteers' motivations, needs and lived experiences, further in-depth studies using qualitative methods would be required.

Despite these limitations, however, this study also benefits from some advantages. Most importantly, to the best of our knowledge, no other research on volunteering during the Ukrainian refugee crisis has been done. Thus, as there is a scarcity of previous work on the topic, this research helps to fill a gap in the literature on the attitudes of volunteers toward the Ukrainian refugees and may stimulate further research on the topic. Moreover, because this was a pilot study, it may inspire further research on volunteers' experiences and needs during the current crisis. Finally, as this study enabled the volunteers to share some of their lived experiences it might have a therapeutic value.

Conclusions

All in all, this study contributes to the existing literature by describing how the current refugee crisis caused by the Russian invasion of Ukraine resulted in the emergence of spontaneous volunteering in Poland. It also shows that when a community is faced with a crisis then people want to be a part of the solution. Moreover, it shows that regardless of a difficult situation and working conditions volunteers are ready to adapt to a crisis to ensure that people who are negatively affected receive the services and support they need. Finally, it demonstrates that although volunteers were motivated by humanistic and democratic values, emotions also played an important role in influencing people's decision to volunteer. At the same time, this research suggests that there is still a need to improve the organizational and internal communication of volunteer organizations.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

References

1. United Nations High Commissioner for Refugees. Operational Data Portal. Ukrainian Refugee Situation. (2022). Available online at: https://data.unhcr.org/en/situations/ukraine (accessed June 14, 2022).

Ethics statement

The study was performed in line with the principles of the Declaration of Helsinki, and, in accordance with local legislation and national guidelines on research involving human subjects, ethical approval and research governance approval was not required. However, since some participants asked for such approval, however, it was obtained from the Poznan University of Medical Sciences Bioethics Committee (KB – 228/22). Written informed consent was also obtained from all respondents enrolled in the study.

Author contributions

JD, DW, and EB supervised the conceptualization of the study, designed the research questionnaire, and conducted the literature search. DW performed the statistical analyses. JD and DW analyzed and discussed the results and interpreted the data. JD wrote the original draft of the manuscript. All authors collected the data, critically revised, edited the various drafts of the manuscript, and approved the final version of the manuscript.

Acknowledgments

We wish to thank all the volunteers who participated in the study. We also acknowledge Ms. Brittany Fechner for language editing of the manuscript.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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^{2.} Straz Graniczna (2022). Available online at: https://twitter.com/Straz_Graniczna?ref_src=twsrc%5Etfw%7Ctwcamp%5Etweetembed%7Ctwterm %5E1537679434525835264%7Ctwgr%5E%7Ctwcon%5Es1_&ref_Available online at: (accessed June 22, 2022).

- 3. United Nations High Commissioner for Refugees. (2022). Available online at: https://www.unhcr.org/news/press/2022/3/6245d8574/un-high-commissioner-refugees-calls-immediate-end-ukraine-war-uprooted.html (accessed June 14, 2022).
- 4. Serwis Rzeczypospolitej Polskiej. Mniejszości narodowe i etniczne, Ukraińcy. (2022). Available online at: https://www.gov.pl (Aaccessed June 16, 2022).
- 5. Centrum Analiz i. *Badań Unii Metropolii Polskich im.* Pawła Adamowicza Miejska gościnność: wielki wzrost, wyzwania i szanse Raport o uchodzcach z Ukrainy w najwiekszych polskich miastach. (2022).
- 6. Firlit-Fesnak G. Działania administracji publicznej wobec uchodzców wojennych z Ukrainy w Polsce pierwszy miesiac budowania systemu pomocy. In: Inwazja Rosji na Ukraine Społeczeństwo i polityka wobec kryzysu uchodzczego w pierwszym miesiacu wojny Raport roboczy, eds G Firlit-Fesnak, E Jaroszewska, Ł Łotocki, J Łukaszewska-Bezulska, M Ołdak, P Zawadzki, et al. (Warszawa: Wydział Nauk Politycznych i Studiów Miedzynarodowych Uniwersytetu Warszawskiego), p 10–22. (2022).
- 7. Kancelaria Sejmu. Ustawa z dnia 12 marca 2022 r. o pomocy obywatelom Ukrainy w zwiazku z konfliktem zbrojnym na terytorium tego państwa. Dz.U. 2022 poz. p. 583. (2022). Available online at: https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20220000583/T/D20220583L.pdf (accessed June 16, 2022).
- 8. Koca BT. New social movements: "Refugees welcome UK". Eur Sci J. (2016) 12:96–108. doi: 10.19044/esj.2016.v12n2p96
- 9. Bernát A, Kertész A, Tóth FM. Solidarity reloaded: Volunteer and civilian organizations during the migration crisis in Hungary. Szociol Szle. (2016) 26:29–52.
- 10. Chtouris S, Miller DS. Refugee flows and volunteers in the current humanitarian crisis in Greece. *J Appl Secur Res.* (2017) 12:61–77. doi: 10.1080/19361610.2017.1228025
- 11. Guribye E, Mydland TS. Escape to the island: International volunteer engagement on Lesvos during the refugee crisis. *J Civ Soc.* (2018) 14:346-363. doi: 10.1080/17448689.2018.1518774
- 12. Jobst E, Gall C, Eiche C, Birkholz T, Prottengeier J. Do good, stay well. Well-being and work satisfaction among German refugee helpers: A national cross-sectional study. *PLoS ONE*. (2018) 13:e0209697. doi: 10.1371/journal.pone.0209697
- 13. Kalogeraki, S. Volunteering for refugees and asylum seekers in Greece. In: *Solidarity in Europe. Palgrave studies in European political sociology.* C. Lahusen, M. Grasso eds. (Cham: Palgrave Macmillan). (2018). p. 169–194. doi: 10.1007/978-3-319-73335-7_7
- 14. Doidge M, Sandri E. 'Friends that last a lifetime': the importance of emotions amongst volunteers working with refugees in Calais. $Br\ J\ Sociol.\ (2019)\ 70:463-80.\ doi: 10.1111/1468-4446.12484$
- 15. Maestri G, Monforte P. Who deserves compassion? The moral and emotional dilemmas of volunteering in the 'refugee crisis. *Sociology.* (2020) 54:920–35. doi: 10.1177/0038038520928199
- 16. Steen Bygballe Jensen L, Kirchner LM. Acts of volunteering for refugees: Local responses to global challenges. *Nordic J Migr Res.* (2020) 10:26–40. doi: 10.33134/njmr.367
- 17. Gallagher T, Schleyer A. "We signed up for this!" student and trainee responses to the COVID-19 pandemic. *New Engl J Med.* (2020) 382:e96. doi: 10.1056/NEJMp2005234
- 18. Thomson E, Lovegrove S. 'Let us Help'- Why senior medical students are the next step in battling the COVID-19 Pandemic. *Int J Clin Pract.* (2020) 74:e13516. doi: 10.1111/ijcp.13516
- 19. Chawłowska E, Staszewski R, Lipiak A, Giernaś B, Karasiewicz M, Bazan D, et al. Student volunteering as a solution for undergraduate health professions education: Lessons from the COVID-19 Pandemic. Front Public Health. (2021) 8:633888. doi: 10.3389/fpubh.2020.633888
- 20. Domaradzki J, Walkowiak D. Medical students' voluntary service during the COVID-19 pandemic in Poland. Front Public Health. (2021) 9:618608. doi: 10.3389/fpubh.2021.618608
- 21. Michno DA, Tan J, Adelekan A, Konczalik W, Woollard ACS. How can we help? Medical students' views on their role in the COVID-19 pandemic. J Public Health. (2021) 43:479–89. doi: $10.1093/{\rm pubmed/fdaa271}$
- 22. Brancato G, Macchia S, Murgia M, Signore M, Simeoni G, Blanke K, et al. *The Handbook of Recommended Practices for Questionnaire Development and Testing in the European Statistical System*. (2005). Available online at: https://www.istat.it/en/files/2013/12/Handbook_questionnaire_development_2006.pdf (accessed June 15, 2022).
- 23. Szlachetna Paczka. Raport. Polacy o pomocy uchodzcom. (2022). Available online at: https://www.szlachetnapaczka.pl/aktualnosci/polacy-o-pomocy-uchodzcom/ (accessed August 20, 2022).

- 24. Centrum Badania Opinii Społecznej. Polacy w obliczu wojny na Ukrainie. (2022). Available online at: https://www.cbos.pl/SPISKOM.POL/2022/K_086_22. PDF (accessed August 20, 2022).
- 25. Garkisch M, Heidingsfelder J, Beckmann M. Third sector organizations and migration: A systematic literature review on the contribution of third sector organizations in view of flight, migration and refugee crises. *Voluntas: Int J Volunt.* (2017) 28:1839–80. doi: 10.1007/s11266-017-9895-4
- 26. Mayer M. Cities as sites of refuge and resistance. Eur Urban Reg Stud. (2018) 25:232–49. doi: 10.1177/0969776417729963
- 27. Boersma K, Kraiukhina A, Larruina R, Lehota Z, Nury EO. A port in a storm: Spontaneous volunteering and grassroots movements in Amsterdam. A resilient approach to the (European) refugee crisis. *Soc Policy Adm.* (2019) 53:728–42. doi: 10.1111/spol.12407
- 28. Larruina R, Boersma K, Ponzoni E. Responding to the Dutch asylum crisis: Implications for collaborative work between civil society and governmental organizations. *Social Inclusion*. (2019) 7:53–63. doi: 10.17645/si.v7i2.1954
- 29. Baszczak Ł, Kiełczewska A, Kukołowicz P, Wincewicz A, Zyzik R. Pomoc polskiego społeczeństwa dla uchodzców z Ukrainy, Polski Instytut Ekonomiczny, Warszawa. (2022) Available online at: https://pie.net.pl/wp-content/uploads/2022/07/Pomoc-pol-spol-UKR-22.07.2022-D-1.pdf (accessed August 20, 2022).
- 30. Kals E, Strubel IT. Volunteering to support refugees: A question of one's scope of justice. Refuge Can J Refug. (2017) 33:66–77. doi: 10.7202/1043064ar
- 31. Fleischmann L, Steinhilper E. The myth of apolitical volunteering for refugees: German welcome culture and a new dispositif of helping. *Soc Incl.* (2017) 5:17–27. doi: 10.17645/si.v5i3.945
- 32. Artero M. Motivations and effects of volunteering for refugees spaces of encounter and political influence of the 'new civic engagement' in Milan. *Partecip Conflitto*. (2019) 12:142–67. doi: 10.1285/i20356609v12i1p142
- 33. Clary EG, Snyder M, Ridge RD, Copeland J, Stukas AA, Haugen J, et al. Understanding and assessing the motivations of volunteers: A functional approach. *J Pers Soc Psychol.* (1998) 74:1516–30. doi: 10.1037/0022-3514.74. 6.1516
- 34. Clary EG, Snyder M. The motivations to volunteer: Theoretical and practical considerations. *Curr Dir Psychol Sci.* (2002) 8:156–9. doi: 10.1111/1467-8721.00037
- 35. Musick M, Wilson J. Volunteers: A Social Profile. Bloomington: Indiana University Press. (2008).
- 36. Hustinx L, Cnaan A, Handy F. Navigating theories of volunteering: A hybrid map for a complex phenomenon. *J Theory Soc Behav.* (2010) 40:410–34. doi: 10.1111/j.1468-5914.2010.00439.x
- 37. Hustinx L. Individualism and new styles of youth volunteering: An empirical exploration. *Voluntary Action*. (2001) 3:47–55.
- 38. Brooks K. Talking about volunteering: A discourse analysis approach to volunteer motivations. *Voluntary Action*. (2002) 4:13–50.
- 39. Hustinx L, Lammertyn F. Collective and reflexive styles of volunteering: A sociological modernization perspective. *Voluntas: Int J Volunt Nonprofit Org.* (2003) 14:167–87. doi: 10.1023/A:1023948027200
- 40. Holdsworth C. Why volunteer? Understanding motivations for student volunteering. *Brit J Educ Stud.* (2010) 58:421–37. doi: 10.1080/00071005.2010.527666
- 41. Handy F, Cnaan RA, Hustinx L, Kang C, Brudney JL, Haski-Leventhal D, et al. A cross-cultural examination of student volunteering: Is it all about résumé building? *Nonprof Volunt Sec Q.* (2010) 39:498–523. doi: 10.1177/0899764009 344353
- 42. Cnaan RA, Smith KA, Holmes K, Haski-Leventhal D, Handy F, Brudney JL. Motivations and benefits of student volunteering: comparing regular, occasional, and non-volunteers in five countries. *Can J Nonprof Soc Econ Res.* (2010) 1:65–81. doi: 10.22230/cjnser.2010v1n1a2
- 43. Gage RL, Thapa B. Volunteer motivations and constraints among college students: Analysis of the volunteer function inventory and leisure constraints models. *Nonprof Volunt Sec Q.* (2011) 41:405–30. doi: 10.1177/0899764011406738
- 44. Fényes H, Pusztai G. Volunteering among higher education students. Focusing on the micro-level effects on volunteering. *J Soci Res Policy*. (2010) 3:73–95
- 45. Cnaan RA, Meijs L, Brudney JL, Hersberger-Langloh S, Okada A, Abu-Rumman S. You thought that this would be easy? Seeking an understanding of episodic volunteering. *Voluntas: Int J Volunt.* (2021) 33:415–27. doi: 10.1007/s11266-021-00329-7
- 46. Wilson J. Volunteerism research: A review essay. Nonprof Volunt Sec Q. (2012) 41:176–212. doi: 10.1177/0899764011434558

47. Brennan MA, Barnett RV, Flint CG. Community volunteers: The front line of disaster response. *Int J Volunt Adm.* (2005) 23:52–6.

- 48. Turinsky T, Nowicka M. Volunteer, citizen, human: Volunteer work between cosmopolitan ideal and institutional routine. In: *Refugee Protection and Civil Society in Europe.* M. Feischmidt, L. Pries, C. Cantat, eds. (Cham: Palgrave Macmillan). (2019). p. 243–268. doi: 10.1007/978-3-319-92741-1_9
- 49. Frykman MP, Mäkelä F. 'Only volunteers'? Personal motivations and political ambiguities within the refugees welcome to Malmö Civil Initiative. In: *Refugee protection and civil society in Europe.* M. Feischmidt, L. Pries, C. Cantat eds. (Cham: Palgrave Macmillan). (2019). p. 291–318. doi: 10.1007/978-3-319-92741-1_11
- 50. Domaradzki J, Walkowiak D. Does religion influence the motivations of future healthcare professionals to volunteer during the COVID-19 pandemic in Poland? An exploratory study. *J Relig Health.* (2021) 60:1507–20. doi: 10.1007/s10943-021-01231-8
- 51. Theiss-Morse E, Hibbing J. Citizenship and civic engagement. *Annu Rev Polit Sci.* (2005) 8:227–49. doi: 10.1146/annurev.polisci.8.082103.104829
- 52. Our World in Data (2022). Ukraine: Coronavirus Pandemic Country Profile. Available online at: https://ourworldindata.org/coronavirus/country/ukraine (accessed June 20, 2022).

- 53. Domaradzki J. 'Who else if not we' Medical students' perception and experiences with volunteering during the COVID-19 crisis in Poznan, Poland. *Int J Environ Res Public Health*. (2022) 19:2314. doi: 10.3390/ijerph19042314
- 54. Bjerneld M, Lindmark G, Diskett P, Garrett MJ. Perceptions of work in humanitarian assistance: interviews with returning Swedish health professionals. *Disaster Manag Response.* (2004) 2:101–8. doi: 10.1016/j.dmr.2004.08.009
- 55. Sifaki-Pistolla D, Chatzea VE, Vlachaki SA, Melidoniotis E, Pistolla G. Who is going to rescue the rescuers? Post-traumatic stress disorder among rescue workers operating in Greece during the European refugee crisis. Soc Psych Psych Epid. (2017) 52:45–54. doi: 10.1007/s00127-016-1302-8
- 56. Borho A, Georgiadou E, Grimm T, Morawa E, Silbermann A, Nißlbeck W, et al. Professional and volunteer refugee aid workers-depressive symptoms and their predictors, experienced traumatic events, PTSD, burdens, engagement motivators and support needs. *Int J Environ Res Public Health.* (2019) 16:4542. doi: 10.3390/ijerph16224542
- 57. Kindermann D, Jenne MP, Schmid C, Bozorgmehr K, Wahedi K, Junne F, et al. Motives, experiences and psychological strain in medical students engaged in refugee care in a reception center. A mixed-methods approach. *BMC Med Educ.* (2019) 19:302. doi: 10.1186/s12909-019-1730-8