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OHS Problems of Migrants in Turkey and the Order of Importance: Pareto Analysis

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Abstract: In Turkey, no studies have been conducted on the listing of the Occupational Health and Safety (OHS) problems of legal and illegal migrant workers, especially of Syrian origin, in the order of importance and the need to address solution suggestions according to this order. This study aims to list the OHS problems of migrants, refugees, asylum-seekers, migrants under international protection, and irregular migrants employed in the production and service sectors in the order of importance and show their effect on solutions. The 40-item list of problems created by performing the literature review was weighted with the expert opinions of stakeholders related to migrants in Turkey, namely, universities, migrant NGOs, Syrian academicians, government units, migrant workers, and OHS specialists, and checked using Pareto analysis. In the table created by experts through the evaluation and weighting of the problems obtained from the literature review, the first eight questions (20%) constituted 79%, the next 12 questions (30%) constituted 16%, and the last 20 questions (50%) constituted 5%. When the first eight problems are analyzed, it is observed that the OSH problems of migrants are caused by the laws that are not enacted, the fact that the state institutions ignore migrant workers, and that migrant workers are completely vulnerable to OSH risks. Afterward, the same expert team was asked about solution proposals within the scope of the existing problems, and they were put in the order of importance via Pareto analysis. In Turkey, there is no law or legislation regarding OHS legislation for migrant workers. Migrant workers experience serious security and health problems. The state especially ignores illegal migrant workers. Illegal migrant workers are deprived of their security rights and the right to access health care. It is observed that 80% of the migrant workers' problems will be resolved when the most important eight problems identified are resolved.

Keywords: Turkish OSH legislation; OHS risks; healthcare services; health status; migrant workers; security

1. Introduction

Following the Balkan Wars (1912–1913), the Ottoman Empire lost plenty of land, especially in Europe, and the population of the country started to decrease. For this reason, liberal migration policies began to be implemented to prevent the population decrease, and migrants were welcomed without any religious, sectarian, and ethnicity discrimination and placed in various regions of the empire [1]. Rebellions in the Balkan geography and separation movements starting in the Ottoman Empire caused migration movements to tend to increase. Although these migration influxes constituted a congestion, the empire later took them under control [2]. The collapse of the empires one by one and the proliferation of the nationalist movements after the First World War put forward the assumption that the collapse of

nation-states was more difficult [3]. This situation also required the Republic of Turkey, which had been founded newly, to rearrange its migration policies. Turkey, like newly founded nation-states, aimed at creating a homogenous population in terms of religion, ethnicity, and culture within the framework of the nation-state policy. Accordingly, it was ensured that the minorities were sent away and individuals from the Turkish culture were brought instead of them. In this context, the Convention Concerning the Exchange of Greek and Turkish Populations was signed on 30 January 1923. With this convention, intermigration was realized, excluding the Greeks in Istanbul and the Turks in Western Thrace [4]. Due to the economic crisis and assimilation activities in Bulgaria between 1984 and 1989, a total of 700,000 Bulgarian-Turkish migrants came to Turkey until 2000, including 400,000 people who migrated at once in 1989 [5].

The labor migration to various Western European countries from Turkey as of the 1960s defined Turkey as a country of emigration in the field of international migration. However, in recent years, the globalization conditions, economic development of Turkey, and negative political and economic developments in neighboring countries, especially in Syria, have caused Turkey to be positioned as a country receiving migration and a country of transition.

Migration movements towards Turkey are mainly divided into two categories, which are:

1. Regular migration of individuals who legally come to Turkey for employment and education, those who entered the country illegally, whose movement turns into irregular migration due to exceeding the duration of employment and residence permit, and people who illegally join the employment market by entering the country via visa exemption,
2. Movements of asylum-seekers and refugees who run away from pressure, public movements, and wars in their countries and take refuge in Turkey, and who use Turkey as a country of transition in order to migrate to developed Western countries.

In the last two decades, numerous legal and irregular migrants have entered Turkey in groups and in a short time, especially with the onset of the civil war in Syria in 2011. As of the end of 2019, the total number of foreigners in Turkey is around 6 million people, most of whom are forced migrants [6]. Turkey has become the place where people take refuge due to religious, historical, economic reasons, and living instincts, such as positive economic developments, its location on the Asian-European transit route, social movements arising from war and poverty in the countries of Asia Minor and the Middle East, religious union with the troubled countries, location of the troubled countries within the borders of the Ottoman Empire in the past, and Turkey's being a continuation of this empire [7]. Turkey has spent a significant amount of money to support migrants, refugees, asylum-seekers, migrants under international protection, and irregular migrants (referred to as "migrants"), who fled from the civil war in Afghanistan, Iraq, Iran, and to a large extent in Syria. However, it is not clear how long the nine-year civil war will continue, and it seems difficult for Turkey to continue providing financial support. Migrants have to work to sustain their lives, and they have become a part of the Turkish economy. It can be said that migrants are beneficial economically. However, significant problems are experienced in social terms. In other words, the vast majority of migrants will continue to work illegally and will not be able to access OHS training and practices.

The total workforce of migrants in Turkey is 2.824 million, and the number of people with work permits is only 276,000. The ratio of this to the local workforce of 31.629 million people is 8.9%, and, unfortunately, 2.548 million migrants and asylum-seekers work informally and illegally [6,8]. It explains that almost all of these people who do not have a work permit and who work illegally do not receive OHS training because illegal workers in Turkey do not receive OHS training, they do not have a legal guarantee, and cannot access health and security services. The state administration has ignored the employment of these people and left them to the conscience of employers. This has made it easier for employers to find cheap workforce, but it has become the beginning of endless traumas for migrant workers.

It is obvious that OHS practices are insufficient in Turkey. Studies conducted in state institutions are inadequate and superficial. There are problems in OHS practices for domestic workers, but it is

not possible to speak of OHS practices, especially for migrant workers who do not have a work permit. Migrant workers are groups that require a special policy, and significant attention should be paid to it [9].

Recently, injuries and fatal occupational accidents have increased significantly in terms of migrant workers, causing injuries and fatality rates to become undeniable. Migrant workers work with lower wages, for longer hours, and under worse conditions than domestic workers and are often subjected to human rights violations, abuse, human trafficking, and violence [10,11].

The ratio of contracted migrant workers is very low (10%), and studies show that poor health and security results are associated with the absence of an employment contract [12].

We can summarize the OHS problems of migrant workers under a few main headings:

- Applicable legal regulations are not made, and the emphasis is placed on the interests of employers.
- There is no legal regulation regarding illegal migrant workers.
- Tens of thousands of migrants work illegally, although it is stated in the laws that employers will be punished if they employ illegal migrants. Migrant workers are virtually invisible.
- They have no legal rights regarding OHS practices.
- They are completely subject to the attitude of the employer in injuries or fatal occupational accidents.
- They have to work illegally to live because they live with their families.
- The lack of communication at work makes migrants vulnerable to OSH risks.
- The state has not established a long-term policy on legal and illegal migrant workers.
- They are constantly struggling with psychosocial risk factors, such as social pressure, mobbing, humiliation, low or unpaid wages, and harassment.

Knowing the order of importance in the strategies to be developed for the solution of the problems is extremely important because problems with a high level of importance also have a high risk value. For example, the non-compliance of laws numbered 4662 and 5543 with the universal legislation is a specific matter for Turkey and should be approached primarily (explained in the Discussion section). It is necessary to deal with the aforementioned problems according to their urgency in terms of the order of importance and to establish solution strategies accordingly. Therefore, Pareto analysis was carried out to determine their importance degrees.

In the literature, we could not reach a study of ranking migrant and refugee workers according to the importance of OSH problems in any country. Turkey has specific problems in this regard. We believe that the problems found, and the ranking of importance, can set an example for other countries.

2. Theoretical Framework

The framework of our study is composed of the examination of OHS problems of illegal migrants, asylum-seekers, and refugees in Turkey, and solution proposals. The problem of migrant workers in Turkey is much bigger and different than in other countries. For example, the total number of asylum-seekers in Europe is about 6,540,000 people, and approximately 3,789,000 of them are in Turkey. In other words, Turkey alone gives shelter to around 58% of all the asylum-seekers in Europe [13]. Accordingly, compared to other countries, there is a high number of migrant workers, who are not registered and have low levels of qualification and education, in Turkey, and these workers work under very difficult and dangerous conditions. No examination and research have been conducted on the OHS problems of these workers. In this sense, our study is important. Moreover, the order of importance of migrant workers' OHS problems and solution proposals were given in our study, which is a new and significant point.

Migrants, refugees, asylum-seekers, and migrants under international protection working in Turkey experience very important problems specific to Turkey, as OHS problems in other countries. At least half of approximately 6 million foreigners are working. The inadequate legal and practical infrastructure of developing countries, especially like Turkey, creates serious problems for these people in accessing OHS services. These problems proceed to the violation of human rights. In this study, migrants, refugees, asylum-seekers, and migrants under international protection in Turkey

were examined. Countries at Turkey's level and less developed countries can benefit from the study. Search for a solution points at the necessity of knowing the importance levels of the problems in Turkey so that solution strategies can be determined. To this end, the Pareto analysis method was used. In the literature, there are no studies, which have been conducted via the Pareto analysis method on the order of importance of migrant and refugee workers' OHS problems and their solutions.

3. Method

In this M40, problems identified by the literature review were weighted by 15 experts in order to identify the Occupational Health and Safety problems of migrants and refugees. Participants consisted of 3 NGO members, 3 academicians, 3 OHS specialists, 1 Ministry of Family and Labor OHS general directorate expert, 1 union specialist, and 4 migrant workers. Forty questions written in the prepared table were asked to be scored over a total of 100 points. Thus, each item was evaluated 15 times independently. The results of the evaluation determined via the scores given by each participant were processed into Excel tables and listed from the highest to the lowest. Geometric averages of the participants' scores were calculated for each problem, and the scoring list of the listed problems was created. In the list of the listed problems, the score of each question was weighted by dividing it by the total score, and the weighted value of each question was cumulatively summed, and the 40th value of the cumulative sums was 100%. Thus, the values were made ready for the Pareto diagram. The Pareto analysis of the sociologist Vilfredo Pareto was carried out on the order of importance table created.

The above-stated studies were also conducted for solution proposals by the same experts. The 'List of Problems' scored by the experts before was sent to them, and they were asked to give solution proposals. The experts sent their solution proposals. The solution proposals sent by 15 experts were grouped, and the joint 36-item 'List of Solution Proposals' was created. The list was sent back to the experts, and the experts were asked to score it according to the order of importance. The scored list was subjected to the same procedures carried out in the list of problems, and the weighted solution proposals list and diagram were prepared.

Pareto analysis is a bar diagram used to separate important reasons for a problem from less important reasons. According to Pareto, "In the normal distribution, the most important 20% of the reasons constitute 80% of the problems, the next 30% constitute 15% of the problems, and the remaining 50% constitute only 5% of the problems." This principle is frequently used in social events and the economy. Pareto diagrams based on control charts or other data collection forms help us to determine which important problems we will focus on. This diagram provides information in decreasing order. The most important step in this diagram, which plays a major role in determining the reasons causing significant losses, is to list the problems in the order of importance. In this way, it becomes easier for us to see which problem we should address first [14].

Advantages

- Pareto analysis represents one of the powerful tools to solve problems, which is simple and effective. Although the technique is based on finding mainly 20% of the fundamental causes that are responsible for 80% of the problems, it can be utilized for solutions to which the rule of 80:20 does not apply.
- It is possible to increase the problem-solving skills of a person who conducts the mentioned analysis since it enables the person to organize the work-related problems into cohesive facts, and after these facts are clearly outlined, planning can be started to solve problems.
- The procedures and processes followed while making changes are usually documented when conducting the afore-mentioned analysis, which will help with a better preparation and improvements in the future decision-making.

Disadvantages

- The Pareto analysis conducted does not provide solutions to problems, but only helps in identifying some significant causes responsible for most of the problems.
- This analysis is based on past information, which owners of small businesses may not find beneficial since that may not represent the company's current situation correctly.
- Its success depends on the accuracy of scoring each of the issues. Businesses that fail to assign proper scoring to each factor on the Pareto chart will get inaccurate results [15].

4. Results

Table 1 shows the score-weight OHS problems of migrant and refugee workers. The score values of the problems are the total of the points given by 15 participants to each problem. Therefore, the total of the points is 1.500. The scores ranked from largest to smallest were weighted by taking cumulative percentages.

As is seen in the Pareto diagram, the cumulative scores (20% of the total problems) given to the first eight problems constitute 79% of the total scores. In other words, when these eight problems are resolved, approximately 80% of all problems will be resolved. Likewise, the total of cumulative scores (30% of the total problems) from problem 9 to problem 20 is 16%. Thus, when these 12 problems are resolved, approximately 15% of all problems will be resolved. When the remaining 20 problems are resolved (50% of the total problems), only 5% of the total problems will be resolved (see Figure 1).

Table 1. Weighted cumulative table of the Occupational Health and Safety (OHS) problems of migrant workers in Turkey.

%	No.	Main Problems Identified by the Tables	Points	Cumulative Percentages	Total Solution Power
20%	1	Law, Statute, Regulation and Implementation Deficiencies	291	19.40	79%
	2	Obligation to Work Informally	203	32.93	
	3	Lack of a Long-Term Migrant Policy	163	43.80	
	4	Lack of the Communication Concept	123	52.00	
	5	Lack of OHS Training	108	59.20	
	6	Failure to Establish a Special Control System in OHS Training	106	66.27	
	7	The Difficulty of Working Conditions	103	73.13	
	8	Working in Difficult Conditions in Unregistered Workplaces	89	79.07	
30%	9	Failure to Report Occupational Accidents Intentionally	57	82.87	16%
	10	OHS Problems of Informal Workers	27	84.67	
	11	Competence Certificate Equivalence Acceptance	24	86.27	
	12	Dissemination of OHS Training	21	87.67	
	13	Failure to Conduct Multilingual Training	20	89.00	
	14	Sexual Abuse, Mobbing	18	90.20	
	15	Low Wage Compared to Domestic Workers	17	91.33	
	16	Lack of Professional Competence Planning	16	92.40	
	17	Lack of the Experience of Workers and Employers	11	93.13	
	18	Lack of the Archive System	8	93.67	
	19	OSH Problems Caused by Cultural Differences	7	94.13	
	20	Gender Discrimination and Child Labor Employment	7	94.60	

Table 1. *Cont.*

%	No.	Main Problems Identified by the Tables	Points	Cumulative Percentages	Total Solution Power
50%	21	Failure to Provide Enough Statistics	6	95.00	5%
	22	Failure to Benefit from Past Cases	6	95.40	
	23	Adaptation Problem	6	95.80	
	24	Lack of Health Screening	6	96.20	
	25	Domestic Workers' Negative Perceptions of Migrant Workers	5	96.53	
	26	Movement Restriction	5	96.87	
	27	Failure to Apply a Mandatory System to Employ One Migrant Worker for Ten Domestic Workers	5	97.20	
	28	Failure to Know OHS Rights	5	97.53	
	29	Failure to Grant a Permission to Establish a Union	5	97.87	
	30	Lack of Overtime Pay and Long Working Hours	5	98.20	
	31	Long Duration of Bachelor Degree Equivalence Acceptance	4	98.47	
	32	Inadequate and Incomplete Job Descriptions	4	98.73	
	33	Failure to Provide Multilingual Signs and Warnings	3	98.93	
	34	OHS Training Deficiency of Workers with Work Permit	3	99.13	
	35	Failure to Address Communication and Language Problems Separately	3	99.33	
	36	Generally Low Educational Levels	3	99.53	
	37	Lack of OHS Culture	2	99.67	
	38	Failure to Accept Universal Migrant-Refugee Definitions	2	99.80	
	39	Fatalism Culture	2	99.93	
	40	Employment Outside the Field of Expertise	1	100.00	
		TOTAL	1500		100.00%

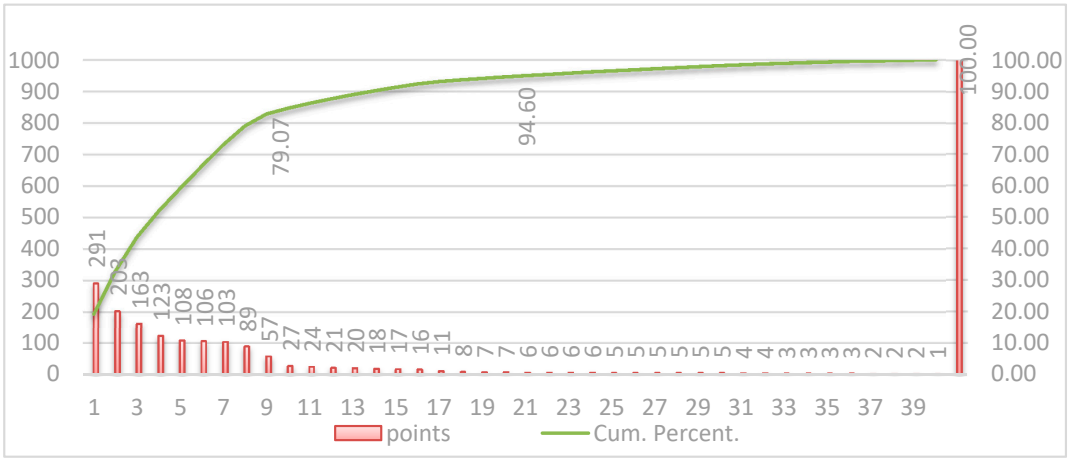


Figure 1. Chart of Pareto diagram of the OHS problems of migrant workers in Turkey.

Table 2 shows the scored solution proposals of migrant and refugee workers' OHS problems. The score values given to solutions are the sum of the scores given by 15 participants to each problem. In other words, the total score is 1500. The scores, which were put in order in a descending manner, were weighted by taking cumulative percentages.

Table 2. Weighted cumulative table for the solution proposals of migrant workers' OHS problems in Turkey.

%	Number	Main Solutions Determined by Units	Points	Cumulative Percentages	Total Solution Power
19.44%	1	Laws on migrants should be updated according to international norms	312	20.80	79.73%
	2	Reservations in international agreements related to migrants should be removed	281	39.53	
	3	The Ministry of Migrants should be founded	173	51.07	
	4	OHS control and audits should be increased	147	60.87	
	5	A special team should be formed for OHS control and audits related to migrants	111	68.27	
	6	Distribution of the funds with external support to provinces where there are a lot of migrant workers	103	75.13	
	7	Commissions (legal commission, commission mixed with ministries, etc.) should be established for the improvement of the legislation by obtaining the opinions of stakeholders.	69	79.73	
30.56%	8	Social policies should be created and improved by stakeholders by holding migrant workshops.	52	83.20	15.07%
	9	Realistic and applicable solution strategies should be developed to reduce informality.	34	85.47	
	10	SSI premiums of illegal migrant workers should be reduced by 50% by registering them.	22	86.93	
	11	Conducting the analysis of needs on this issue	21	88.33	
	12	An up-to-date and reliable database should be formed regarding migrant workers	17	89.47	
	13	ISKUR (Turkish Employment Agency) registration should be made mandatory for workplaces employing migrant workers	15	90.47	
	14	Language proficiency should be a condition for giving migrant workers work permit.	14	91.40	
	15	OHS systems in Israel, Germany and Canada should be adapted to Turkey	14	92.33	
	16	Unregistered migrant workers who want to seek their OHS rights should be provided with convenience.	13	93.20	
	17	An authorized OHS senior control mechanism should be created	12	94.00	
	18	Migrant worker capacities of provinces should be reviewed	12	94.80	
50%	19	The opinions of NGO experts should specifically be obtained regarding the issue	10	95.47	5.20%
	20	Pre-work permit system should be established	9	96.07	
	21	Temporary work permit, temporary SSI registration and registration number should be formed.	9	96.67	
	22	The state should support employers who employ migrants with foreign funds	7	97.13	
	23	Supports such as adjustment and social aid related to migrant workers should be regulated again	7	97.60	
	24	In investments from abroad, migrant workers should be employed by granting more legal work permits	6	98.00	
	25	Quotas such as the obligation of employing convicted or disabled individuals should also be applied for migrants	6	98.40	
	26	Work permits should be granted according to the industrial capacities of cities	4	98.67	
	27	Migrants should be enabled to get legal support from assigned law offices free of charge.	3	98.87	

Table 2. *Cont.*

%	Number	Main Solutions Determined by Units	Points	Cumulative Percentages	Total Solution Power
	28	Communication of official and civil institutions regarding migrants should be accelerated by establishing interactive platforms.	3	99.07	
	29	Tendential controls should not be carried out, relying on the reason that the employer will be harmed.	3	99.27	
	30	A decision should be made on employing one migrant worker in return for every 10 domestic workers.	2	99.40	
	31	A commission related to migration should be founded in TBMM (Grand National Assembly of Turkey)	2	99.53	
	32	Procedures related to work permit should be accelerated and facilitated	2	99.67	
	33	The paradox regarding the advantageous status of illegal employment for workers and employers should be resolved	2	99.80	
	34	Fines given to employers for employing illegal migrant workers should be converted into the obligation of obtaining a work permit and employing them on insurance for a while	1	99.87	
	35	Notification software, mostly mobile-based, should be developed for this issue	1	99.93	
	36	They should not be employed outside their field of expertise	1	100.00	
100%		TOTAL	1500		100.00%

As seen in the Pareto diagram, the cumulative scores given to the first seven solution proposals (19.44% of the total problems) correspond to 79.73% of the total scores. In other words, when these seven solutions are put into practice, around 80% of all the problems will have been resolved. Likewise, the sum of cumulative scores (30.56% of the total problems), including solution proposal 8 and solution proposal 18, is 15.07%. In other words, when these 11 solutions are put into practice, around 15% of all the problems will have been resolved. When the remaining 18 solution proposals (50% of the total problems) are put into practice, only 5.20% of the total problems will have been resolved (see Figure 2).

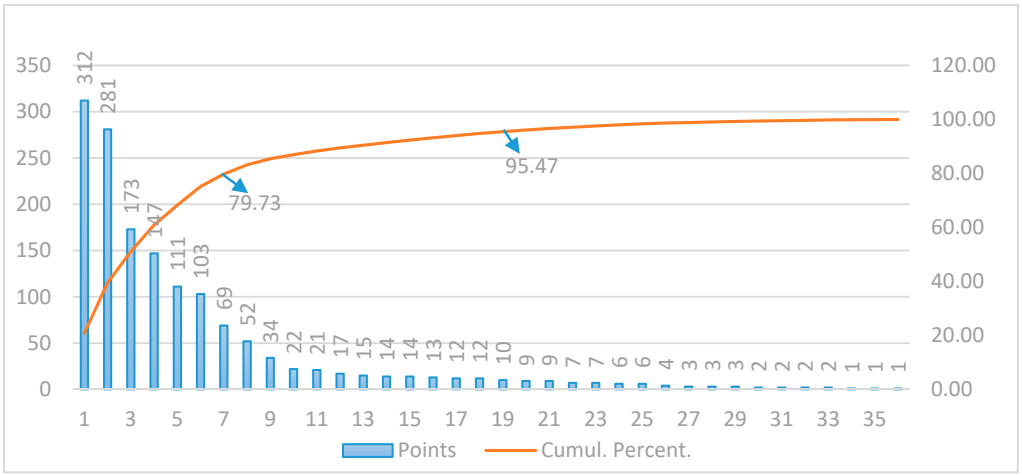


Figure 2. Chart of Pareto for the solution proposals of migrant workers' OHS problems in Turkey.

5. Discussion

Since Turkey borders on Iran, Iraq, and Syria, which are among the problematic countries of the Middle East, it functions as a buffer against the migration movements from these countries for Europe. When also summed with migrants from Afghanistan, Georgia, Africa, and the Turkish

Republics that separated from the Soviet Union, there are approximately 6 million migrants, refugees, and asylum-seekers in Turkey. In Table 3, it is observed in the data in the table and diagram below that the number of asylum-seekers in Turkey is higher than their numbers in the whole Europe in comparison with Europe. Such a high number of asylum-seekers constitutes a serious problem (see Figure 3).

Table 3. Seven countries with the highest number of asylum-seekers in Europe.

Countries Welcoming the Most Asylum-Seekers in Europe		
Countries	**Number of Asylum-Seekers**	**%**
Turkey *	3,789,000	57.94
Germany	1,410,000	21.56
France	402,000	6.15
Italy	355,000	5.43
Sweden	328,000	5.02
Austria	173,000	2.65
Greece	83,000	1.27
Total	6,540,000	

* Euronews Turkey.

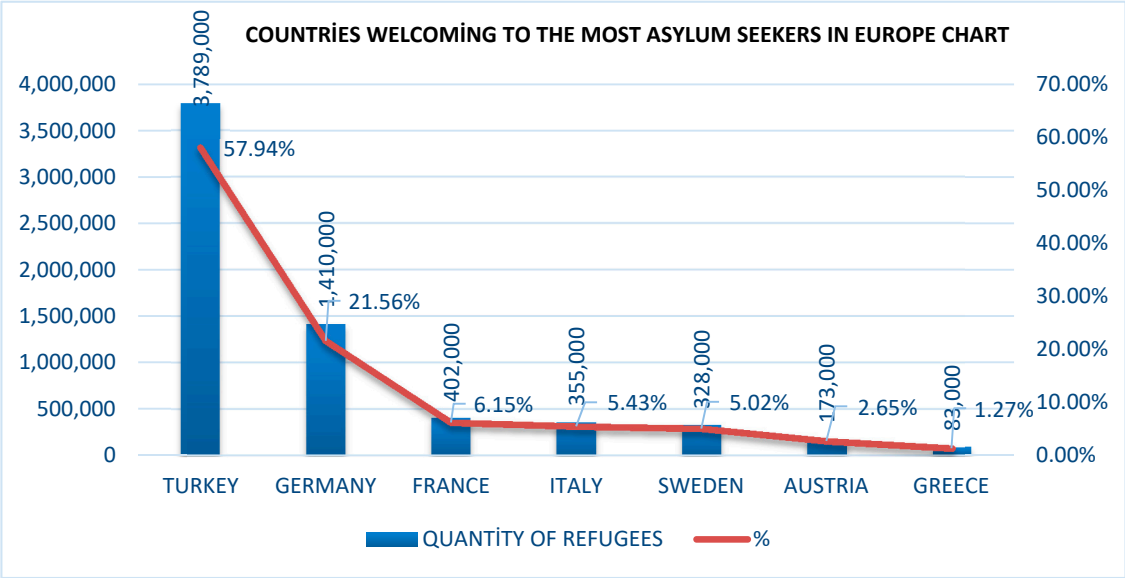


Figure 3. Chart of seven countries with the highest number of refugees in Europe.

According to the official data for August 2020, the number of Syrian asylum-seekers in Turkey is 3,605,152. The asylum-seekers in Turkey have been given the "Temporary Protection Status" and are not allowed to work. However, this is not the case; those who can work do work when they find a job, and the OHS problem starts here.

Figure 4 shows the asylum-seeker migration waves from 2011, when the Syrian civil war started, until August 2020. Figure 5 demonstrates foreigners from different countries and under international protection due to reasons such as belief, pressure, oppression, fear of being killed, and exile.

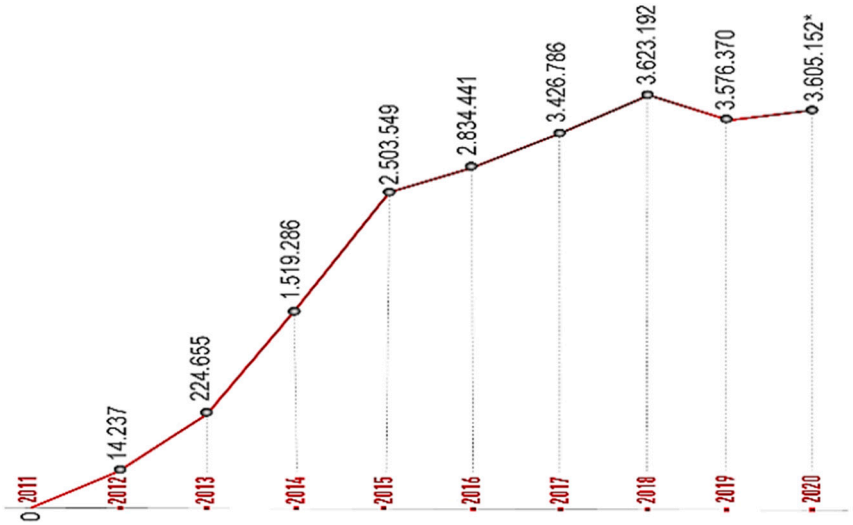


Figure 4. Chart of the Syrians under temporary protection by years. * Data of the Directorate General of Migration Management as of 6 August 2020.

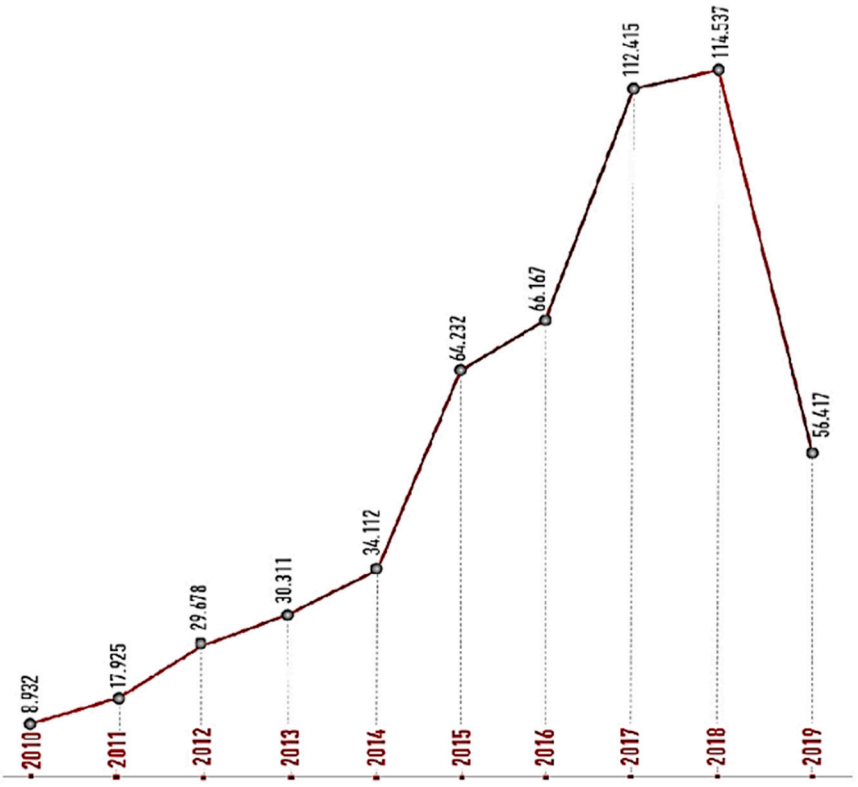


Figure 5. Chart of those under international protection by years. Data of the Directorate General of Migration Management as of the end of 2019.

Shelter centers have been established for asylum-seeking Syrians in Eastern and Southeastern Anatolia, and accommodation, nutrition, health, and education services are provided to them. However, asylum-seekers do not want to stay at these centers. Therefore, elderly people, women, and children live in shelter centers. This situation has been considered acceptable for state administrators as well because it is very difficult and costly to meet the needs of such a number of people. Table 4 shows the shelter centers and numbers of the asylum-seekers living there. It is observed in the table that 98% of the asylum-seekers live outside the shelter centers.

Table 4. Distribution of the Syrians under temporary protection according to temporary shelter centers (seven shelter centers in five provinces).

City	Tsc Name *	Tsc Population	Total Population
Adana (1)	Sariçam	21,152	21,152
Kilis (1)	Elbeyli	8578	8578
Kahramanmaraş (1)	Center	10,796	10,796
Hatay (3)	Altinözü	2655	10,238
	Yayladağı	3812	
	Apaydin	3771	
Osmaniye (1)	Cevdetiye	11,034	11,034
Total		61798	
The total number of syrians outside temporary shelter centers		3,543,354	

Data of the Directorate General of Migration Management as of 06.08.2020. * Temporary Shelter Center (TSC).

Migrant Health Centers (MHCs) have been established in places where asylum-seekers in our country live densely in order to offer them protective health services and basic health services more effectively and efficiently, to overcome the problems resulting from language and culture barriers, and to increase access to health services. MHCs, similarly to the family practice in our country, have migrant health units (MHUs) consisting of one doctor and one assistant health professional who will render services to every 4000 people on average, and meet the physical and technical standards defined for family practice. Strengthened MHCs have been established in temporary shelter centers that have a partially dense population and are far from a full-fledged state hospital and in places where the number of asylum-seekers is above 20,000. In strengthened MHCs, in addition to primary care health services, internal medicine, pediatric, gynecologic, dental, and psychosocial support services are provided; the services are supported with imaging units and simple service laboratories. Thus, it is aimed to increase access to services and reduce the burden of hospitals. In MHCs, besides the health personnel joint by asylum-seekers, there are also patient guidance staff who can speak Arabic, Persian, Pashto, and Turkish, and support services personnel. These centers have been founded as the "CHC Affiliated Unit" in line with the "Community Health Center and Affiliated Units (CHC) Regulations." Costs related to increasing the number of MHCs, their operations, and employment of the personnel are met within the scope of the "Health Project." Data on primary care health services rendered to the Syrians under temporary protection are recorded using the "Examination Information Management System" [16].

There is a legal basis for each health policy applied in Turkey regarding asylum-seekers and those under international protection. By the chronological order, these legal bases are as follows:

- Foreigners and International Protection Law [17];
- Temporary Protection Regulations [18];
- Principles for Health Services to be Given to Those under Temporary Protection [19];
- Circular on Health and Other Services of Syrian Guests [20];
- Directives on Migrant Health Centers/Units [21];
- Directives on the Principles on Amendment in Principles for Health Services to be Given to Those under Temporary Protection [19].

Problems of migrant workers in countries receiving migration are substantially similar to each other. However, the case is quite different in Turkey. In the Republic of Turkey, reservations on Items 15, 40, 45, 46, 76, and 77 of the "Law on Approval of Confirmation of the International Agreement on the Protection of Rights of All the Migrant Workers and Their Family Members" numbered 4662 [22] and the definition of migrant [23] in the "Settlement Law" numbered 5543 (defined as follows: Migrants

are those who are from the Turkish race and come to Turkey alone or as a group to settle down in adherence to the Turkish culture and who are accepted in accordance with this Law) are not within international norms. Especially these two laws ignore the right of illegally working migrant workers to access OHS services from the beginning because their transition to the migrant status is not possible. Another crucial problem is the matter of religious beliefs. This problem is also valid for domestic workers. In Islam, people believe that the time, place, and form of their death are written in their fate, taking precautions means interfering in God's business, and if they do it, they will commit a sin, and it will not be of any use. When it is considered that almost all the migrants and asylum-seekers coming to Turkey are Muslims, it can be seen how important the issue is. The above-stated three main problems show how important the legislation is. Therefore, we should start solving the OHS problems of migrant workers from these three problems. We can say the following:

The order of importance in the strategies to be developed for the solution of problems is extremely important because the problems with a high level of importance also have a high risk value. For example, a universal legislative amendment in laws numbered 4662 and 5543 is a specific topic for Turkey, and it should be approached primarily.

When eight problems with the highest score are examined within the framework of Pareto analysis, it is observed that when these problems are resolved, almost all problems will be resolved directly or indirectly. Namely, when the problems of

- Law, statute, regulation, and implementation deficiencies,
- Obligation to work informally,
- Lack of a long-term migrant policy,
- Lack of the communication concept,
- Lack of OHS training,
- Failure to establish a special control system in OHS training,
- The difficulty of working conditions,
- Working in difficult conditions in unregistered workplaces are resolved, 80% of the total problems will be resolved.

Upon examining Table 1 in detail, it is observed that the OSH problems of migrant workers arise from the attitudes and policies of the state (1, 2, 3, 4, 5, 6, 7, 8, 12, 13, 18, 21, 24, 27, 31, 38). Non-governmental organizations and universities are more sensitive than the state to the development and implementation of OSH practices regarding migrant workers.

The main risks that migrant workers face in the workplace point to the result of infectious diseases, metabolic cardiovascular diseases, and poor quality of life. They often work in what is known as 3D jobs (dirty, dangerous, and demanding (sometimes degrading)) and are hidden from the public and public policy or ignored. Due to the increasing tendency in migrant movements and the increase in the incidence of occupational accidents and occupational diseases caused by unfavorable working conditions, state health institutions should direct their attention to the protection of this category of workers [11]. They receive lower wages than non-migrants, work for longer hours under worse conditions, and often experience human rights violations, abuse, human trafficking, and violence, and face psychological problems, including somatic symptom disorder [24]. Most importantly, these vulnerable workers take high risks in the workplace, work without adequate training and protective equipment, and cannot complain about unsafe working conditions. This is more critical for migrant workers who do not have a work permit and fear losing their jobs or even being deported. These conditions further increase the occupational death and injury risk for migrant workers compared to domestic workers doing the same job in the same sector. In other words, giving the most dangerous jobs to the migrant workforce increases the rate of occupational accidents involving death and injury among migrants [25].

Among migrant workers, there is an increase in the frequency of serious, psychotic, anxiety, and post-traumatic disorders due to some socio-environmental variables, such as the loss of social

status, discrimination, and separation from the family. The main disorders arising from the study are depressive syndrome (weak concentration at work, the loss of emotion or anger and somatization), anxiety, alcohol or substance abuse, and poor sleep quality. This causes low living conditions due to marginalization from the social context and exhausting work [26].

Worldwide, migrant workers have higher occupational exposure rates, leading to poor health consequences, workplace injuries, and occupational deaths. Globally, in the data for 2018, the ILO estimates that 2.6 million deaths from occupational accidents and diseases occurred worldwide, and the estimated number of migrant workers in the world in 2019 was 164 million [27]. Higher occupational injury and death rates among migrant workers can be attributed to a variety of factors, including risks associated with jobs and the lack of training and protection for migrant workers.

Migrant workers are employed in jobs in which they are exposed to higher temperatures, louder noises, stronger vibrations, and faster work pace and stand for a longer time than domestic workers. They usually work without a contract and under unfavorable conditions. The sectors that are most likely to employ migrant workers are generally the ones that carry the highest risk for negative occupational health [28].

In Turkey, migrant workers work in the production and service sectors, mostly in natural resources, construction and maintenance, agriculture, production, transportation, and material handling jobs, which pose a considerably higher risk compared to other industries. Most health risks for migrant workers arise from environmental hazards inherent in the professional environment. They are employed in jobs in which they are more exposed to environmental toxins, including extreme temperatures, pesticides, and chemicals. Migrant workers working in natural resources, construction, and maintenance often work outside. They are exposed to environmental conditions that may increase the risk of lightning strikes, sun exposure, heat-related illness and death, snake bites, and tick-borne diseases. Workers in foundries are exposed to high heat, nickel, and iron dust inhalation exposure. In confined spaces, silos, warehouses, and storehouses, they face sick building syndrome. In regions where cold weather conditions are predominant, exposure to cold and freezing risks are high [26,29].

Access to healthcare services is particularly difficult for informal migrants and refugees. The state does not protect them. They have to resolve their occupational health problems by their own means [25,27]. Accommodation conditions are very primitive, they live in communes with income below the hunger threshold. They are under constant pressure in their workplaces and social circles, they are subjected to robbery and extortion from time to time, they cannot complain due to the fear of being deported. They are subjected to mobbing and sexual abuse, and after a while, they get used to it and concede [30]. They do not receive OSH and vocational training, and there is no state institution that supervises this. They do not understand the instructions given due to the lack of communication or become more vulnerable to risks when they understand incompletely. The main reason for all this is the lack of the established long-term migration policy of Turkey in international norms [26,31].

6. Conclusions

Although there are many studies on the OHS problems of migrant and refugee workers, radical steps are not taken to resolve the problems. Priorities need to be defined very carefully to resolve priority problems. When the data in Table 1 are analyzed, the importance of solution-oriented approaches that state units should have is seen. When we look at the OHS practices in terms of domestic workers, we see that the laws and regulations are sufficient, but we face negative consequences that lead to serious human rights violations as a result of the dramatic deficiencies in implementation, follow-up, and continuity.

Our determinations about the current situation are as follows:

1. Undergoing a difficult period in terms of creating comprehensive arrangements against the intensive migration/asylum-seeking wave, which was experienced in a short time, and practicing them, Turkey could not carry out a planned activity about managing the crisis resulting from migrants or distributing them across the country in a controlled way.

2. It is not possible to say that Turkey still has a sustainable and prospective migration or asylum-seeker policy. It is necessary to make amendments in legal arrangements particularly related to the implementation of a sustainable migration and asylum-seeker policy and to define a single responsible unit in this matter by preventing the conflicts of authority.
3. Asylum-seekers, as well as those creating migration and asylum-seeker policies, do not know what the position of migrants in Turkey will be in the future, whether they will stay in the country and under which conditions they will live.
4. Migrants cannot benefit from the basic human rights in our country due to reasons such as the lack of education, economic insufficiency, and legislative deficiencies. As a result, migrants experience adjustment problems. Adjustment problems lead to undesired events by causing tension and hostility between migrants and natives.
5. As a result of the exclusion of migrants from the society, economic and social life due to insufficiency, indifference and legislative deficiencies, an increase is observed in crimes such as robbery and violence. Thus, it is inevitable that migrants develop the reflex of securing themselves within the community and group like the mafia.

These important determinations constitute the basis of migrant problems. To eliminate the sources of these problems, it is necessary to adopt and implement a contemporary, effective, planned, long-term, improvable, and sustainable migration policy.

In the case of migrant workers, knowing that they are involved in the economy, overlooking their illegal employment, but not making any regulations for OHS problems of migrant workers, ignoring them, thus leaving them to the mercy of the migrant and employer, not training them and not supporting their social lives have brought problems to this point. Although non-governmental organizations and universities have created partial pressure on the state in this regard, no results have been achieved yet.

In light of these facts, the main components of the contemporary and sustainable migration policy should be as follows:

- A special law should urgently be enacted for migrants.
- An independent Ministry of Migration, which will deal with migrant problems, should be established.
- A strong and sustainable migration policy covering the afore-stated principles and qualities should be formed.
- An active Migrant Monitoring Office should be established, and all the migrants should be recorded. It should be known where they live and what they do as a job and monitored for their spatial activities in a disciplined manner.
- For the adjustment of migrants to the society, a realistic, comprehensive, economic, political, social, and cultural program should be established. In this program, importance should be attached to education, health, and social peace.
- Security policies and diplomatic relations should be developed in compliance with the migrant policy. Policies that prevent migrants from being used by some criminal organizations and from being abused should be developed.
- Priority should be given to foreign policy attempts to make it easy for Syrian asylum-seekers to return to their country. Accordingly, the territorial integrity of Syria should be supported, and contribution should be made to the formation of a political-economic structure suitable for their living in Syria.

The improvements to be made within the scope of these suggestions will resolve all the OHS problems of migrant workers.

It is very important to understand the importance of the chain of problems, which includes the first eight items in this study, and to determine the priority solutions. Achieving solutions in this order of importance will save lives and save time, money, and resources to a large extent.

The aim of this study was ranked according to their importance for the improvement of OHS issues of migrant workers refugees and asylum seekers in Turkey, and to present proposals for solutions. However, we believe it will also be enlightening for the underdeveloped and developing countries that host migrants and refugees. If our suggestions are evaluated and implemented, the improvements to be realized will be considered as good examples by these countries.

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References

1. Efe, H. Osmanlı İmparatorluğu ve Türkiye'de Yaşanan Göçler ve Etkileri. Available online: http://dergipark.gov.tr/sbm/issue/36882/412976 (accessed on 11 May 2020).
2. Şahin, N. 19. Yüzyıl Sonrasında Anadolu'ya Yapılan Göç Hareketleri ve Anadolu Coğrafyasındaki Sosyo-Kültürel Etkileri. *Afyon Kocatepe Univ. Sos. Bilimler Derg.* **2006**, *8*, 63–82.
3. Tolay, J. The Legal Framework of Asylum Policy In Turkey: Towards More Protection? In *Turkey: Beyond the Fortress Paradigm at the Southeastern Borders of the EU*; Edwin Edgar Melen Press: New York, NY, USA, 2013; p. 78.
4. Okutan, M.Ç. *Tek Parti Döneminde Azınlık Politikaları*; İstanbul Bilgi Üniversitesi Yayınları: Istanbul, Turkey, 2009; pp. 227–228.
5. Vassilev, R.V. Post-Communist Bulgaria's Ethnopolitics. *Glob. Rev. Ethnopolitics* **2011**, *2*, 37–53. [CrossRef]
6. İçişleri Bakanlığı, T.C. Göç İdaresi Genel Müdürlüğü. Available online: https://www.goc.gov.tr/ (accessed on 12 May 2020).
7. Aktel, M.; Kaygısız, Ü. Migration administration in Turkey. *J. Fac. Econ. Adm. Sci.* **2018**, *23*, 579–604.
8. Türkiye İstatistik Kurumu (TUİK). Available online: https://www.turkiye.gov.tr/turkiye-istatistik-kurumu-baskanligi-tuik (accessed on 14 May 2020).
9. Civan, O.E. İş Sağlığı ve Güvenliğinde özel Politika Gerektiren Gruplar. Available online: http://www.ankarabarosu.org.tr/siteler/ankarabarosu/tekmakale/2017-4/8.pdf (accessed on 14 May 2020).
10. Quandt, S.A.; Arcury-Quandt, A.E.; Lawlor, E.J.; Carrillo, L. 3-D jobs and Health disparities: The health implications of Latino chicken catchers' working conditions. *Am. J. Ind. Med.* **2013**, *56*, 206–215. [CrossRef] [PubMed]
11. Mucci, N.; Traversini, V.; Giorgi, G.; Garzaro, G. Migrant Workers and Physical Health: An Umbrella Review. *Sustainability* **2019**, *11*, 232. [CrossRef]
12. Kara, M.A. Türkiye'ye Yönelik Düzensiz Emek Göçü ve Göçmen İstihdamı: İnşaat Sektörü Örneği. Master's Thesis, Marmara University, Istanbul, Turkey, 2014.
13. Euro News Türkiye. Available online: https://tr.euronews.com/2018/06/29/avrupa-da-en-cok-siginmaci-kabul-eden-ulkeler-hangileri (accessed on 4 August 2020).
14. SAGE Reference. Available online: http://sk.sagepub.com/reference/the-sage-encyclopedia-of-quality-and-the-service-economy/i3037.xml (accessed on 14 May 2020).
15. Blackman, I.; Chan, E. Using Pareto Principle Plus Statistic Methodology in Establishing a Cost Estimating Model. Available online: http://www.irbnet.de/daten/iconda/CIB_DC27245.pdf (accessed on 4 August 2020).
16. Türkiye Cumhuriyeti Resmî Gazete. Available online: https://www.resmigazete.gov.tr/eskiler/2015/02/20150205-5.htm (accessed on 14 May 2020).
17. Türkiye Cumhuriyeti Sağlık Bakanlığı. Available online: https://www.mevzuat.gov.tr/MevzuatMetin/1.5.6458.pdf (accessed on 4 August 2020).
18. İçişleri Bakanlığı, T.C. Göç İdaresi Genel Müdürlüğü. Available online: https://kms.kaysis.gov.tr/(X(1)S(jfeqcoxl3bjskgvxjmheszmv))/Home/Goster/34583 (accessed on 4 August 2020).
19. Türkiye Cumhuriyeti Sağlık Bakanlığı. Available online: https://dosyasb.saglik.gov.tr/Eklenti/1376,saglik-bakanligi-gecici-koruma-yonergesi-25032015pdf.pdf?0 (accessed on 4 August 2020).

20. T.C. İçişleri Bakanlığı Afet ve Acil Durum Yönetimi Başkanlığı. Available online: http://www.madde14.org/index.php?title=AFAD_-_Suriyeli_Misafirlerin_Sa%C4%9Fl%C4%B1k_Hizmetleri_(Genelge_2013/8) (accessed on 5 August 2020).
21. Ankara Barosu. Available online: http://ankarabarosu.org.tr/kurullar/mhk/doc/G%C3%B6%C3%A7men_Sa%C4%9Fl%C4%B1%C4%9F%C4%B1_Merkezleri_Birimlerine_Dair_Y%C3%B6nerge.docx (accessed on 5 August 2020).
22. Türkiye Büyük Millet Meclisi. Available online: https://www.tbmm.gov.tr/kanunlar/k4662.html (accessed on 5 August 2020).
23. Türkiye Cumhuriyeti Resmî Gazete. Available online: https://www.resmigazete.gov.tr/eskiler/2006/09/20060926-1.htm (accessed on 5 August 2020).
24. Simsek, Z.; Ersin, F.; Kırmızıtoprak, E. Development of the Seasonal Migrant Agricultural Worker Stress Scale in Sanliurfa, Southeast Turkey. *J. Agromed.* **2016**, *21*, 56–60. [CrossRef] [PubMed]
25. Moyce, S.C.; Schenker, M. Migrant Workers and Their Occupational Health and Safety. *Ann. Rev. Public Health* **2018**, *39*, 351–365. [CrossRef] [PubMed]
26. Mucci, N.; Traversini, V.; Giorgi, G. Migrant Workers and Psychological Health: A Systematic Review. *Sustainability* **2020**, *12*, 120. [CrossRef]
27. ILO. Labour Migration Branch. Available online: https://www.ilo.org/global/topics/labourmigration/WCMS_243771/lang--en/index.htm (accessed on 20 May 2020).
28. RondaP'erez, E.; Benavides, F.G.; Levecque, K.; Love, J.G.; Felt, E.; Van Rossem, R. Differences in working conditions and employment arrangements among migrant and non-migrant workers in Europe. *Ethn. Health* **2012**, *17*, 563–577. [CrossRef] [PubMed]
29. Quandt, S.A.; Kucera, K.L.; Haynes, C.; Klein, B.G.; Langley, R. Occupational health outcomes for workers in the agriculture, forestry and fishing sector: Implications for immigrant workers in the south eastern US. *Am. J. Ind. Med.* **2013**, *56*, 940–959. [CrossRef] [PubMed]
30. Dedeoğlu, S. Türkiye'de Göçmenlerin Sosyal Dışlanması: İstanbul Hazır-Giyim Sanayinde Çalışan Azerbaycanlı Göçmen Kadınlar Örneği. *Ank. Univ. SBF J.* **2011**, *66*, 27–48.
31. Türkiye Işçi Sendikaları Konfederasyonu. Göçmenlerin iş Sağlığı ve Güvenliği Konuları. Available online: http://www.turkis.org.tr/dosya/50mTRT1Kh6C6.pdf (accessed on 5 August 2020).



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