



REPUBLIC OF TURKEY
MARMARA UNIVERSITY
INSTITUTE OF HEALTH SCIENCES

**ASSESSMENT OF HEALTH-RELATED QUALITY OF LIFE AMONG ARABIC
SPEAKING IMMIGRANTS IN SULTANBEYLI - ISTANBUL**

ASMAA Z F MOHAMMED
MASTER THESIS

PUBLIC HEALTH DEPARTMENT

SUPERVISOR
Assoc. Prof. Dr. AYŞE NİLÜFER ÖZAYDIN

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STATEMENT

Hereby I declare that this thesis study is my own work. I had no unethical behavior at any stage from the planning of the thesis until writing it. I have obtained all the information in this thesis within the academic and ethical rules. I have cited all the information and comments that are not obtained with this thesis study, and these sources are also included in the list of references. I hereby declare that I have no infringement of patents and copyrights during the study and writing of this thesis.

02/10/2020

Asmaa Z F Mohammed

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ABBREVIATIONS And SYMBOLS

BP	: Body Pain
DGMM	: Directorate General of Migration Management
EMW	: Ever Married Women
FSU	: Former Soviet Union
GH	: General Health
HRQOL	: Health-Related Quality Of Life
HSCL	: Hopkins Symptoms Checklist
IOM	: International Organization for Migration
IUD	: Intra Uterine Device
MCS	: Mental Component Summary
MOS	: Medical Outcomes Study
MH	: Mental Health
PCL	: Posttraumatic stress Disorder Checklist
PCS	: Physical Component Summary
PF	: Physical Functioning
PTSD	: Posttraumatic Stress Disorder
QOL	: Quality Of Life
RE	: Role limitations due to Emotional problems
RP	: Role limitations due to Physical problems
SD	: Standart Deviation
SF	: Social Functioning
SF-36	: 36-Item Short-Form Health Survey
TAC	: Temporary Accommodation Centers
TDHS	: Turkey Demographic and Health Survey
UNFPA	: United Nations Population Fund
UNHCR	: United Nations High Commissioner for Refugees
UNRWA	: United Nations Relief and Works Agency
VT	: Vitality
WHO	: World Health Organization
WHOQOL	: World Health Organization Quality Of Life
WHOQOLBREF	: World Health Organization Quality Of Life BREF

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İstanbul-Sultanbeyli'deki Arapça konuşan göçmenlerin sağlıkla ilgili yaşam kalitelerinin değerlendirilmesi

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1. ÖZET

Amaç: Göç küresel bir olgudur ve ani/hızlı bir çevresel değişim yaratır, toplumu ve bireyleri etkiler. Bu çalışmada İstanbul-Sultanbeyli'de yaşayan Arapça konuşan göçmenlerin arasında Sağlıkla İlgili Yaşam Kalitelerinin (SYK) değerlendirilmesi amaçlanmaktadır.

Gereç ve yöntem: Bu tanımlayıcı çalışma için veriler, İstanbul/Sultanbeyli'deki Mülteciler Derneği'ne kayıtlı Arapça konuşan göçmenlerden, sosyo-demografik özellikler, SYK (SF-36) ve evli kadınların (EK) üreme sağlığı ile ilgili konularını içeren Arapça bir anket kullanılarak yüz-yüze görüşme yöntemiyle toplanmıştır. Veriler SPSS11.0 kullanılarak analiz edilmiştir.

Bulgular: Bu çalışmada 379 katılımcı ile görüşülmüştür (Yaş aralığı:19-79, Ortanca yaş: 33 yıl). Katılımcıların yarıdan fazlası kadındır (%57,5), katılımcıların çoğunluğu (85,5%) evliydi ve kadınların %29,6'sı dörtten fazla çocuğa sahipti. Katılımcıların üçte-biri (36,7%) ilkokul mezunuydu. Kadınların SYK puanı, fiziksel-fonksiyon alt ölçeğinde erkeklerden daha düşüktü (80,0 vs. 85,0, $p:0.033$). En genç grup daha yüksek fiziksel-fonksiyon, vücut-ağrısı, genel-sağlık ve rol-sınırlaması-fiziksel puanlarına sahipti ($p:0.0001$, $p:0.0001$, $p:0.0001$, $p:0.047$). Eğitim düzeylerine, istihdam durumlarına ve bildikleri dillere göre SYK'lerinde önemli farklılıklar vardı. Evli kadınların yaşayan çocuk sayıları fiziksel-fonksiyon, vücut-ağrısı, rol-sınırlaması-duygusal ölçeklerini önemli ölçüde etkilemekteydi.

Sonuç: Bulgularımız, İstanbul-Sultanbeyli'de ikamet eden Arapça konuşan göçmenlerin SYK ölçeklerinin nispeten ılımlı olduğunu göstermektedir. Katılımcıların SYK'in, yaş, eğitim seviyesi, istihdam durumu ve bildikleri dilden önemli ölçüde etkilendiği saptanmıştır. Göçmenler için Türkçe ve mesleki kursların açılmasını öneriyoruz. Mülteci Derneklerinde aile planlaması danışmanlık ve hizmetlerinin sunumuna çok gereksinim vardır.

Anahtar Sözcükler: Göç, yaşam kalitesi, Türkiye, mülteci, Kısa Form-36

Assessment of health-related quality of life among Arabic speaking immigrants in Sultanbeyli–Istanbul

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2. SUMMARY

Objective: Migration is a global phenomenon and creates a sudden/rapid environmental change, affects society and individuals. It was objected to evaluate the health-related quality of life (HRQOL) among Arabic speaking immigrants living in Sultanbeyli–Istanbul.

Material and methods: Data for this descriptive study collected from Arabic speaking immigrants registered in the Association for Refugees in Sultanbeyli/Istanbul through face-to-face interviewer by using a questionnaire in Arabic, including items about socio-demographic characteristics, HRQOL(SF-36), and reproductive health of ever-married-women (EMW). Data analyzed by using SPSS11.0.

Results: In this study, 379 participants were interviewed (age:19-79, median.33,0 years). More than half were females (57,5%), most of the respondents (85,5%) were ever married, and 29,6% of ever-married-women had more than four children. One-third of participants (36,7%) completed primary schools. The HRQOL scores among females were lower than those of males in the physical-function subscale (80,0 vs. 85,0, $p:0.033$). The youngest age group had higher physical-function, body-pain, general-health, and role-limitation-physical scores ($p:0.0001$, $p:0.0001$, $p:0.0001$, $p:0.047$). There were significant differences in HRQOL domains due to educational-attainment, employment-status, and known-language. Physical-function, body-pain, role-limitation-physical, and role-limitation-emotional scales were significantly affected by the number of living children for EMW.

Conclusion: Our findings show that Arabic-speaking-immigrants residing in Sultanbeyli/Istanbul have HRQOL scales relatively moderate. The HRQOL is significantly influenced by age, educational attainment, employment status, and known language. It is recommended to implement the Turkish language and vocational courses for immigrants. Family planning services should be taken place in Refugee Associations.

Keywords: Migration, life quality, Turkey, refugee, Short Form-36

3. INTRODUCTION AND AIM

Migrations have occurred during the history and have shaped the distribution of population, social and economic structure, and cultural development in the world (Gün, 2006). Migration is a global phenomenon that describes the displacement of individuals or clusters of individuals from one geographic region to another, through an international border, or within a state to stay permanently or temporarily (IOM, 2019).

Migration, which took place between certain regions or countries in previous years, is now being done globally, with technology advancement and the spread of communication tools (Koca, 2019). Globalization has facilitated modern migration and has increased the volume of refugees and other groups of international migrants, diversity, geographical coverage, and the complexity of international migration (Czaika and Haas, 2014; Grundy, 2009).

Migrations initially caused by geographic causes, long-term hunger, wars, and critical conditions such as climate. Today, these reasons are replaced by population problems, economic problems, environmental disturbances, political problems, and educational causes (Akıncı et al. 2015; Yalçın, 2004).

In the world, the number of immigrants and refugees has risen rapidly in latest years, particularly during the second half of the twentieth century (T.C. İçişleri Bakanlığı Göç İdaresi Genel Müdürlüğü, 2017), because of the direct or indirect impact of globalization, regional conflicts, poverty, discrimination, unemployment or lack of access to quality working conditions, technology and consequently the development of transport and communication opportunities. Although voluntarily, people are sometimes forced to migrate from their settlements to other places (Koca, 2019; Gün, 2006).

Today, There are an assessed 1 billion immigrants globally include 272 million international immigrants and 763 million internal immigrants (<https://www.who.int/health-topics/refugee-and-migrant-health>, Accession date: 1 January 2020).

According to data from United Nations (UN), estimates suggest that the number of international migrants in the world can reach 405 million in 2050, if migration movements continue to rise at the speed of the last 20 years (T.C. İçişleri Bakanlığı Göç İdaresi Genel Müdürlüğü, 2017). In the literature, it is mentioned that about 444 00 persons are forced daily to escape from their homes because of conflict and discrimination (<https://www.unhcr.org/figures-at-a-glance.html>, Accession date:12 March 2020).

Turkey's geographical location, historical and cultural ties with countries in the region, the war in the neighborhood, civil conflicts, political instability, rising poverty, and the visa facilitation resulted from bilateral agreements with many countries. Besides, an increase in Turkey's political and economic power has led to many migrants moving toward Turkey (Bulut and Daşlı, 2019; Eryurt, 2017).

The number of migrants selecting Turkey as a destination country has also enlarged significantly in recent years. Over 3,9 million refugees were residing in Turkey in January 2020. Most of them are Syrians (approximately 3,6 million individuals) who have registered for temporary protection in Turkey, and close to 330 000 refugees and asylum seeker of nationalities like Afghanistan, Iraq, Iran, Somalia, and other nationalities (<https://turkey.iom.int/migrant-presence-monitoring>, Accession date: 1 March 2020; <https://reliefweb.int/report/turkey/unhcr-turkey-fact-sheet-february-2020>, Accession date: 1 April 2020). These have made Turkey the country that hosts the largest number of refugees globally (Akpınar, 2017).

Migration creates a sudden and rapid environmental change, affecting society and individuals socially, culturally, and physically (Bulut and Daşlı, 2019; Topçu and Beşer, 2006). It impacts on the demographic standards because immigrants vary from the general community. International immigrants are commonly young, healthy, and often move from relatively high fertility societies to low-fertility societies. As a result, immigrants may assist the host community (temporally), and at least in the beginning, because they have a higher fertility rate and lower mortality rate (Grundy, 2009).

Due to the increase in the migration rate among several years of the last decades, migrant health has become an essential public health topic. Studies that focus on the quality of life and health-related results in immigrant and refugee populations in the world have become increasingly necessary (Gushulak and MacPherson, 2006).

We can describe immigrant life through two dimensions: the quantitative dimension, morbidity, lifetime, and mortality rates, and the qualitative measurement of life that forms the basis of the quality of life; involves social relations, physical environment, economic, mental, cultural situation, and individual satisfaction (Öksüz and Malhan, 2005).

Quality of life is a very complicated concept and variable; it is generally defined as a degree of “well-being.” It is expressed as a way of perceiving one's situation within their own culture and values system (<https://www.who.int/healthinfo/survey/whoqol-qualityoflife>, Accession date: 9 February 2020), which includes mental health, physical health, level of independence, personal beliefs, social relations, and environmental factors. It can be said that quality of life was the subjective satisfaction of a person's own life (WHOQOL Group, 1998).

The measurement of health-related quality of life (HRQOL) has played the primary health and well-being index in recent years. Health-related quality of life result is commonly used to verify healthcare efficiency, including medicine and technical treatment effects, and policy development (Saban et al., 2008).

The impact of migration on health is controversial because some studies have shown that recent immigrants were healthier than natives, mainly when migration occurs to a country with better access to health care services (Domnich, 2012). Another study has suggested that immigrants HRQOL better than those living in their home country (Bayram et al., 2007). Other studies found that immigrants had a lower health-related quality of life (HRQoL) than natives (Nesterko et al., 2013).

Little studies have demonstrated data about immigrants' health in Turkey; from these studies, a survey conducted in the Konya province showed that the war and conflicts deteriorated refugees' psychological health and physical health.

Syrian refugees suffered from more post-traumatic stress disorder (PTSD) compared to the general population (Akgün, 2016).

To the best of our knowledge, there is no data available in the scientific literature about health-related quality of life and consequences in migrants living in Istanbul. Therefore, this descriptive study aimed to identify the possible health-related quality of life among Arabic speaking immigrants in Sultanbeyli-Istanbul by using SF-36 (Arabic version) (Guermazi et al., 2012).



4. GENERAL INFORMATION

4.1. Migration

4.1.1 Definition of migration

The phenomenon of migration that is contemporary to humanity's history (Tuzcu and Ilgaz, 2015). Although there are many definitions of the concept of migration in the literature, generally, migration is defined as the movement of individuals from their setting to another residence for economic, political, social, and cultural causes (Koçak and Terzi, 2012).

The International Organization for Migration (IOM) describes migration as a process of social change during which an individual or group of individuals moves from one cultural environment to another cultural setting, from rural to urban regions, between neighboring countries, or over long distances to settle for a more extended period or permanently (IOM, 2019).

Migration is also defined as an individual or group of individuals' decision to leave their environments and move to new settlements temporarily or permanently for a better life expectancy, directly associated with economic reasons (Pazarlioğlu, 2007).

Based on all these definitions, migration is also possible to define as a dynamic process that corresponds to temporary or permanent changes in settlements between administrative settlements, geographical regions, or countries due to social, economic, political, educational, cultural, and other reasons (Çağlar, 2018).

4.1.2 Classification of migration

A situation in which migration is classified in terms based on certain principles. These principles are as follows (Çağlar, 2018):

- a. Migration based on will. Here, the individual's choice is decisive, and migration is handled voluntarily and forced.

Volunteer migration is when people go to other places where they volunteer to live in better conditions, look for work, or work. In contrast, forced migration is called when individuals leave places where they live due to wars, pressures, violence, conflicts, and natural disasters (Adıgüzel, 2016).

According to another definition; While volunteer immigration is the individual's will to migrate from the very beginning to the end, compulsory immigration is that individuals have to relocate outside of their choice due to war danger, conflicts, and lack of life safety (Yalçın, 2004).

- b. Migrations are based on density. Here, migration is considered as individual and group (mass) migration. Individuals and group migration is the migration movement that starts with a small number of people and becomes a mass in a short time (Koca, 2019).
- c. Migrations are based on national borders. Such migrations are classified as external (International) migration and internal migration. International migration is when individuals move away from traditional residence and through an international borderline to a country where they are not citizens. In contrast, internal migration describes people's displacement within a state or the country's border, including creating a new short-term or permanent residence (IOM, 2019). According to the United Nations, for a person to become an international immigrant, it is sufficient to stay in a foreign state for more than one year, regardless of the reasons or whether immigration is compulsory (UNSD, 1998).
- d. Migrations are based on legal status. Here, migration is handled in terms of regular and irregular migration (Koca, 2019). While regular migration is migration using recognized, permitted legal means, irregular migration is defined as the inability to control cross-border human movements by states (T.C. İçişleri Bakanlığı Göç İdaresi Genel Müdürlüğü, 2017; IOM, 2013).
- e. Migrations are based on settlement periods. Migrations in this group are defined based on temporary and permanent.

4.1.3 Causes of migration

The United Nations Population Fund (UNFPA) emphasizes that the trend of migration in the world is generally from rural to city areas and from under-developed countries to developed or developing countries (<https://www.unfpa.org/migration>, Accession date: 10 March 2020). The causes of migration can be categorized under four main headings (Aydm, 2017);

1. Economic causes

These are migrations with economic concerns. The main reasons are;

- Rapid population growth
- Disorders in income distribution
- Employment issues
- Low income in rural areas.

2. Political causes

They are migration arising from political events within the country or between countries. The main reasons are;

- Civil conflicts, civil wars
- Terror or anarchy
- International wars
- Inter-country border changes
- Population variations.

3. Social causes

They are migrations due to the various needs of people. The main reasons are;

- Education and health needs
- Desire to live more comfortably
- Blood feuds or family disputes
- Religion, desire to pray freely
- Desire to see the natural and human beauties, to relax.

4. Natural causes

These are migrations arising from natural events (geography and climate). The main reasons are;

- Erosion and ground efficiency decrease
- Very hot, very dry, very wet or very cold climate conditions
- Natural disasters, for example, earthquakes, floods, landslides
- Agricultural areas are few or scattered due to rough terrain.

Therefore, it is more useful to think of migration causes in two categories: ‘push’ and ‘pull’ factors (Table 4.1). Push factors drive individuals out of their country of origin, while pull factors attract individuals towards a particular destination country (Kristiansen et al., 2007). These factors influence both the health of migrants and the migration’s nature (Bhugra, 2004).

Table 4.1. Push and pull factors of migration

Push Factors Nation of origin	Pull Factors Host nation
• People growing, early age construction • Insufficient educational organizations, social security, and medical care	• Steady population, decrease in population, demographic aging • benefits of the welfare state, educational institutions, social security, and medical care
• Unemployment, low salaries • Poverty, low consumption, and living standard	• Labor demand, high salaries, employment opportunities • Welfare, high consumption, and standard of living
• Dictatorships, political instability, lousy authority • Conflict, (civil)war, people rights abuse, terrorism, repression of minorities, discrimination	• Political stability, democratic state, pluralism, the rule of law • Peace, protection of a human right, protection of minorities
• natural disaster, lack of natural resources, desertification, lack of environmental policy, water lack, soil destruction	• Better environment, protect the natural resources, environmental policy

Ref: (Schmid, 2011).

4.1.4 Concept of immigrants

In the literature, definitions such as refugees, asylum seekers, and immigrants are used for people who have to leave their places dependent on the causes of migration, the current problems, and their living circumstances (Demirhan and Aslan, 2015).

Rights related to immigrants in the migrated countries are considered within these concepts (IOM, 2019). These concepts are briefly explained below:

- Immigrant: an individual who moves to another region or country, where they are located to improve their financial and social conditions to meet their own and their families' future expectations (IOM, 2013).
- Refugee: an individual who lives outside his country due to fear of discrimination for reasons such as race, religion, social group, and political attitude, and does not want to advantage of the security of the state concerned due to the present fear according to the 1951 United Nations Convention Relating to the Status of Refugees and its 1967 Protocol (Çiçekli, 2009; UNHCR, 2010).

The difference between the refugee and the immigrant can be understood by doing it compulsory in one and voluntarily in the other (Ziya, 2012).

- Asylum-seekers: Individuals who want to enter a country as a refugee under national or international laws and are waiting to receive the right to refugees (Akpınar, 2017; Çiçekli, 2009). Every asylum-seeker will not eventually be recognized as a refugee, but every recognized refugee is primarily an asylum seeker (IOM, 2019).

Turkey became a party to the Geneva Convention on the Legal Status of Refugees of 1951 and the Additional Protocol of 1967 with geographical reservation. This reservation made in the Protocol on the Status of Refugees of 1967 excludes refugees from outside the European countries. So that, “Article 91 of the Law No. 6458 the Law on Foreigners and International Protection” was approved by the Turkish Grand National Assembly and entered into force on April 11, 2014 (T.C. İçişleri Bakanlığı Göç İdaresi Genel Müdürlüğü, 2017).

The law established the essential foundation for Turkey's asylum system. It specified the Directorate General of Migration Management (DGMM) as the primary institution responsible for making activities and policies for all foreign nationalities in Turkey (<https://www.unhcr.org/tr/turkiyedeki-multeciler-ve-siginmacilar>, Accession date:2 April 2020).

The Syrian asylum seekers who are currently granted "Temporary Protection Status." The Temporary Protection Regulation defines it as protecting foreigners obliged to leave their nation, cannot return to their country of origin, come to Turkey's margins individually, or as a mass inflow to obtain immediate and temporary security (Dedeoğlu, 2016).

4.1.5 Epidemiology of migration

Immigration occurs in every region of the world, even in almost every country, with less or more intensity (Demirhan and Aslan, 2015).

In recent years, migrations have been known to increase in several regions of the world. After the 1960s, international migration increased remarkably. The number of migrants reached 70 million in 1960, 102 million in 1980, 175 million in 2000, 244 million in 2015s. However, the percentage of international immigrants in the world population is only a little higher than that documented over the past decades, equaling 3,4% in 2015, compared to 2,8% in 2000, and 2,3 % in 1980 (IOM, 2018;<https://www.un.org/development/desa/en/news/population/international-migrant-stock-2019.html>, Accession date: 1 January 2020).

According to the United Nations High Commissioner for Refugees (UNHCR), the total number of international migrants worldwide are 272 million and 763 million internal migrants. With an unprecedented global estimate of 79,5 million forcibly displaced individuals include 26,0 million of whom are refugees, 20,4 million of whom are refugees under the mandate of the UNHCR, and 5,6 million were refugees under the directive of the United Nations Relief and Works Agency for Palestine Refugees (UNRWA) in the Middle East (<https://www.unhcr.org/figures-at-a-glance.html>, Accession date: 12 March 2020).

Turkey is one of the nations most influenced by these migration actions because it is located during the crossing points, with its strategic location as a bridge between the east and west.

According to data from DGMM, the number of Syrians under temporary security in Turkey has increased from 2011 to the present.

In 2018, it was reported that the Syrians under temporary protection are 3 623 192, and in June 2019, 3 622 284 Syrians who have under temporary protection in Turkey (<https://www.goc.gov.tr/gecici-koruma5638>, Accession date: March 11, 2020), and close to 330 000 refugees and asylum seeker of nationalities like Afghanistan, Iraq, Iran, Somalia, and other nationalities ([https://turkey.iom.int/default/files/sitreps/sites/Q4 quarterly -Oct-Nov-Dec-19.pdf](https://turkey.iom.int/default/files/sitreps/sites/Q4%20quarterly%20Oct-Nov-Dec-19.pdf), Accession date: 1 March 2020; <https://reliefweb.int/report/turkey/unhcr-turkey-fact-sheet-february-2020>, Accession date: 1 April 2020).

According to data from DGMM, 108 268 people remain in a total of 13 Temporary Accommodation Centers (TAC) in eight provinces (Adana, Şanlıurfa, Gaziantep, Kilis, Osmaniye, Malatya, Hatay, and Kahramanmaraş), and 3 514 016 Syrians are live in different cities and regions outside their shelter centers. When the distribution of "Syrians" under temporary protection by provinces is examined; cities that have most of the number of them are as follows: Istanbul (547 235), Gaziantep (440 618), Şanlıurfa (432 007), Hatay (428 073), Adana (240 076) and Mersin (201 224) (<https://www.goc.gov.tr/gecici-koruma5638>, Accession date: March 11, 2020).

The number of these individuals will be seen much more when the population that is dependent on them is added, as most of them are married and have children (Varavikova and Tulchinsky, 2018).

4.1.6 Migration and health

Migration creates a sudden and rapid environmental change, affecting society and individuals socially, culturally, and physically; it also has significant effects on health and health variables. Migrants are subject to many health dangers through immigration and after leaving their nation. Previous health problems of the person, age, sex, and duration of the pressures can increase these disadvantages (Topçu and Beşer, 2006).

Migration from wars, internal turmoil, and natural disasters in countries force individuals to live with insufficient living standards.

Before, during, and after the migration, many situations will adversely affect an individual's health.

These can be summarized as follows (Scholz, 2016):

- i. Pre-migration: trauma suffered from violence, war, and conflict,
- ii. During the journey: travel circumstances (stressful, dangerous, crowded; and lacking essential health requirements), situation (alone or as part of a mass displacement; walking, ship, and truck), and period of the journey,
- iii. After reaching the host society: living conditions, length of stay, legal status, right to use healthcare, differences in culture and language, and refugee camps or receiving centers.

According to literature and international reports, the most prominent health problems in immigrant individuals can be summarized as follows (Karadağ and Altıntaş, 2010; Karaca and Doğan, 2014):

- Increased preventable diseases by the vaccine;
Infectious disease rates may increase or the course of existing diseases, especially measles, pneumonia, diphtheria, and polio. May deteriorate even further, depending on healthcare disruption in war environments, especially if emergency and acute health problems are emphasized.
- Increase in airborne diseases;
Although there has not been an increase according to the records until now, poor conditions of immigrants' accommodation or coexistence as a crowd can increase the risk of airborne diseases.
The frequency of appearance of diseases such as upper and lower respiratory diseases, tuberculosis, influenza, and pneumonia may increase.
- Increase in diseases transmitted by water and nutrients;
Poor sanitation and hygiene conditions in migration routes and their settlements, and poor food hygiene, can increase the disease transmitted by water and nutrients such as Diarrhea, dysentery, Hepatitis A, etc.
- Increase in diseases transmitted by vectors;
Due to the unhealthy living conditions, immigrants are more likely to be in environments suitable for the reproduction of vectors and to have diseases passing through vectors such as malaria, plague, and parasitic diseases.

An example of this is that " Leishmaniasis disease" is more prevalent among people from Syria than Turkey.

- Chronic diseases and complications
- Sexual abuse and sexually transmitted diseases such as HIV/AIDS,
- Anemia,
- Malnutrition;

An increase in the frequency of malnutrition due to inadequate and unbalanced nutrition was expected. While malnutrition negatively affects children's growth and development, it also increases the susceptibility to infectious diseases and, thus, deaths from these diseases.

- Inadequate use of family planning approaches;

It was reported that immigrants coming from Syria do not use modern family planning methods sufficiently. Their fertility rates are high because they have problems accessing health services; the healthcare workers cannot follow mostly unregistered immigrants. Failure to use family planning methods can lead to an increase in fertility, undesirable pregnancies, risky pregnancies, miscarriage, birth complications, and maternal and infant mortality.

- Injuries caused by physical violence and psychological violence,
- Problems with dental health.

Another fundamental health problem for immigrants is psychological health problems. The most common mental health problems among immigrants are posttraumatic stress disorder (PTSD) and depression.

In immigrant people, mental health problems may arise due to adaptation to their new environment, longing for the places they leave or where they have to leave, and leaving their relatives (Acarturk et al., 2015).

It is reported that refugees who escaped from war regions are often at greater danger for mental health disorders, such as depression, PTSD, and "trauma" issues. These may lead to disordered behavior impairing their capability to deal with family or social life and make integration into a new community difficult (Fegert et al., 2018).

Stress is a significant factor when assessing the psychological health of immigrants. Immigrants' stress is permanent and is defined as chronic stress that causes major physical and spiritual problems in individuals and causes significant health problems (Filiz and Yıldırım, 2019).

The significant problems in the health care of immigrants are physical and legal barriers. They are challenging for individuals to benefit from health care in cases where there is not enough medical staff, language discrepancy, how the health system works is unknown, the health care services offered are paid out from the pocket, etc. (Karadağ and Altıntaş, 2010).

In general, immigrants are subject to epidemic diseases and significant health problems due to unhealthy living conditions. For example, there were 349 measles cases in Turkey in 2012, while the measles case, which was accompanied by the migration movement from Syria, increased by nearly 20 times. Refugees living in shelter camps have measles disease and tuberculosis, and skin diseases (Korkmaz, 2014).

4.1.7 The status of immigrants living in Turkey

According to the more recent Turkish governance figures since 2011, about 547235 Syrians migrated to Istanbul, Turkey's largest city, with 15 million people (<https://www.goc.gov.tr/gecici-koruma5638>, Accession date: March 11, 2020).

Although each area of Istanbul holds many Syrian refugees, Syrian refugees are mostly gathered around certain districts of Sultangazi, Kucukcekmece, Sultanbeyli, and Bagcilar. Where impoverishment prevails, religion and conservative are parts of daily life, and life is much cheaper than the other regions of Istanbul (Balcioglu, 2018; Erdogan, 2017).

According to Syrians Coordination Center records, the number of refugee families registered by the Refugee Association through the field studies performed in Sultanbeyli since 2014 is 4,768, while the number of people including family members is 23,815 people, constituting about 7% of the district's total population (<https://multeciler.org.tr/sukom-2019-ocak-ayi-istatistikleri/>, Accession date: 1 November 2019).

Some studies focused on the status of immigrants living in Turkey have been illustrated below:

Bircan (2013) conducted interviews with 17 female immigrant workers from the countries of the Former Soviet Union (FSU) between April 2011 and March 2012, to distinguish the setting and employment circumstances for female immigrant working in Istanbul, to study their behavior in the search for health and how to use the public health services. All the interviewees stated migrating due to social and economic factors. The results demonstrated that concern of banishment led to limitations in their everyday lives.

The effect of distrust on their behavior in searching for health found that they only seek medical advice when it is mandatory (Bircan, 2013).

Akgün (2016) conducted a study to explore the mental well-being of 487 Syrian refugees aged (18-65) settled in Konya province and factors associated with possible mental disorders via Arabic versions of the WHO-5 Mental Well-Being Index, Major Depression Inventory, Perceived Stress Scale, and Harvard Trauma Questionnaire. This study was revealed that the war and conflicts destroyed the mental health of refugees as well as their physical health, and Syrian refugees experienced more posttraumatic stress disorder (PTSD) compared to the general population. Moreover, it became manifest that gender, ethnicity, and traumatic experiences were prominent factors for mental disorders in Syrian refugees (Akgün, 2016).

Assida (2016) carried out a study to identify and assess forced immigration's socio-economic influence on the relocated individuals and the hosting society in Samsun.

Thus, the study searches the influence on particular socioeconomic concerns, such as housing conditions, educational procedures, employment status, income rate, payments, and health conditions and services. The researcher handled two various questionnaires for native participants and forced displaced migrants. Two hundred forty participants were randomly selected. At the same time, 163 interviews were handled with 40 native participants and 120 forced immigrants, in addition to 3 meetings with commissioners of non-governmental administrations. The results have shown that the displacement has negatively influenced the studied socioeconomic issues.

The housing situations of migrants have altered. The vast majority of them are staying in rented residences. Their health conditions and services have declined, and immigrant students' educational procedure has been reduced, and most have become outside school. Besides, the working condition has been adversely influenced, and their regular monthly income is meager compared to the native employees and the least possible income in Turkey. In terms of the influences on the hosting society, there are more positive influences than their existence's negative influences. They develop occupations, represent foreign exchange sources, actively engage the construction and tourism sectors, and provide an opportunity to understand other cultures. On the other hand, their existence has specific negative influences, such as rising rental costs, reducing wages, and disrupting social peace (Assida, 2016).

Balcioğlu (2018) conducted a case study through nineteen semi-organized interviews with twenty-two Syrian refugees and a focus group with eleventh participants, between May and August 2016 in Sultanbeyli. Each of the participants had been residents in Sultanbeyli for at least four months, with a maximum of three years. Additionally, the researcher performed semi-organized meetings with the commissioners of the Municipality of Sultanbeyli, the Blue Cross Association, and the Turkish Red Cross, which were the prominent three institutions working in Sultanbeyli in order to integrate refugees. To explore Syrian refugees' experience and social networks' function in refugees and host populations' daily livings in Sultanbeyli. Results revealed that many Syrians are jobless, and individuals who work are working illegally, frequently in negative situations lacking occupation security (Balcioğlu, 2018).

Fuhr et al. (2019) carried out a cross-sectional study between February and May 2018, among 1678 Syrian refugees aged 18 years or over in Sultanbeyli-Istanbul-Turkey. They were proposing to report an indication of psychological health requirements and admission to mental health and psychosocial support by using the Hopkins Symptoms Checklist (HSCL-25) for depression and anxiety and the Posttraumatic Stress Disorder (PTSD) Checklist (PCL-5). Results revealed that Syrian refugees have high levels of depression, PTSD symptoms, anxiety, and a significant psychological health treatment gap, despite legally having access to the public psychological health system in Turkey.

Various barriers for not accessing care were identified; organizational obstacles (e.g., misbeliefs about treatment costs, costs of alternative medication opportunities) or behavioral obstacles (e.g., stigma, lack of knowledge of treatment) (Fuhr et al., 2019).

4.2. Quality of Life (QOL)

4.2.1 Historical evolution of the term QOL

The expression quality of life was primarily intended for clinical research findings; the term was long-standing. Historically, the quality of life has emerged as a conception in the philosophy of Greek. Aristotle proposed that pleasure was developed from the spirit's great action and guided to a good life (King and Hinds, 2011).

For the first time, the term quality of life was defined by Thorndike (1939) as "reflected response from the social environment of the individual " (Öz, 2006).

In the 1960s, it became a resource of political instability in the United States, and after those years, its use was widespread (Öz, 2006; Özerdoğan and Beji, 2015).

In contemporary periods, the members of the World Health Organization (WHO) (1948) implicitly presented the term of quality of life in the public health when they described health as " status of complete psychological, physical, and social functioning well-being, not just the absence of illness or disability " (King and Hinds, 2011).

In 1975, the QOL concept was presented as a primary term in the health field. Quality of life has been utilized as a resulting variant to assess and treat the type of disease (Paraskevi, 2012). However, in recent years, clarification of this term has been called for in the medical context and, specifically, health-related quality of life (HRQOL) (Xavier et al., 2003). In recent years, improving life quality is further essential than extending a lifetime (Atasever and Ertürk, 2003).

4.2.2 Definitions of QOL

Although the concept of QOL is frequently-used, it does not have a consensus definition in the literature. Some claim that there is extra dissension on the definition of QOL than on other constructs in medical, mental, and social research (Dijkers, 2005). A consensus definition of QOL has not been reached because QOL is a vague concept and a multidimensional term. It might mean various things to various people (Bowling, 2001).

The QOL concept is used to perceive well-being among individuals and societies and various susceptible populations, such as migrants and refugees (Bayram et al., 2007; Ghazinour et al., 2004).

QOL can be used in different scientific branches, like sociology, health care, economic, environmental, and other disciplines, like music (Mandzuk and McMillan, 2005).

According to the WHO (1994), QOL is described as: "persons" perception of their location in the life within the framework of value and culture systems, and regarding their objectives, predictions, worries, and standards (WHOQOL Group, 1993).

Moreover, WHO defined QOL as a multi-faceted conception, which inclusive of essential areas such as an individual's physical health, mental health, independence levels, personal beliefs, social relations, and their relations with environmental factors (Sabbah et al., 2003, Su et al., 2014).

This explanation reflects that quality of life mentions self-assessment as an integral part of a social, cultural, and environmental framework (WHOQOL Group, 1998).

Lehman defined QOL that an individual's feeling of well-being and satisfaction with her/his living conditions and an individual's health condition and access to opportunities and sources (Lehman, 1997).

Centre for Health Promotion defined the concept QOL that the grade to which an individual has the essential potentials of her/his life in the areas of being (who one is): physical being, mental being, spiritual being, and belonging (association with person's environment): social belonging, community belonging, physical belonging, and becoming (accomplishing personal objectives, wishes, and ambitions): practical or day-to-day activities becoming, leisure becoming, growth becoming (Raphael et al., 1999).

The principal part in the zones of "being, "belonging, and "becoming is an individual's awareness of his/her wellbeing and health. It is, therefore, essential to drop extra light on the term of Health-related quality of life.

4.3. Health-Related Quality of Life (HRQOL)

4.3.1 Definitions of HRQOL

In health research, researchers are not interested in QOL in its broad sense; thus, the HRQOL term was brought in. HRQOL refers to a person's awareness of his/her well-being and health in the comprehensive zones of physical, mental, and social function (WHOQoL Group, 1993).

The physical area is about the person's perception of how well they can handle day-to-day work and work by spending energy. The social area covers how much individuals can relate to and socialize with family members, neighbors, colleagues, and individuals in other communities. In the mental area, there are emotional and spiritual situations such as depression, anxiety, fear, anger, and happiness (Işikli et al., 2007).

HRQOL is a concept that includes the person's satisfaction in the state of health and the emotional response to the state of health (Eser, 2006).

In conformity with the WHO definition of health, HRQOL refers to the general conditions of QOL of ill or healthy subjects according to the following eight domains:

- i. Limitations in physical functioning due to health problems,
 - ii. Limitations in social functioning due to physical or emotional problems,
 - iii. Role limitations due to physical health problems,
 - iv. Bodily pain,
 - v. General mental health,
 - vi. Role limitations due to emotional health problems,
 - vii. Vitality (energy),
 - viii. Moreover, general health awareness of a person or a group of the person assessed in the awareness of satisfaction or dissatisfaction (Ware and Sherbourne, 1992).
- One popular component across the different definitions of HRQOL is the person's subjective perception of well-being.

4.3.2 Instruments used for assessment HRQOL

Fitzpatrick, with other researchers, presented different types of QOL instruments, such as generic, disease-particular, dimension-particular, and site- or region-particular (Fitzpatrick et al., 1998). We discuss only generic HRQOL instruments since the other types are beyond the scope of our study. Generic HRQOL tools are designed for general use regardless of the disease or situation of the individual. Thus, it may be used for both healthy subjects and patients. It can evaluate a wide range of health-related QOL (Ren et al., 2005). A generic instrument often includes dimensions such as physical, mental, and social health. It may be used to compare various situations and interventions, which are very important for policymakers to allocate resources and broaden their outcome indicators (O'Connor, 2004).

It can pick up a wide variety of disorders in different systems, not specific to the disease condition.

Euro QOL, Short Form-36, Nottingham Health Profile, Good Health Scale, Disease Impact Profile, Health Exploitability Index, and WHO Life Quality Questionnaire are a standard generic health-related quality of life measurement tools (Soydeğer, 2008).

4.4. Short Form 36 (SF-36)

The SF-36 questionnaire was generated since the Medical Outcomes Study (MOS) or Researcher And Development Health Insurance Experiment for usage in clinical exercise and investigation, health strategy assessments, and surveys within the general population (Ware and Sherbourne, 1992; Mchorney and Ware, 1993).

The SF-36 questionnaire covers the participants' experiences, feelings, perceptions, and beliefs regarding the QOL in the previous four weeks. It comprises of 36 closed-ended structured questions measuring eight QOL indicators. The closed-ended questions of the SF-36 questionnaire force participants to identify their answers from a range of potential answers (Stark and Roberts, 2002). Furthermore, the SF-36 questionnaire permits a person to reach three primary objectives of both the social and natural disciplines (Henslin, 2002).

The first goal is to create generalizations, go outside the person case, and create declarations appropriate to more comprehensive conditions or groups concerning a person's QOL and HRQOL. The second goal, the questionnaire, allows the researcher/practitioner to anticipate or determine the possible results regarding an individual's health and life quality. The third goal, the SF-36 questionnaire, provides possible solutions for improving HRQOL in each of the eight measurements by recommending probable intervention programs or approaches (Henslin, 2002).

4.4.1 The eight HRQOL dimensions assessed by the SF-36 questionnaire

A brief review of each of the eight HRQOL measurements assessed by the SF-36 questionnaire includes:

4.4.1.1 General health:

This dimension assists the conception of a person's general health. It is assessed in terms of conceptions such as excellent, very good, good, fair or poor, getting ill easier than other people, and just as healthy as anyone he/she knows (Ware, 1993).

4.4.1.2 Physical functioning:

Physical functioning indicates the extent to which individuals can accomplish vigorous activities such as running, lifting heavy objects, participating in exhausting sports, climbing several flights of stairs, and walking more than a kilometer. The scores on the physical functioning domain scale refer to the magnitude to which the participant's perceptions of their QOL are affected by their physical condition (Ware, 1993).

4.4.1.3 Physical roles limitation:

This measurement indicates the limit to which an individual obstructs the functioning of his/her daily actions due to her/his physical health. For example, they can accomplish vigorous actions such as lifting heavy objects or to perform moderate activities such as moving a table or pushing a vacuum cleaner (Ware, 1993).

4.4.1.4 Emotional roles limitation:

This measurement points to the limit to which an individual's emotional situation, such as sense depressed or anxious, restricts her/his daily functioning and ability to accomplish roles. Such as cutting down the length of time consumed on work or other actions and achieving fewer than she/he would like to (Ware, 1993).

4.4.1.5 Vitality:

This dimension points to the extent to which an individual's experience of sense, such as energetic and full of energy, exhausted and fatigued (Ware, 1993).

4.4.1.6 Mental health:

This dimension is assessed in terms of the limit to which he/she entirely senses lively, is pleased, sense peaceful and calm, is very nervous, or is sense exhausted and tired (Ware, 1993).

4.4.1.7 Social functioning:

This dimension points to social performances and communicating significantly with other people, such as family memberships, partners, neighbors, and other social relatives (Ware, 1993).

4.4.1.8 Body pain:

This measurement indicates the limits to which an individual's experience of body pain obstructing daily actions, involving duties associated with work in the community field and jobs inside the home situation (Ware, 1993).

4.5. Migration and Quality of Life

Due to the growing immigration rate over the past few years, migrant health as a fundamental human right has become a priority zone in studies focusing on public health and QOL. Health outcomes worldwide have become increasingly necessary in immigrant and refugee populations (Gushulak and MacPherson, 2006).

Koochek et al. (2007) carried out a cross-sectional study to assess the association between immigration stations and HRQOL. By comparing aging Iranians in Iran (n= 298), aging Iranian immigrants in Sweden (n= 176), and old Swedes in Sweden (n = 151) through the administration of the SF-36 to six hundred twenty-five males and females, their age between 60-84 years to gather HRQOL data. A Swedish control group was randomly selected from the general people (Koochek et al., 2007).

Bayram et al. (2007) conducted research to evaluate Turkish immigrants' quality of life who live in Stockholm-Sweden and assess the influence of domains to explain the difference in immigrants' quality of life. By applying the World Health Organization Quality Of Life (WHOQOL)-100 scale Turkish version (Bayram et al., 2007).

Yang and Wang (2011) conducted a cross-sectional study of two hundred three participants to assess relationships between demographic variables, health-related quality of life, and acculturation among Vietnamese immigrant women in transnational marriages in southern Taiwan. The instruments were used in the study: the SF-36 Version 2., demographic inventory, and the Suinn–Lew Asian Self-Identity Acculturation Scale (Yang and Wang, 2011).

Nesterko et al. (2013) conducted a study in German. The researchers assessed the socio-economic sheet from 2006, HRQOL (assessed with the SF-12v2), and satisfaction with life in addition to immigration-linked factors in 21 079 people (involving 2,971 immigrants), in order to compare HRQoL and SWL in immigrants and native-born population (Nesterko et al., 2013).

Daher et al. (2011) did a study amongst 300 Iraqi migrants living in Malaysia between September 2009 and April 2010. A translated version of the MOS SF-36 in Arabic was administered amongst adults aged 18 and above and capable of speaking and writing Arabic. Respondents completed the questionnaire (n=253) range in ages from 18 to 67 years (Mean = 33.6) (Daher et al., 2011).

Salinero-Fort et al. (2015) performed between January 2007 and December 2009, a cross-sectional Primary Health Care multi center-based study to make a comparison of the health-related quality of life of Latin American born persons stayed in Spain (n=903) and Spanish-born (n=691). They analyzed socio-demographic, psychosocial factors, and certain immigration information related to health-related quality of life (Salinero-Fort et al., 2015).

Nante et al. (2016) performed a study from July 2011 to February 2015, aimed to assess the HRQOL of asylum seekers and refugees hosted in Tuscany, Italy, by administering the Short-Form Questionnaire (SF-36) (Nante et al., 2016).

Nesterko et al. (2017) performed a study on 153 Jewish immigrants from the Former Soviet Union (FSU) who settled in Germany by handing out a survey form in the Russian language, containing elements about the background of migration, degree of integration, recognized discrimination as well as cultural characteristics, HRQOL (SF-12), and dispositional optimism/ pessimism (Life Orientation Test-R) (Nesterko et al., 2017).

Abdo et al. (2019) conducted a study in Jordan in 2017, targeted to evaluate the QOL among 661 Syrian refugees living outside the camps in Jordan and making a comparison of it to the QOL of 714 Jordanians of average socioeconomic status and 208 Jordanians of low socioeconomic status, aged between 18 and 75 years, by administering the World Health Organization Quality of Life tool (WHOQOLBREF) (Abdo et al., 2019).

5. MATERIAL AND METHOD

5.1. Study Design

This study is implemented as a descriptive study, although it was planned as a cross-sectional study. The necessary information for sampling about study population could not be allowed by the authority, then the type of the study must be changed to a descriptive study.

5.2. Time and Place of The Study

This research was planned and implemented during 2019 and 2020;

- i. The Ethical Permission /approval was obtained from the Marmara University Faculty of Medicine Clinical Research Ethics Committee on 26.07.2019,
- ii. The Authority Permission was obtained from Istanbul Governorship and Istanbul Provincial General Directorate of Migration Management on 27.11.2019,
- iii. The thesis proposal was approved by Marmara University Institute of Health Sciences Faculty on 11.12.2019,
- iv. In the research, data were collected in the field between 13 December 2019 and 17 January 2020.

The research has been conducted at the Association for Refugees* in Sultanbeyli with the Arabic speaking immigrants who come and use this center during the field study period, during the weekday and working hours.

* Association for Refugees was founded in 2014 to seek solutions to the problems and support all vital needs. Especially the main problems of refugees, people who need international protection and adapt quickly to society cooperate with the private sector organizations, non-governmental organizations, and public institutions. It supports refugees in need with its staff consisting of different nationalities. In short, the Association for Refugees continues its activities without discrimination due to language, religion, race, gender, age, disability, and political differences. The Association for Refugees provides support to refugees and asylum seekers in many different areas. It includes a migrant health center (this service is provided by the ministry of health of the Republic of Turkey), Turkish language course, physical therapy unit, career courses, and mental health center (Mülteciler Toplum Merkezi-Mülteciler Derneği; <https://multeciler.org.tr/multeciler-toplum-merkezi/>, Accession date: 1 January 2020).

5.3. Study Population

The population who are Arabic speaking immigrants registered in Association for Refugees in Sultanbeyli are the target population of our study, which estimated by the unit of statistics in Ministry of Interior Directorate General of Migration Management as about 23 thousand people (Mülteciler Derneği; <https://multeciler.org.tr/sukom-2019-ocak-ayi-istatistikleri/>, Accession date: 1 November 2019).

5.4. Sample Size

This study's minimum sample size was determined using the following formula (Charan, Biswas 2013).

$$\text{Sample size } (n) = \frac{Z_{1-\alpha/2}^2 P(1-P)}{d^2} = \frac{(1.96)^2 (0.50) (1-0.50)}{(0.05)^2} = 384 \text{ person} \quad (1)$$

Where,

$Z_{1-\alpha/2}$ = Standard normal variate (1.96 for a 95 percent confidence level),

p = Response distribution (50%),

d = Margin of error (5%).

This study was planned to be implemented as a cross-sectional study. Because the necessary information for sampling about the study population could not be allowed by the authority, the study type must be changed as a descriptive study. To be collect valuable, useful information, the researcher decided to reach at least the calculated sample size as the total number of the participants.

5.5. Eligibility Criteria

5.5.1 Inclusion criteria

Eligible participants of immigrants;

- should be aged 18 years or over,
- came to Turkey in the last ten years (2010-2019) and residing in Sultanbeyli-Istanbul,
- Arabic speaking, who can read and write Arabic,
- volunteer to participate in research.

5.5.2 Exclusion criteria

- Not Arabic speaking,
- Could not read or write in Arabic.

5.6. Data Collection

At the start, all questionnaire forms (in Arabic version) were prepared, organized, and classified with serial numbers to ensure the availability of the needed information.

The participants were given a suitable time to answer the questions and encourage them to be open and honest in answering while promising them that the interview information would remain confidential and just used for the study. Great care has been taken to ensure privacy and confidentiality.

The researcher explained the purpose of the questionnaire to the participant before obtaining consent. During the interview, the researcher simplified any unclear information to ensure the participant's exact and real answer. Moreover, participants were informed that the study results would be used for publication, and no personal data would be revealed. Questionnaires were only distributed to those who had consented to participate in the study. The researcher has collected data, and 15 minutes was enough to complete the questionnaire by a face-to-face interview in Association for Refugees in Sultanbeyli.

5.6.1 Data collection tools

Data were collected using the standard questionnaire for this study. There are two compartments in the questionnaire for all participants.

The first part of the questionnaire was included the socio-demographic questions (Annex. 1a, Annex. 1b). The second part of the questionnaire was thirty-six Items Short Form Health Survey Questionnaire (SF-36) (Annex. 2a, Annex. 2b).

There is another third compartment for only ever-married women (EMW) participants, including questions about reproductive health (Annex. 3a, Annex. 3b).

The first part of the questionnaire was socio-demographic questions. This section has been dedicated to collect information about socio-demographic variables such as the participant's sex, age, length of residence, marital status, educational attainment, employment status, monthly income, social security coverage, health insurance coverage, the total number of a household member, presence of disease, source of the drinking water, source of heating and number of room in the house (Annex. 1a, Annex. 1b).

The second part of the questionnaire was “thirty-six items short-form health survey questionnaire (SF-36). SF-36 items have been used in this study to assess HRQOL (Ware and Sherbourne, 1992). The SF-36 survey is self-administered for measuring the health-related quality of life. SF-36 consists of 36 items. Its generates scores across eight dimensions of health:

- i. physical functioning (PF),
- ii. role limitations due to physical problems (RP),
- iii. general health (GH),
- iv. vitality (VT),
- v. bodily pain (BP),
- vi. social functioning (SF),
- vii. role limitations due to emotional problems (RE),
- viii. mental health (MH) (Ware and Sherbourne, 1992).

The first four scales are summarized into the Physical Component Summary and the last four scales into the Mental Component Summary (Figure 5.1) (Diaz-Buxo et al., 2000; McHorney et al., 1993).

The areas cover daily living activities, emotional state, pain, fatigue, social participation, and health perceptions. It also includes one single item scale indicating a perceived change in the general health status over one year.

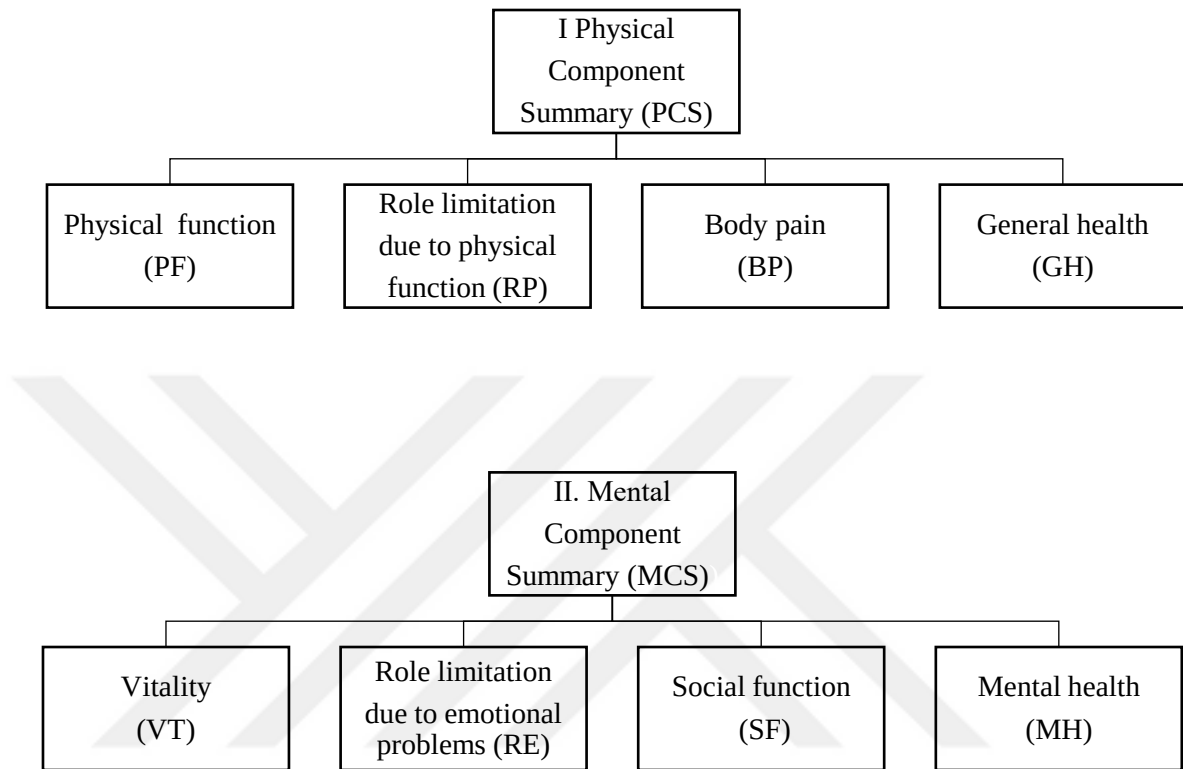


Figure 5.1. Component summary of SF-36

(Ref: <https://www.ncor.org.uk/wp-content/uploads/2013/01/SF-36.pdf>, Accession date: 20 November 2019)

SF-36 has been translated into many languages and proved to be valid and reliable. The Arabic version is being used in Arabic speaking countries where certain items were modified to fit more closely into the Arabic context and consist with the inherent norms of Arabic societies, which share almost the same socio-cultural norms (Coons et al., 1998; Sabbah et al., 2003). The SF-36 was translated to the Arabic language in Lebanon by three native Arabic speakers.

The SF-36 was scored according to the recommendation by Ware (1993). The SF-36 items describing the eight health concepts were transformed into a score of 0-100, and the scale of the items averaged to obtain a subscale score.

The physical component summary and mental component summary were computed by averaging the values of the respective subscales.

Scoring the SF-36 questionnaire is a two-step process. In the first step, preceded numeric values are recoded per the scoring key given in table 5.1.

All items are scored so that a high score defines a more favorable health state. Besides, each item is scored on a 0 to 100 range so that the lowest and highest possible scores are zero and 100, respectively. Scores represent the percentage of the total possible score achieved.

Table 5.1. Recoding items of SF-36

Item number	Change the original response category	To be recoded as (%) value of:
1,2,20,22,34,36	1 →	100
	2 →	75
	3 →	50
	4 →	25
	5 →	0
3,4,5,6,7,8,9,10,11,12	1 →	0
	2 →	50
	3 →	100
13,14,15,16,17,18,19	1 →	0
	2 →	100
21,23,26,27,30	1 →	100
	2 →	80
	3 →	60
	4 →	40
	5 →	20
	6 →	0
24,25,28,29,31	1 →	0
	2 →	20
	3 →	40
	4 →	60
	5 →	80
	6 →	100
32,33,35	1 →	0
	2 →	25
	3 →	50
	4 →	75
	5 →	100

In step 2, items on the same scale are averaged together to create the eight scale scores, as shown in table 5.2. Items left blank (missing data) are not taken into account when calculating the scale scores. Hence, scale scores represent the average for all items in the respondent's scale (Ware, 1993). The score given to QOL in each domain varies between zero and 100; "a score close to zero" implies "a worse QOL" while "the one close to 100" shows "a better QOL" (Brazier et al., 1992).

Table 5.2. Averaging items to form the eight domains of SF-36

Domains	Number of items	After recoding per table 5.1, average the following items:
Physical functioning	10	3 4 5 6 7 8 9 10 11 12
Role limitations due to physical health	4	13 14 15 16
Role limitations due to emotional problems	3	17 18 19
Vitality	4	23 27 29 31
Emotional well-being	5	24 25 26 28 30
Social functioning	2	20 32
Pain	2	21 22
General health	5	1 33 34 35 36

The third part of the questionnaire was questioned for the reproductive health of ever-married women (EMW). This section has been dedicated to collecting information about reproductive health of EMW: given the birth history, the number of living children, age at first birth, ever miscarriage history, ever induced abortion history, ever use of any contraceptive method, and current use of the contraceptive method.

5.7. Pilot Testing

Data collection instruments were tested with twenty participants. The goals of the pilot study were to assess the adequacy of the data collection plan, to explore whether respondents understand the questions, in the same way, to minimize the problems that may arise during data collection, to identify all domains and components of instruments, and to estimate the interview duration. Because there was not found any problem, the pilot participants were included in the study.

5.8. Ethical Considerations

The approval was obtained from Marmara University- Faculty of Medicine Research Ethics Committee before the study on 26.07.2019 (Annex. 4). Written permission was obtained from Istanbul Governorship and Istanbul Provincial General Directorate of Migration Management on 27.11.2019.

Considering the volunteering principle, the immigrants were informed verbally and with the information form about the study's purpose and benefit. Written informed consent was obtained and included in the study.

5.9. Response Rate

According to the eligibility criteria, the researcher invited 394 immigrants whose age was 18 years and more to participate. A total number of 379 immigrants agreed, representing (96,2%) of the study population, while 15 immigrants refused, representing (3,8%) of the population. Most of the refused reason for invited participants were time-limitation, and having so young babies, they had to care.

5.10. Statistical Analysis

Collected data has been entered and analyzed using Statistical Package for Social Science (SPSS 11.0). The researcher was utilized descriptive statistics such as means, medians, crosstabs to show sample characteristics differences. In this study, numerical values of demographic data and scale score distributions have been given. Independent samples Mann-Whitney U and Kruskal-Wallis tests have been used to find the relationship between health-related QOL dimensions and other independent variables. The results were accepted as statistically significant when the p-value was less than 5% ($p<005$).

6. RESULTS

The first part of the results presented results on the participants' socio-demographic characteristics, health conditions and smoking, housing characteristics of households, and ever-married women participants' reproductive health.

The second part of the results presented results on SF-36 scales (physical functioning (PF), role limitations due to physical problems (RP), general health (GH), vitality (VT), bodily pain (BP), social functioning (SF), role limitations due to emotional problems (RE), mental health (MH), and health compared to one year ago).

The third part of the results presented findings on relationships between SF-36 scales and socio-demographic characteristics of the participants and reproductive health of ever and currently married women participants.

6.1. Socio-Demographic Characteristics of The Participants

The total number of immigrants through interviews voluntarily for the current study was 379 Syrian persons. The socio-demographic characteristics of the participants involved in the research are presented in table 6.1.

Among these participants, 57,5% were female, and 42,5% were male. The median age of males participating in the study was 33,0 years ($\bar{X}$:35,5, SD:11,9, min:19, max:72).

The median age of females participating in the study was 34,0 years ($\bar{X}$:36,0, SD:12,6,min:19, max:79). The ages of the male and female participating in the study were similar ($p_{MWU}=0.829$) (Table 6.1).

While 39,9% of the females participating in the study were in the '29 and under' age group, 37,3% of the male participants were in the '29 and under' age group. While 12,4% of the females participating in the study were in the '50 and above' age group, 16,5% of the male participants were in the '50 and above' age group. In the study, the distribution of males and females by age groups was similar ($p=0.321$) (Table 6.1) (Figure 6.1.1).

Table 6.1 showed that most immigrants participating in the research were ever married (85,5%). Whereas 93,1% of the female participating in the study were ever married, 75,2% of the study's male participants were ever married ($p=0.0001$, Table 6.1).

The present distribution of immigrants participating in the research by educational attainment is presented in table 6.1, which indicate that forty five percent of the female participating in the research and 25,5% of the male participating in the research were complete primary school. In comparison, 7,8% of the female participating in the research and 16,1% of the male participating in the research were complete university. In the study, a male was more educated than a female ($p=0.001$) (Table 6.1, Figure 6.1.2).

The median age at first marriage of male participants was 24,0 years ($\bar{x}$:24,7, SD:4,6, min:15, max:50). The median age at first marriage of female participants was 18,0 years ($\bar{x}$:18,8, SD:4,2, min:11, max:41). In the study, a female was married younger than the male ($p_{MWU}=0.0001$, Table 6.1).

While 45,8% of the female participating in the study were married in the '17 and under' age, only 3,3% of the male participants were married in the '17 and under' age. Whereas 7,9% of the female participating in the study were married in the '25 and more' group, 46,3% of the male participants were married in the '25 and more' group ($p=0.0001$, Table 6.1).

The present distribution of immigrants participating in the research by known language is presented in table 6.1. While 55,3% of the male participating in the study have known Turkish, only 21,6% of the female participants have known Turkish. Whereas 38,5% of the male participating in the study have only known Arabic, 72,0% of the female participants have only known Arabic. In the study, males were more known Turkish than females ($p=0.0001$, Table 6.1).

The majority of the immigrants participating in the research were not currently employed (79,2%). While 41,0% of the male participating in the study were currently employed, only 6,0% of the female participants were currently employed. In the study, males were employed more than females ($p=0.0001$, Table 6.1).

Findings indicated that more than half of the immigrants (are currently working) participating in the research were waged workers regular (54,4%), 36,7% were daily waged workers (seasonal), and 7,6% were self-employed. Smaller percentages were salaried government employees (1,3%). Also, results show that 43,0% of the immigrants (are currently working) participating in the research work in the industry, 25,3 % were worked in tailoring, and only 8,9% were worked as public officials.

Table 6.1 revealed that only 2,6% of the immigrants participating in the research covered by the Social Security Institution. Whereas five percent of the males participating in the study covered by Social Security Institution, 0,9% of the females participating in the study covered by Social Security Institution. In the study, males have more coverage by Social Security Institution than females ($p=0.015$, Table 6.1).

The percent distribution of immigrants participating in the research by health insurance coverage is presented in table 6.1. Accordingly, only 2,6% of immigrants are covered by general health insurance in Turkey. The majority of Syrian immigrants are covered by insurance for temporary protection (65.2%), while 32,2% of immigrants are covered by private health insurance (Red Crescent). In the study, a male has more coverage by general health insurance than a female ($p=0.044$, Table 6.1).

The median number of usual household members of male and female respondents in the study was 5.0 persons ($\bar{x}:5,9$, $SD:2,8$, $Range:2-15$, $\bar{x}:5,4$, $SD:2,2$, $Range:1-15$, respectively). In the study, the number of usual household members of the male and female respondents was similar ($p_{MWU}=0.265$, Table 6.1).

The median length of residence in Turkey(months) of male and female participating in the study was 60,0 months ($\bar{x}:58,1$, $SD:16,1$, $range:24-97$, $\bar{x}:56,2$, $SD:18,5$, $range:12-96$, respectively). The length of residence in Turkey of the male and female respondents was similar ($p_{MWU}=0.667$, Table 6.1). The median monthly income (TL) of male and female participating in the study was 1800 TL¹ ($\bar{x}:1747,0$, $SD:691$, $range:500-4000$, $\bar{x}:1699,5$, $SD:652,1$, $range:500-4000$, respectively) ($p_{MWU}=0.396$, Table 4.1).

¹ 1 USD= 5.98TL (<https://kur.doviz.com/serbest-piyasa/amerikan-dolari>, Accession date:6 February, 2020).

Median monthly income (USD) of male and female participating in the study was 301 USD (x :292,2, SD :115,5, range:84-669, $\bar{x}$:284,2, SD :109,1, range:84-669, respectively) ($p_{MWU}=0.396$).

According to the minimum wage (2020), there were three categories. The majority of the immigrants participating in the research have a monthly income below minimum wage (82,6 %). In contrast, 17,4% of the immigrants participating in the study have monthly income equal to or above minimum wage. In the study, the minimum wage of the male and female respondents was similar ($p=0.807$, Table 6.1).

Concerning the poverty line (<http://www.kamuajans.com/ekonomi/ocak-2020-aclik-ve-yoksulluk-siniri-h546077.html>, Accession date: 6 January 2020), no one of the study participants get income even at the poverty line.

Table 6.1. The distribution of socio-demographic characteristics of participants according to the sex

Variables	Male		Female		Total		<i>p</i>
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
Age groups							
<= 29	60	37,3	87	39,9	147	38,8	0.321
30-39	53	32,9	54	24,8	107	28,2	
40-49	28	17,4	41	18,8	69	18,2	
>= 50	20	12,4	36	16,5	56	14,8	
Marital status							
Never married	40	24,8	15	6,9	55	14,5	0.0001
Ever married	121	75,2	203	93,1	324	85,5	
Educational attainment							
No education	10	6,2	15	6,9	25	6,6	0.001
Complete primary school	41	25,5	98	45,0	139	36,7	
Complete secondary school	52	32,3	52	23,9	104	27,4	
Complete high school	32	19,9	36	16,5	68	17,9	
Complete university	26	16,1	17	7,8	43	11,3	
Age at first marriage							
≤17	4	3,3	93	45,8	97	29,9	0.0001
18-24	61	50,4	94	46,3	155	47,8	
≥25	56	46,3	16	7,9	72	22,2	
Known language							
Only Arabic	62	38,5	157	72,0	219	57,8	0.0001
Turkish	89	55,3	47	21,6	136	35,9	
English or Kurdish	10	6,2	14	6,4	24	6,3	
Total	161	100,0	218	100,0	379	100,0	

Table 6.1. The distribution of socio-demographic characteristics of participants according to the sex (continued)

Variables	Sex				Total		p
	n	%	n	%	n	%	
Employment status							
Currently employed	66	41,0	13	6,0	79	20,8	0.0001
Not currently employed	95	59,0	205	94,0	300	79,2	
Social security coverage							
Social security institution	8	5,0	2	0,9	10	2,6	0.015
None	153	95,0	216	99,1	369	97,4	
Health insurance coverage							
General health insurance	8	5,0	2	0,9	10	2,6	0.044
Insurance for temporary protection	105	65,2	142	65,1	247	65,2	
Private health insurance (Red Crescent)	48	29,8	74	33,9	122	32,2	
Monthly income (TL)							
< Minimum wage*	132	82,0	181	83,0	313	82,6	0.807
= Minimum wage	6	3,7	10	4,6	16	4,2	
> Minimum wage	23	14,3	27	12,4	50	13,2	
Number of usual members of the household							
≤ 4	59	36,6	75	34,4	134	35,4	0.054
5- 9	82	50,9	130	59,6	212	55,9	
≥ 10	20	12,4	13	6,0	33	8,7	
Length of residence in Turkey(months)							
≤ 24	6	3,7	17	7,8	23	6,1	0.071
25- 36	15	9,3	30	13,8	45	11,9	
37- 48	34	21,1	34	15,6	68	17,9	
49- 60	58	36,0	60	27,5	118	31,1	
≥ 61	48	29,8	77	35,3	125	33,0	
Total	161	100,0	218	100,0	379	100,0	

* Minimum wage for 2020 was announced by the Ministry of Family, Labor, and Social Services. The net was set at 2.324,70 TL (<https://www.ailevecalisma.gov.tr/tr-tr/asgari-ucret/asgari-ucret-2020/>, Accession date: 06 February 2020).

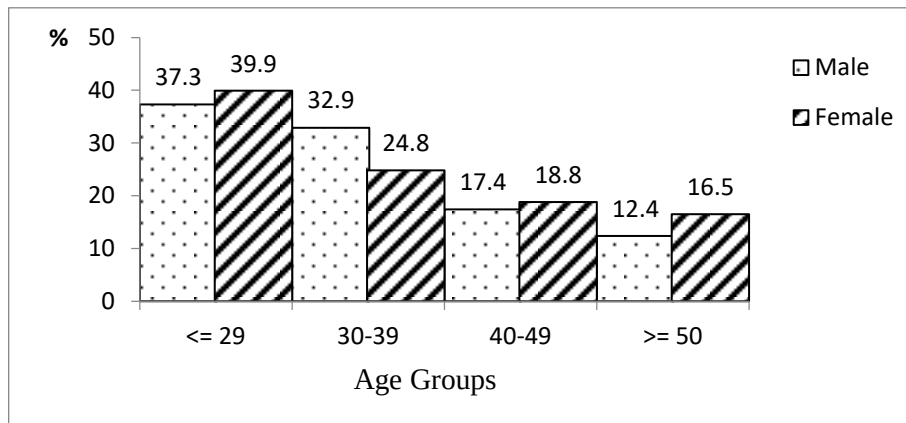


Figure 6.1.1. The distribution of age groups of participants according to the sex

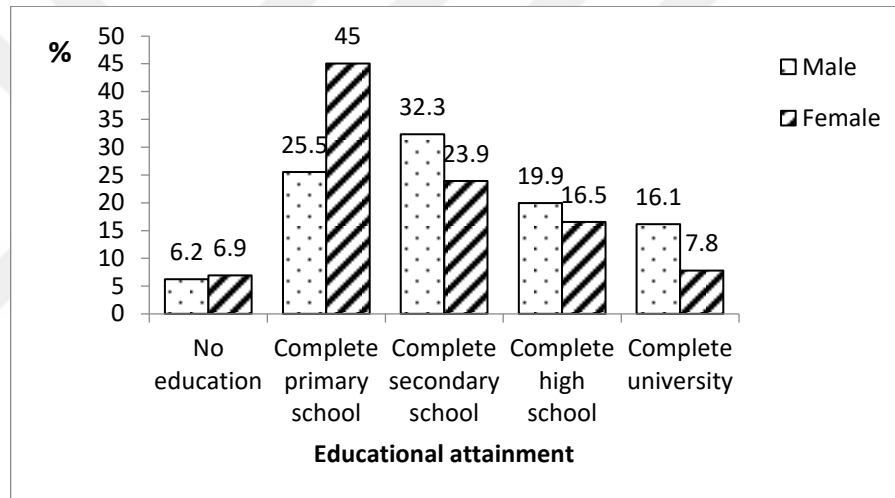


Figure 6.1.2. The distribution of the educational attainment of participants according to the sex

6.2. Disease-Related Variables and Smoking Characteristic

The percent distribution of immigrants participating in the research by smoking is presented in table 6.2. While 61,5% of the male participating in the study smokes, only 15,1% of the female participating in the study smokes ($p=0.0001$, Table 6.2).

Whereas 42,2% of the males participating in the study were smoked for 11 years and above in their lives, only 9,2% of the female participants were smoked for 11 years and above ($p=0.0001$, Table 6.2).

According to the presence of disease diagnosed by health physicians before and after coming to Turkey, the distribution of females and males was similar ($p=0.577$, 0.522 , respectively) (Table 6.2).

Results also show that the distribution of females and males in the presence of disease currently diagnosed by health physicians was similar ($p=0.324$, Table 6.2).

Table 6.2. The present distribution of disease-related variables and smoking characteristic according to the sex

Variables	Sex				Total		p
	Male		Female		n	%	
	n	%	n	%			
Ever smoking							
Yes	99	61,5	33	15,1	132	34,8	0,0001
No	62	38,5	185	84,9	247	65,2	
Smoking years							
Did not smoke at all	62	38,5	185	84,9	247	65,2	0,0001
1-4 year	5	3,1	8	3,7	13	3,4	
5-10 year	26	16,1	5	2,3	31	8,2	
11 year and above	68	42,2	20	9,2	88	23,2	
Disease diagnosed by a health physician <u>before</u> coming to Turkey							
No disease	135	83,9	178	81,7	313	82,6	0,577
Degenerative disc disease	7	4,3	10	4,6	17	4,5	
Diabetes Mellitus	4	2,5	5	2,3	9	2,4	
Hypertension	1	0,6	11	5,0	12	3,2	
Asthma	4	2,5	6	2,8	10	2,6	
Rheumatism	3	1,9	3	1,4	6	1,6	
Other*	9	5,6	9	4,1	18	4,7	
Disease diagnosed by a health physician <u>after</u> coming to Turkey							
No disease	128	79,5	179	82,1	307	81,0	0,522
Degenerative disc disease	11	6,8	2	0,9	13	3,4	
Hypertension	6	3,7	9	4,1	15	4,0	
Diabetes Mellitus	4	2,5	7	3,2	11	2,9	
Asthma	3	1,9	3	1,4	6	1,6	
Rheumatism	3	1,9	8	3,7	11	2,9	
Other*	8	5,0	16	7,3	24	6,3	
The disease <u>currently</u> diagnosed by a health physician							
No disease	103	64,0	150	68,8	253	66,8	0,324
Degenerative disc disease	20	12,4	9	4,1	29	7,7	
Hypertension	8	5,0	21	9,6	29	7,7	
Diabetes Mellitus	8	12,4	12	5,5	20	5,3	
Asthma	7	4,3	8	3,7	15	4,0	
Rheumatism	7	4,3	9	4,1	16	4,2	
Other*	14	8,7	23	10,6	37	9,8	
Total	161	100,0	218	100,0	379	100,0	

* Disease (other) include: anemia, heart disease, irritable bowel, cancer, stomach ulcer, psychiatric, Hepatitis B (HBV).

* Some of the participants give more than one answer to questions of disease.

6.3. Housing Characteristics of Households

In the Turkey Demographic and Health Survey (TDHS) -2008, the household was defined as an individual or group of individuals living together and sharing a common food source.

The prevalent sources of drinking water of households participating in the study were piped water within the dwelling (filter) (41,7%) and bottled water (35,1%). In comparison, the lower percentage of households participating in the study have used piped water within the dwelling (without filter) as the source of drinking water (5,8%) (Table 6.3).

Half of the participants (50,4%) used stove as heating, while (1,6%) of the participants do not have heating (Table 6.3).

The majority of households participating in the study (90,8%) have a separate kitchen. On the other hand, more than half of the households participating in the study (66,8%) have separate bathrooms (Table 6.3).

The median number of sleeping rooms of households participating in the study was 3,0 rooms ($\bar{X}$:2,8, SD:0,7, min:1, max:5). While the median number of household members participating in the study per sleeping room was 2,0 members ($\bar{X}$:2,1, SD:1,1, min:0,5, max:9).

Table 6.3 illustrates that 31,1% of households have one or two rooms for sleeping, and about 54,9 % have three rooms for sleeping (Table 6.3).

Table 6.3. The present distribution of the households by housing characteristics

	n	%
Source of drinking water		
Piped water within the dwelling (filter)	158	41,7
Piped water within the dwelling (without filter)	22	5,8
Public well	66	17,4
Bottled water	133	35,1
Heating		
Central heating	11	2,9
Natural gas/kombi	158	41,7
Stove	192	50,7
Electric heater	12	3,2
No heating	6	1,6
Total	379	100,0

Table 6.3. The present distribution of the households by housing characteristics (continued)

	n	%
The Household has a separate room used as a kitchen		
Yes	344	90,8
No	35	9,2
Separate bathroom		
Yes	253	66,8
No	126	33,2
Number of sleeping rooms		
≤ 2	118	31,1
3	208	54,9
≥ 4	53	14,0
Total	379	100,0

6.4. The Reproductive Health Status of Ever Married Women Participants

To determine the reproductive health status of ever-married women participating in the study, we were asked questions about given birth history, the number of living children, age at first birth, age at last birth, miscarriage history, induced abortion history, etc.

In the study, 93.1% (n=203) of women participants were ever-married women (EMW) (Table 6.1). The median age of EMW participating in the study was 35,0 years ($\bar{x}$:36,9, SD:12,4, min:19, max:79).

About 90,1% of the EMW participants have given birth history, whereas the rest were not (9,9%, Table 6.4).

The median number of living children was 3,0 children ($\bar{x}$:3,6, SD:2,3, min:0, max:10). About 12,3% of EMW participants have any child has died after live births where the rest have not.

The median age at first birth was 19,0 years ($\bar{x}$:19,4, SD:3,9, min:13, max:40), whereas the median age at last birth was 29.0 years ($\bar{x}$:28,6, SD:6,4, min:17, max:42, Table 6.4). About 85,7% of the EMW were not currently pregnant, whereas 14,3% were currently pregnant (Table 6.4).

According to ever miscarriage history, 40,9% of the EMW have miscarriage history, whereas 59,1% did not have miscarriage history.

Only 3,0% of the study EMW participants have ever induced abortion history, whereas 97,0% of the study EMW participants did not have ever induced abortion history (Table 6.4).

Overall, 33,8% of currently married women age 19-49 want to have another child, 47,6% want no more children or are sterilized, and 18,6% are undecided (Table 6.4).

According to the ever use of contraceptive methods, about 64,5% of EMW participants have ever used contraceptive methods, whereas 35,5% have not.

Overall, 39,3% of currently married women declared to use a method of family planning. The most commonly used method is the IUDs (18,6%), followed by oral contraceptive pills (10,3%), male condoms (5,5%), sexual abstinence (2,8%), and the tubal ligation of women (2,1%) (Table 6.4).

The most common reason for discontinuation was side effects/health concerns (43,2%), followed by being pregnant (29,5%), the desire to become pregnant (19,3%), and cost too much or husband disapproved (8,0%) (Table 6.4).

Table 6.4. Distribution of characteristics related to the reproductive health of ever-married women

Variables	n	%
EMW's age group (year)		
<= 29	73	36,0
30-39	54	26,6
40-49	40	19,7
>= 50	36	17,7
Given birth history		
Yes	183	90,1
No	20	9,9
Childhood mortality history		
Yes*	25	12,3
No	178	87,7
The number of girls has died during childhood		
0	193	95,1
1	8	3,9
2	2	1,0
The number of boys has died during childhood		
0	185	91,1
1	17	8,4
2	1	0,5
Total	203	100,0

* Any child has died after live births.

Table 6.4. Distribution of characteristics related to the reproductive health of ever-married women (continued)

Variables	n	%
Number of living children (n= 203)		
0	19	9,4
1-2	52	25,6
3-4	72	35,5
5-6	33	16,3
≥ 7	27	13,3
Age at first birth (n= 203)		
<=15**	17	9,2
16-17**	42	22,8
18-24	110	59,8
25-34	14	7,6
>=35	1	0,5
Age at last birth (n= 203)		
<=17	3	1,6
18-24	55	29,9
25-34	81	44,0
>=35**	45	24,5
Currently pregnant (n= 203)		
Yes	29	14,3
No	174	85,7
Ever miscarriage history (n= 203)		
Yes	83	40,9
No	120	59,1
Ever induced abortion history (n= 203)		
Yes	6	3,0
No	197	97,0
Fertility preferences of currently married female (n= 145)		
Want to have another child	49	34,0
Want no more children	66	45,8
Are sterilized	2	1,4
Undecided	27	18,8
Ever use of any contraceptive methods (n= 203)		
Yes	131	64,5
No	72	35,5
Current use of contraceptive method (n= 145)		
IUDs	27	18,6
Oral contraceptive pills	15	10,3
Male condoms	8	5,5
Sexual abstinence	4	2,8
Tubal ligation	3	2,1
Not currently using	88	60,7

** Risky group.

Table 6.4. Distribution of characteristics related to the reproductive health of ever-married women (continued)

Variables	n	%
Reasons for discontinuations of contraceptive methods (n= 88)		
Wanted to become pregnant	17	19,3
Being pregnant	26	29,5
Side effects/health concerns	38	43,2
Cost too much	4	4,5
Husband disapproved	3	3,5

Overall, the rate of contraceptive use of currently married women aged 19-49 is 39,3%, and contraceptive methods use rise with the increasing age of currently married women. The use of the contraceptive methods among younger women (age $\leq$ 29 and age 30-39) is low (34,3% and 42,2%, respectively) ($p=0.454$, Table 6.5).

Current contraceptive method use was the lowest among currently married women who complete primary school or never attended school (37,5%), then rises, although not so much, to 44,4% among women with complete secondary school, and then decreases to 37,5% among women with a complete university ($p=0.912$, Table 6.5).

The use of the contraceptive methods among currently married women who have monthly income $\geq$ minimum wage (62,1%) is higher than currently married women who have monthly income $<$ minimum wage (33,6%) ($p=0.005$, Table 6.5).

In the study, contraceptive methods use decreases with increasing age at first marriage of currently married women. The use of contraceptive methods among currently married women, married at age $\geq$ 25 is the lowest (10,0%) ($p=0.130$, Table 6.5).

Contraceptive method use increases as the number of living children increases, 40,1% of currently married women with seven or more children using a contraceptive method than 5,6% for women with no living children ($p=0.051$, Table 6.5).

Contraceptive methods use decreases as the length of residence in Turkey(months) increases, with 46,1% of currently married women who have a residence in Turkey for 24 months or less using a contraceptive method compared to 31,7% for women who has a residence in Turkey for 60 months or more.

In the study, the distribution of currently married women by contraceptive method currently used, according to the length of residence in Turkey(months) was similar ($p=0.898$, Table 6.5).

Table 6.5. Percent distribution of currently married women by contraceptive method currently used, according to background characteristic

Variables	Current use of contraceptive method (n= 145)				Total		<i>p</i>
	Currently using		Not currently using		n	%	
	n	%	n	%			
Age group(year)							
<= 29	24	34,3	46	65,7	70	100,0	0.454
30-39	19	42,2	26	58,8	45	100,0	
40-49	14	46,7	16	53,3	30	100,0	
Educational attainment							
Complete primary school or less	24	37,5	40	62,5	64	100,0	0.912
Complete secondary school	16	44,4	20	55,6	36	100,0	
Complete high school	11	37,9	18	62,1	29	100,0	
Complete university	6	37,5	10	62,5	16	100,0	
Monthly income (TL)							
< minimum wage	39	33,6	77	66,4	116	100,0	0.005
≥ minimum wage	18	62,1	11	37,9	29	100,0	
Age at first marriage							
≤17	27	43,5	35	56,5	62	100,0	0.130
18-24	29	39,7	44	60,3	73	100,0	
≥ 25	1	10,0	9	90,0	10	100,0	
Number of living children							
0	1	7,1	13	92,9	14	100,0	0.051
1-2	22	52,4	20	47,6	44	100,0	
3-4	25	41,0	36	59,0	61	100,0	
5-6	10	58,8	7	41,2	17	100,0	
≥ 7	6	66,7	3	33,3	9	100,0	
Length of residence in Turkey(months)							
<=24	6	50,0	6	50,0	12	100,0	0.898
25-36	8	44,4	10	55,6	18	100,0	
37-48	9	34,6	17	65,4	26	100,0	
49-60	15	37,5	25	62,5	40	100,0	
>=61	19	38,8	30	61,2	49	100,0	
Total	57	39,3	88	60,7	145	100,0	

6.5. Quality of life domains (SF-36 Analysis)

SF-36 quality of life consists of eight core domains, including 35 items. The final (36th) item is a supplemental question related to health status change during the previous years. The results of the analysis of the SF-36 questionnaire were divided into eight domains, which include: physical functioning (10 items), role limitation due to physical health (4 items), general health (5 items), body pain (2 items), energy/tiredness (vitality) (4 items), social functioning (2 items), role limitation due to emotional problems (3 items), and mental health (5 items). The eight domains are hypothesized to form two separate higher-ordered groups due to the physical and mental health variance that they have in common. The Physical Component Summary (PCS) comprises of physical function, role limitation due to physical health, general health, and body pain. The Mental Component Summary (MCS) comprises of vitality, social functioning, mental health, and role limitation due to emotional problems.

6.5.1 Immigrant perceptions of their quality of life

The median QOL was 55,7 ($\bar{x}$:55,4, SD:19,0, min:6,8, max:98,1), found with the using SF-36 questionnaire indicating that respondents had a moderate level of QOL.

By combination the median of each question related to each domain, the study outcomes showed that physical functioning (median=80,0) was the best QOL domain, followed by vitality (median=65,0), social functioning (median=62,5), body pain (median=57,5), and general health (median=55,0) (Table 6.5.1). The poorer health were role limitation physical (median=25,0), followed by role limitation emotional (median=33,3), and mental health (median=52,0). As shown in the table 6.5.1; participants were better in Physical Component Summary (median=63,1) compared with Mental Component Summary (median=45,7).

These means that immigrants shared in the study were satisfied with their physical function condition.

Table 6.5.1. Scores obtained in the SF-36 from immigrants

SF-36 Domains	QOL among immigrants (n=379)		
	Median	Mean	SD
General Health	55,0	53,3	26,5
Social Functioning	62,5	63,4	30,5
Physical Functioning	80,0	75,5	21,5
Bodily Pain	57,5	58,5	34,2
Mental Health	52,0	49,6	26,1
Vitality	65,0	61,9	32,6
Role Limitation-Emotional	33,3	38,8	41,4
Role Limitation-Physical	25,0	39,9	38,9
Physical Component Summary	63,1	61,8	21,3
Mental Component Summary	45,7	47,1	21,9
Total SF-36	55,7	55,4	19,0

6.5.2 Effect of migration on general health domain

When the researcher asked immigrants to rate their general health, it is evident in the table (6.5.2), almost half of immigrants (53,3%) reacted positively, since (38,3%) rated general health as good, (9,2%) as very good, and (5,8%) as excellent. Moreover, 18,7% of the immigrants revealed poor general health, and (28,0%) rated their general health as fair. Findings also showed that 39,8% of the participants, like anybody else, and (21,9%) expected good health in the future.

According to the distribution of responses about getting sick easier than other people related item and the expectation of health to get a worse related item, there is a statistically significant difference between males and females ($p=0.031$, 0.008 , respectively).

By combination, the median of each question related to general health, the researcher revealed that immigrants have 55,0% **medium QOL** related to general health.

Table 6.5.2. The percent distribution of responses about general health-related item "General Health domain" according to the sex

Variables	Sex						p
	Male		Female		Total		
	n	%	n	%	n	%	
General health							0.191
Excellent	13	8,1	9	4,1	22	5,8	
Very Good	17	10,6	18	8,3	35	9,2	
Good	52	32,3	93	42,7	145	38,3	
Fair	46	28,6	60	27,5	106	28,0	
Poor	33	20,5	38	17.4	71	18,7	
Get sick easier than other people							0.031
Definitely True	37	23,0	53	24,3	90	23,7	
Mostly True	18	11,2	37	17,0	55	14,5	
Don't Know	22	13,7	19	8.7	41	10,8	
Mostly False	15	9,3	37	17,0	52	13,7	
Definitely False	69	42,9	72	33,0	141	37,2	
Healthy as anybody I know							0.196
Definitely True	65	40,4	86	39,4	151	39,8	
Mostly True	43	26,7	59	27,1	102	26,9	
Don't Know	9	5,6	19	8,7	28	7,4	
Mostly False	15	9,3	30	13,8	45	11,9	
Definitely False	29	18.0	24	11.0	53	14,0	
The expectation of health to get worse							0.008
Definitely True	39	24,2	24	11,0	63	16,6	
Mostly True	21	13,0	30	13,8	51	13,5	
Don't Know	64	39,8	94	43,1	158	41,7	
A Little of the Time	6	3,7	18	8,3	24	6,3	
Definitely False	31	19,3	52	23,9	83	21,9	
Health is excellent							0.105
Definitely True	18	11,2	12	5,5	30	7,9	
Mostly True	76	47,2	118	54,1	194	51,2	
Don't Know	8	5,0	19	8,7	27	7,1	
Mostly False	22	13,7	30	13,8	52	13,7	
Definitely False	37	23,0	39	17,9	76	20,1	
Total	161	100,0	218	100,0	379	100,0	

6.5.3 Effect of migration on physical functioning

As shown in the table (6.5.3), almost half of the participants were limited a lot to perform activities that required physical endurance and capacity (vigorous activities). Half of them had no limitation to perform activities (lifting or carrying groceries, walking for more than 1,5 km).

The majority of them reported no limitation to perform moderate activities, bathing or dressing, climbing one flight of stairs, walking for 100 m, and walking for 1,5 km.

By combination, the median of each question related to physical function, the researcher revealed that immigrants have an 80,0% **good level of QOL** related to physical functioning that occupied the first highest score (Table 6.5.1).

Table 6.5.3. The percent distribution of responses about physical function related item "Physical Functioning domain."

Variables	Yes, limited a lot	Subcategories	
		Yes, limited a little	No, not limited
Vigorous activities	185(48,8%)	99(26,1%)	95(25,1%)
Moderate activities	37(9,8%)	86(22,7%)	256(67,5%)
Lifting or carrying groceries	73(19,3%)	110(29,0%)	196(51,7%)
Climbing several flights of stairs	115(30,3%)	133(35,1%)	131(34,6%)
Climbing one flight of stairs	10(2,6%)	62(16,4%)	307(81,0%)
Bending, kneeling, or stooping	49(12,9%)	59(15,6%)	271(71,5%)
Walking for more than 1,5 km	65(17,2%)	102(26,9%)	212(55,9%)
Walking for 1,5 km	13(3,4%)	57(15,0%)	309(81,5%)
Walking for 100 m	2(0,5%)	21(5,5%)	356(93,9%)
Bathing or dressing	2(0,5%)	25(6,5%)	357(93,0%)

6.5.4 Effect of migration on role limitation due to physical health

Table (6.5.4) presents the study results regarding role limitations due to physical health-related items. More than half of the participants (60,1%) had limited role due to their physical health, so there was a cut down on the length of time spent on work or other activities, accomplished less than they would like to, limited in the kind of work or other daily living activities, and had difficulty performing the work or other daily living activities. That means a higher percentage of the participants complained of physical functioning weakness that limited them to perform these activities like work or other daily activities that require good physical health. As a result, they had limitations in their usual role.

By combination, the median of each question related to role limitation due to physical health, the researcher revealed that immigrants have 25,0% of **a low level of QOL** related to role limitation due to physical health, that occupied the lowest QOL score (Table 6.5.1).

Table 6.5.4. The percent distribution of responses about role limitation due to physical health-related item "Role Limitation-Physical domain."

Variables	Yes		No	
	n	%	n	%
Cut down on the length of time you spent on work or other activities	208	54.9	171	45.1
Accomplished less than you would like to	238	62.8	141	37.2
You are limited in the kind of work or other activities	203	53.6	176	46.4
Had difficulty performing the work or other activities	262	69.1	117	30.9

6.5.5 Effect of migration on role limitations due to emotional problems

As shown in the table (6.5.5), more than half of the participants (61,2%) stated a limited role due to their emotional problems. That means they had problems with work or other daily living activities because of emotional problems that have caused the role limitation.

By combination, the median of each question related to role limitations due to emotional problems, the researcher revealed that immigrants have 33,3% of a **low level of QOL** related to role limitations due to emotional health problems, which occupied the second-lowest score (Table 6.5.1).

Table 6.5.5. The percent distribution of responses about role limitation due to emotional problem-related item "Role Limitation-Emotional domain."

Variables	Yes		No	
	n	%	n	%
Cut down the length of time you spent on work or other activities	232	61,2	147	38,8
Accomplished less than you would like	234	61,7	145	38,3
Did not do work or other activities as carefully as usual	230	60,7	149	39,3

6.5.6 Effect of migration on vitality

Table (6.5.6) shows the effect of migration on vitality. Only (18,2%) of the participants felt full of life all of the time or at least most of their time, but the percent increased among those having energy and feeling tired and those who got worn out all of the time or at least most of their time. By combination, the median of each question related to vitality, the researcher revealed that immigrants have 65,0% of a **good level of QOL** related to vitality, which occupied the second-highest QOL score.

Table 6.5.6. The percent distribution of responses about vitality related item "Vitality domain."

Variables	Subcategories					
	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
Feel full of life	27(7,1%)	42(11,1%)	49(12,9%)	133(35,1%)	58(15,3%)	70(18,5%)
Have a lot of energy	46(12,1%)	32(8,4%)	47(12,4%)	111(29,3%)	68(17,9%)	75 (19,8%)
Feel worn out	29 (7,7%)	55 (14,5%)	107(28,2%)	37(9,8%)	60 (15,8%)	91 (24,0%)
Feel tired	31 (8,1%)	44 (11,5%)	113(29,4%)	38(9,9%)	62 (16,1%)	96 (25,0%)

6.5.7 Effect of migration on mental health

Table (6.5.7) showed that the higher percentage of the participants felt calm and peaceful and felt so down in the dump that nothing could cheer them up all of the time. Also, the higher percent were nervous a good bit of the time, and they were feeling downhearted and blue a good bit of the time, and they were not feeling happy or some of the time felt so. By combination, the median of each question related to mental health, the researcher revealed that immigrants have 52,0% of the **medium level of QOL** related to mental health.

Table 6.5.7. The percent distribution of responses about mental health-related item "Mental Health domain."

Variables	Subcategories					
	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
Have been a very nervous person	60(15,8%)	58(15,3%)	91(24,0%)	36(9,5%)	65(17,2%)	69(18,2%)
Have felt so down in the dumps that nothing could cheer you up	84(22,2%)	55(14,5%)	76(20,1%)	35(9,2%)	60(15,8%)	69(18,2%)
Have felt calm and peaceful	97(25,6%)	43(11,3%)	30(7,9%)	69(18,2%)	63(16,6%)	77(20,3%)
Have felt downhearted and blue	78(20,6%)	59(15,6%)	98(25,9%)	27 (7,1%)	52(13,7%)	65(17,2%)
Have been a happy person	50(13,2%)	27 (7,1%)	56(14,8%)	89(23,5%)	77(20,3%)	80(21,1%)

6.5.8 Effect of migration on social functioning

Table (6.5.8) showed that a higher percentage of the participants accomplish their normal social activities without interference due to physical or emotional health problems. By combination, the median of each question related to a social function, the researcher revealed that immigrants have 62,0% of a **good level of QOL** related to social functioning, which occupied the third-highest score.

In the study, the responses about social function according to the length of residence in Sultanbeyli (months) and length of residence in Turkey (months) study were similar ($p=0.434$, 0.894 , respectively).

Table 6.5.8. The percent distribution of responses about social function related item "Social Function domain."

Variables	n	%
Physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups		
Not at all	166	43,8
Slightly	74	19,5
Moderately	63	16,6
Quite a bit	43	11,3
Extremely	33	8,7
Physical health or emotional problems interfered with your social activities (like visiting friends, relatives)		
All of the Time	68	17,9
Most of the Time	61	16,1
Some of the Time	79	20,8
A Little of the Time	37	9,8
None of the Time	134	35,4
Total	379	100,0

6.5.9 Effect of migration on body pain

Table (6.5.9) showed that more than half of immigrants suffer from pain. However, the higher percent reported any limitations due to pain, which can interfere with their normal work and daily living activities. By combination, the median of each question related to body pain, the researcher revealed that immigrants have 57,0% of a **medium level of QOL** related to body pain.

Table 6.5.9. The percent distribution of responses about body pain related item "Body Pain domain."

Variables	n	%
How much physical pain have you had during the past four weeks?		
None	111	29,3
Very mild	43	11,3
Mild	8	2,1
Moderate	96	25,3
Severe	83	21,9
Very Severe	38	10,0
How much did pain interfere with your normal work?		
Not at all	138	36,4
A little bit	57	15,0
Moderately	80	21,1
Quite a bit	69	18,2
Extremely	35	9,2
Total	379	100,0

6.5.10 Health compared to one year ago

Table (6.5.10) showed that the immigrants' evaluation of their health compared to one year earlier. A higher percent of the participants (39,8%) evaluated personal health about the same compared to the previous year. The researcher revealed that immigrants have 50,0% of a **medium level of QOL** related to health compared to one year earlier.

In the study, the responses about health compared to one year ago of the male and female participants were similar ($p=0.971$).

According to age groups, there is a statistically significant difference in health responses compared to the previous year ($p=0.004$). Responses about health compared to one year ago in the age group less than 29 were better than other age groups with a statistically significant difference.

In the study, the responses about health compared to the previous year according to employment status and educational attainment were similar ($p=0.186$, 0.088 , respectively).

According to the length of residence in Turkey(months), responses about health compared to one year ago were similar ($p=0.613$).

Table 6.5.10. The percent distribution of responses about health compared to one year ago related item

Variables	n	%
Health compared to one year ago		
Much better now	14	3,7
Somewhat better now	32	8,4
About the same	151	39,8
Somewhat worse now	95	25,1
Much worse now	87	23,0
Total	379	100,0

6.6. The Relationship of Socio-Demographic Characteristics with QOL Domains

To explore differences in perceptions of the QOL according to socio-demographic characteristics, the researcher conducted the Mann Whitney U test and Kruskal-Wallis test analysis, as illustrated below.

6.6.1 Differences in perceptions about QOL according to sex

Table (6.6.1) illustrates differences in perceptions of QOL according to sex. Of the 379 eligible immigrants; 57,5% were females and 42,5% were males (Table 6.1).

The finding showed that male immigrants had better QOL than females on all QOL domains except the social functioning domain.

Mann Whitney U test shows significant differences due to sex in physical Functioning ($p=0,033$). However, the differences between males and females' overall QOL perception have not reached statistically significant differences ($p=0.423$). That means the sex factor has no impact on QOL among immigrants (Table 6.6.1).

Table 6.6.1. Differences in perceptions about the QOL of immigrants according to sex

SF-36 Domains	Sex		p^*
	Male median	Female median	
Physical Functioning	85,0	80,0	0.033
Role Limitation-Physical	50,0	25,0	0.073
General Health	55,0	54,5	0.751
Body Pain	57,5	47,5	0.294

* Mann Whitney U test result.

Table 6.6.1. Differences in perceptions about the QOL of immigrants according to sex (continued)

SF-36 Domains	Sex		<i>p</i> *
	Male median	Female median	
Vitality	60,0	59,0	0.473
Social Functioning	62,5	62,5	0.609
Role Limitation-Emotional	33,3	16,7	0.126
Mental Health	48,0	47,0	0.473
Physical Component Summary	64,0	62,6	0.160
Mental Component Summary	45,7	45,4	0.895
Total SF-36	57,9	54,9	0.423

* Mann-Whitney U test result.

6.6.2 Differences in perceptions about QOL according to age

The median distribution of QOL regarding the age of immigrants is presented in table 6.6.2. Findings showed that immigrants whose ages were less than 29 years had better median scores on six of the eight subscales (physical functioning, general health, role limitation-physical, body pain, vitality, and social functioning), and on both summaries scale PCS and MCS than other age groups.

Findings showed that there were no statistically significant differences between the median of the following domain: vitality, social functioning, mental health, and role limitation-emotional, according to the age of immigrants ($p > 0.05$).

Kruskal-Wallis test shows significant difference in the scales: physical function ($p = 0.0001$), body pain ($p = 0.0001$), general health ($p = 0.0001$), and role limitation-physical ($p = 0.047$) due to the age. Immigrants less than 29 years have the best results in physical function (median 90,0); body pain (median 80,5); general health (median 65,0); role limitation-physical (median 55,0); contrariwise the worst results are in the group with an age ≥ 50 years: PF (median 55,0); BP (median 62); GH (median 40,0); RP (median 35,1).

However, according to age, the differences between overall QOL perception have reached statistically significant differences ($p = 0.0001$).

Immigrants less than 29 years have the best results in overall QOL perception (median 60,6); contrariwise, the worst results in overall QOL perception are in the group with age $\geq$ 50 years (median 42,0); This means that the age factor has an impact on QOL among immigrants.

Table 6.6.2. Differences in perceptions about the QOL of immigrants according to age

SF-36 Domains	Age groups				<i>p</i> *
	≤ 29 Median	30-39 Median	40-49 Median	≥ 50 Median	
Physical Functioning	90,0	80,0	75,0	55,0	0.0001
Role Limitation-Physical	55,0	50,0	25,0	24,5	0.047
General Health	65,0	55,0	50,0	40,0	0.0001
Body Pain	80,5	77,5	45,0	35,0	0.0001
Vitality	60,0	65,0	55,0	50,6	0.241
Social Functioning	62,5	62,5	62,5	68,8	0.421
Role Limitation-Emotional	33,3	33,3	35,3	35,1	0.349
Mental Health	48,0	52,0	44,0	46,9	0.241
Physical Component Summary	67,4	63,1	60,7	42,5	0.0001
Mental Component Summary	47,9	45,7	44,6	42,7	0.529
Total SF-36	60,6	57,5	52,1	42,0	0.0001

* Kruskal-Wallis test result.

6.6.3 Differences in perceptions about QOL according to educational attainment

The median distribution of QOL regarding the educational attainment of immigrants is presented in table 6.6.3. Findings showed that immigrants completed university had better median scores on five of the eight subscales (physical functioning, general health, role limitation-physical, body pain, and role limitation-emotional) and PCS than the other categories.

Findings showed no statistically significant differences between the medians of the following domains: role limitation-physical, general health, vitality, social functioning, mental health, and role limitation-emotional, regarding educational attainment among immigrants ($p>0.05$).

Kruskal-Wallis test shows significant differences in the scales: physical function and body pain regarding educational attainment ($p=0.0003$, 0.037 , respectively).

Immigrants completed university have the best results in physical function (median 86,0); body pain (median 70,0); contrariwise, the worst results are in the group have no education: PF (median 65,0); BP (median 45,0).

Table 6.6.3. Differences in perceptions about the QOL of immigrants according to educational attainment

SF-36 Domains	Educational attainment					<i>p</i> *
	No education Median	Primary school Median	Secondary school Median	High School Median	University Median	
Physical Functioning	65,0	75,0	80,0	85,0	86,0	0.003
Role Limitation-Physical	28,0	25,0	40,9	50,0	52,0	0.154
General Health	45,0	55,0	55,0	62,5	65,3	0.090
Body Pain	45,0	45,5	55,8	66,3	70,0	0.037
Vitality	55,0	65,0	62,5	60,0	60,4	0.517
Social Functioning	62,5	62,5	65,0	62,9	60,7	0.678
Role Limitation-Emotional	34,8	36,0	40,4	41,7	45,0	0.456
Mental Health	44,0	52,0	50,0	48,0	46,0	0.517
Physical Component Summary	48,3	59,0	65,6	67,5	67,8	0.006
Mental Component Summary	36,9	45,7	50,0	49,0	49,1	0.422
Total SF-36	42,8	53,3	58,0	59,7	59,4	0.014

* Kruskal-Wallis test result.

6.6.4 Differences in perceptions about QOL according to marital status

The median distribution of QOL regarding the marital status of immigrants is presented in table 6.6.4. Findings showed that immigrants never married had better median scores on all QOL domains and on both summaries scales PCS and MCS than the other categories.

Findings show no statistically significant differences between the medians of the following domains: vitality, social functioning, mental health, and role limitation-emotional regarding the marital status of immigrants ($p>0.05$).

Kruskal-Wallis test shows significant differences in the scales: physical function, general health, role limitation-physical, and body pain, regarding the marital status ($p=0.0001$, 0.0001, 0.002, 0.026 respectively).

Never married immigrants have the best results in physical function (median 95,0); general health (median 75,0); role limitation-physical (median 50,0); body pain (median 77,5), contrariwise the worst results are in the widowed immigrants group: PF (median 65,0); GH (median 50,0); RP (median 12,5); BP (median 35,0).

However, according to marital status, the differences between overall QOL perception have reached statistically significant differences ($p=0.0001$). Never married immigrants have the best results in overall QOL perception (median 65,8). That means the marital status factor has an impact on QOL among immigrants.

Table 6.6.4. Differences in perceptions about the QOL of immigrants according to marital status

SF-36 Domains	Marital status				<i>p</i> *
	Never married Median	Currently Married Median	Widowed Median	Divorced Median	
Physical Functioning	95,0	80,0	65,0	70,0	0.0001
Role Limitation-Physical	50,0	25,0	12,5	25,0	0.002
General Health	75,0	55,0	40,0	50,0	0.0001
Body Pain	77,5	57,5	35,0	77,0	0.026
Vitality	65,8	65,0	62,5	60,0	0.766
Social Functioning	75,0	62,5	62,5	64,0	0.866
Role Limitation Emotional	66,7	33,3	30,1	27,3	0.058
Mental Health	52,9	52,0	50,0	48,0	0.766
Physical Component Summary	78,3	61,7	44,4	59,3	0.0001
Mental Component Summary	53,2	45,0	39,3	42,1	0.111
Total SF-36	65,8	53,9	40,8	47,9	0.0001

* Kruskal-Wallis test result.

6.6.5 Differences in perceptions about QOL according to employment status

Table (6.6.5) presents differences in perceptions of QOL according to employment status. Findings showed that there were no statistically significant differences between medians of the following QOL domains: vitality, social functioning, and mental health regarding the employment status of immigrants ($p>0.05$).

For the following QOL domains: physical function, physical role limitation, general health, body pain, and emotional role limitation, there were statistically significant differences among the immigrants due to employment status ($p=0.0001$, 0.001 , 0.0001 , 0.006 , 0.013 , respectively).

These differences were in favor of immigrants who work, which means that these immigrants have a higher percentage of good QOL related to PF, RP, GH, BP, and RE than immigrants who do not work.

However, according to employment status, the differences between overall QOL perception have reached statistically significant differences ($p=0,0001$). Immigrants who work have the best results in overall QOL perception (median 65,1). That means that the employment status factor has an impact on QOL among immigrants.

Table 6.6.5. Differences in perceptions about the QOL of immigrants according to employment status

SF-36 Domains	Employment status		<i>p</i> *
	Currently employed Median	Not currently employed Median	
Physical Functioning	90,0	75,0	0.0001
Role Limitation-Physical	50,0	34,6	0.001
General Health	65,0	55,0	0.0001
Body Pain	77,5	45,0	0.006
Vitality	65,0	60,0	0.423
Social Functioning	62,5	62,5	0.622
Role Limitation-Emotional	33,3	33,3	0.013
Mental Health	52,0	48,0	0.423
Physical Component	78.1	60,8	0.0001
Summary			
Mental Component	50,4	44,8	0.061
Summary			
Total SF-36	65,1	53,5	0.0001

* Mann-Whitney U test result.

6.6.6 Differences in perceptions about QOL according to monthly income

Table (6.6.6) presents the median distribution of QOL by monthly income. Results showed that immigrants who have an income equal to or more than minimum wage (2325 TL²) have a better median of all QOL domains, and on both summary scales, PCS and MCS, than immigrants who have an income of less than minimum wage (2325 TL). Findings showed that there were no statistically significant differences between medians of all QOL domains except vitality, and mental health, according to the monthly income of immigrants ($p>0.05$).

For the following QOL domains: vitality, and mental health, there were statistically significant differences among the immigrants due to monthly income ($p=0,021$, $0,021$, respectively). Immigrants with an income equal to or more than minimum wage (2325 TL) have the best vitality and mental health (median 72,5, 58,0, respectively).

However, according to monthly income, the differences between overall QOL perception and MCS have reached statistically significant differences ($p=0,033$, $0,022$, respectively). Immigrants with an income equal to or more than minimum wage (2325 TL) have the best results in overall QOL perception and MCS (median 61,5, 54,7, respectively). That means that the monthly income factor has an impact on QOL among immigrants.

² Minimum wage for 2020 was announced by the Ministry of Family, Labor, and Social Services. The net was set at 2.324,70 TL (Retrieved February 06, 2020, from <https://www.ailevecalismama.gov.tr/tr-tr/asgari-ucet/asgari-ucet-2020/>).

Table 6.6.6. Differences in perceptions about the QOL of immigrants according to monthly income

SF-36 Domains	Monthly Income		<i>p</i> *
	< Minimum wage Median	≥ Minimum wage Median	
Physical Functioning	80,0	85,0	0.059
Role Limitation-Physical	25,0	25,0	0.594
General Health	55,0	60,0	0.243
Body Pain	57,5	57,5	0.359
Vitality	60,0	72,5	0.021
Social Functioning	62,5	75,0	0.241
Role Limitation-Emotional	33,3	33,3	0.330
Mental Health	48,0	58,0	0.021
Physical Component Summary	63,1	66,5	0.137
Mental Component Summary	44,3	48,8	0.022
Total SF-36	54,7	61,5	0.033

* Mann-Whitney U test result.

6.6.7 Differences in perceptions about QOL according to the age at first marriage

The median distribution of QOL regarding the age at first marriage of immigrants is presented in table 6.6.7. Findings show no statistically significant differences between the medians of all QOL domains: PF, RP, GH, BP, VT, SF, MH, and RE, according to the age at first marriage of immigrants ($p>0,05$).

Table 6.6.7. Differences in perceptions about the QOL of immigrants according to the age at first marriage

SF-36 Domains	Age at first marriage				<i>p</i> *
	≤17 Median	18-24 Median	25-34 Median	≥35 Median	
Physical Functioning	80,0	75,0	80,0	65,5	0.521
Role Limitation-Physical	25,0	25,0	50,0	12,5	0.204
General Health	55,0	55,0	55,0	35,0	0.384
Body Pain	45,0	45,0	57,5	30,6	0.223
Vitality	65,0	60,0	65,0	33,9	0.278
Social Functioning	75,0	62,5	68,8	60,0	0.266
Role Limitation-Emotional	31,3	33,3	33,3	30,0	0.065
Mental Health	52,0	48,0	52,0	40,0	0.278
Physical Component Summary	63,1	59,0	62,7	45,7	0.544
Mental Component Summary	45,0	43,6	49,5	39,4	0.104
Total SF-36	53,5	51,4	59,9	43,1	0.195

* Kruskal-Wallis test result.

6.6.8 Differences in perceptions about QOL according to the length of residence in Turkey(months)

The median distribution of QOL regarding the length of residence in Turkey(months) of immigrants is presented in table 6.6.8. Findings showed that immigrants residing in Turkey for "24 months or less" had better median scores on four of the eight subscales (physical functioning, general health, body pain, and role limitation-emotional) and PCS compared with the other categories.

Findings show no statistically significant differences between the medians of all QOL domains: PF, RP, GH, BP, VT, SF, MH, and RE, due to the length of residence in Turkey(months) ($p>0,05$). However, in the study, there are no statistically significant differences between the medians of all QOL domains due to the length of residence in Turkey(months) among male participants in the study ($p=0.569$). Besides, there are no statistically significant differences between the medians of all QOL domains due to the length of residence in Turkey(months) among female participants in the study ($p=0.852$).

Table 6.6.8. Differences in perceptions about QOL scores of immigrants according to the length of residence in Turkey(months)

SF-36 Domains	Length of residence in Turkey(months)					<i>p</i> *
	<=24 Median	25-36 Median	37-48 Median	49-60 Median	>=61 Median	
Physical Functioning	90,0	85,0	80,0	85,0	80,0	0.079
Role Limitation-Physical	25,0	25,0	50,0	25,0	25,0	0.873
General Health	65,0	55,0	57,5	60,0	55,0	0.519
Body Pain	77,5	60,0	46,3	46,3	57,5	0.885
Vitality	60,0	65,0	65,0	65,0	60,0	0.822
Social Functioning	62,5	62,5	62,8	62,5	62,5	0.715
Role Limitation-Emotional	33,3	33,3	33,3	33,3	33,3	0.822
Mental Health	48,0	52,0	52,0	52,0	48,0	0.810
Physical Component Summary	73,3	66,9	64,7	63,8	60,2	0.319
Mental Component Summary	41,1	48,9	45,2	45,7	46,8	0.593
Total SF-36	56,5	56,3	57,8	57,7	52,1	0.466

* Kruskal-Wallis test result.

6.6.9 Differences in perceptions about QOL according to known languages

The median distribution of QOL regarding immigrant's known language is presented in table 6.6.9. Findings showed that immigrants had known English or Kurdish besides Turkish had better median scores on all QOL subscales and on both summaries scale PCS and MCS compared with the other categories.

Findings also showed that there were no statistically significant differences between the medians of the following domains: role limitation-physical, general health, and role limitation-emotional, due to immigrant's known language ($p>0.05$).

Kruskal-Wallis test shows significant differences in the scales: physical function ($p=0.002$), body pain ($p=0.025$), vitality ($p=0.033$), social functioning ($p=0.024$), and mental health ($p=0.033$) due to immigrant's known language. Immigrants known English or Kurdish in addition to Turkish have the best results in physical function (median 87,0); body pain (median 77,5); vitality (median 75,0); social functioning (median 75,0); mental health (median 60,0); contrariwise the worst results are in the group known only Arabic: PF (median 75,0); BP (median 45,0); VT (median 60,0); SF (median 62,5); MH (median 48,0). However, according to the immigrant's known language, the differences between overall QOL perception have not reached statistically significant differences ($p=0.090$).

Table 6.6.9. Differences in perceptions about QOL scores of immigrants according to a known language

SF-36 Domains	Known language			<i>p</i> *
	Only Arabic	Turkish	English or Kurdish	
	Median	Median	Median	
Physical Functioning	75,0	85,0	87,0	0.002
Role Limitation-Physical	25,0	37,5	50,0	0.104
General Health	55,0	60,0	62,0	0.680
Body Pain	45,0	57,5	77,5	0.025
Vitality	60,0	65,0	75,0	0.033
Social Functioning	62,5	65,9	75,0	0.024
Role Limitation-Emotional	25,0	37,5	50,0	0.103
Mental Health	48,0	52,0	60,0	0.033
Physical Component Summary	60,2	67,6	68,3	0.019
Mental Component Summary	44,5	45,7	49,5	0.306
Total SF-36	53,9	59,5	61,4	0.090

* Kruskal-Wallis test result.

6.7. The Relationship of Reproductive Health of Ever and Currently Married Women Participant's with QOL Domains

6.7.1 Differences in perceptions about QOL of EMW participant's according to the number of living children

The median distribution of EMW participants' QOL regarding the number of living children is presented in table 6.7.1. Findings showed that EMW participants did not have any child had better median scores of all QOL domains, on both summaries scale PCS and MCS in comparison with the other categories.

Findings also showed no statistically significant difference between the medians of the following domains: general health, vitality, social functioning, and mental health, due to the number of living children for EMW participants ($p>0.05$).

Kruskal-Wallis test shows significant differences in the scales: physical function ($p=0.0001$), role limitation-physical ($p=0.005$), body pain ($p=0.010$), and role limitation-emotional ($p=0.044$), regarding the number of living children for EMW participants. EMW participant's didn't have any child have the best results in physical function (median 87,5); role limitation-physical (median 50,0); body pain (median 77,5); role limitation-emotional (median 33,5); contrariwise the worst outcomes are in the group have seven child or more: PF (median 60,0); RP (median 24,0); BP (median 45,0); RE (median 48,0). The differences between overall QOL perception regarding the number of living children for EMW participants have reached statistically significant differences ($p=0.001$). EMW participants did not have any child have the best results in overall QOL perception (median 61,5)

Table 6.7.1. Differences in perceptions about the QOL of EMW participants according to the number of living children

SF-36 Domains	Number of living children					p^*
	0 Median	1-2 Median	3-4 Median	5-6 Median	≥ 7 Median	
Physical Functioning	87,5	80,0	75,0	65,0	60,0	0.0001
Role Limitation-Physical	50,0	25,0	25,0	24,2	24,0	0.005
General Health	60,0	57,5	55,5	50,0	45,0	0.794
Body Pain	77,5	57,5	47,5	45,0	22,5	0.010
Vitality	70,0	65,0	65,0	55,0	45,0	0.326

* Kruskal-Wallis test result.

Table 6.7.1. Differences in perceptions about the QOL of EMW participants according to the number of living children (continued)

SF-36 Domains	Number of living children					<i>p</i> *
	0 Median	1-2 Median	3-4 Median	5-6 Median	>=7 Median	
Social Functioning	75,0	62,5	62,5	50,0	48,0	0.242
Role Limitation-Emotional	33,5	33,3	32,9	29,6	23,2	0.044
Mental Health	56,5	52,0	52,0	46,7	36,0	0.326
Physical Component Summary	67,6	59,3	60,5	48,8	45,0	0.0001
Mental Component Summary	48,7	48,6	45,7	40,4	38,6	0.078
Total SF-36	61,5	56,9	54,7	44,3	38,0	0.001

* Kruskal-Wallis test result.

6.7.2 Differences in perceptions about QOL of currently married women participant's according to the use of contraceptive methods

Table (6.7.2) illustrates differences in perceptions of QOL of currently married women participants age 19-49 according to the use of contraceptive methods by using the Mann-Whitney U test. Findings show among currently married women participants age 19-49, the difference was not statistically significant between the medians of all QOL domains: physical function, physical role limitation, general health, vitality, body pain, social functioning, mental health, and emotional role limitation, due to the use of contraceptive methods ($p>0.05$).

Table 6.7.2. Differences in perceptions about the QOL of currently married women participants according to the use of contraceptive methods

SF-36 Domains	Use of contraceptive methods		<i>p</i> *
	Currently use (n= 57)	Not currently use (n =88)	
	Median	Median	
Physical Functioning	80,0	82,5	0.910
Role Limitation-Physical	25,0	25,0	0.229
General Health	55,0	60,0	0.512
Body Pain	47,5	61,3	0.653
Vitality	60,0	70,0	0.495
Social Functioning	62,5	75,0	0.330

* Mann-Whitney U test result.

Table 6.7.2. Differences in perceptions about the QOL of currently married women participants according to the use of contraceptive methods (continued)

SF-36 Domains	Use of contraceptive methods		<i>p</i> *
	Currently use	Not currently use	
	(n= 57) Median	(n =88) Median	
Role Limitation-Emotional	33,3	33,3	0.609
Mental Health	48,0	56,0	0.653
Physical Component Summary	64,6	61,7	0.293
Mental Component Summary	43,9	48,4	0.136
Total SF-36	53,6	59,4	0.199

* Mann-Whitney U test result.

7. DISCUSSION AND CONCLUSION

7.1 Discussion

The main objective of the study was to identify the perception of the Arabic speaking immigrants living in Sultanbeyli/ Istanbul/ Turkey, who are 18 age and older, about their health-related quality of life.

To the best of our knowledge, this is the first attempt to evaluate HRQOL among Arabic-speaking immigrants living in Sultanbeyli-Istanbul that are one of this study's main strengths. A response rate of 96,2% may reveal precise and beneficial outcomes; this extremely good response rate gives the study another strength point.

In our research, 379 immigrants were interviewed. Daher et al. (2011) study assessed the HRQOL among 300 Iraqi migrants in Malaysia, while Nante et al. (2016) aimed to assess the HRQOL of 114 refugees and asylum seekers welcomed in Tuscany, Italy. Consequently, our large study sample minimizes the error, which can be result from the volunteering selection of the study sample.

In our study, more than half of the immigrants $n=218(57.5\%)$ are female. This finding was consistent with a cross-sectional survey performed among Syrian refugees in Sultanbeyli- Istanbul, which aimed to verify mental health needs and admission to mental health and psychosocial support, where half of the sample were females (51.6%) (Fuhr et al., 2019). According to the January 2020 data from the Online Database of Association for Refugees in Sultanbeyli, the number of male immigrants is 16 336 people, while the number of females is 15 174 people³. Our results consistent with the Health Status Survey of Syrian Refugees in Turkey, which aimed to develop background information for noncommunicable diseases and their risk factors among Syrians 18–69 years old in Turkey; of those 5 760 who responded, 42.3% are male, and 57.7% are female (Balcılar, 2016).

³ <https://multeciler.org.tr/sukom-2020-ocak-ayi-istatistikleri/>, Accession date: 1 May 2020

In our study, the number of females was more than males. This finding could be attributed to surveying at the day time in the Association for Refugees in Sultanbeyli since men were at their workplaces.

Findings revealed that the majority of the participants within the young age group (18-29 years). This finding could be explained by that this age group is most likely to migrate. This finding consistent with another study conducted in Malaysia, where the young respondents were the majority (Daher et al., 2011).

Results related to the distribution of males and females according to marital status were consistent with the results from the Health Status Survey of Syrian Refugees in Turkey, which established that (8,4%) of women were never married, and (20,5%) of men were never married (Balcılar, 2016). Also, corresponding to the other study conducted in Sultanbeyli highlighted that majority of the participants were married (83,2%), and 9.5% of the sample were never married (Fuhr et al., 2019). The finding may be related to Arabic culture; married women migrate more than single women.

In our study, men were more educated than women. This finding corresponding to the results from the Turkey Demographic and Health Survey (TDHS) Syrian Migrant Sample (2018), which established that one in eleven Syrian women had 'high school and higher education,' while one in nine of the Syrian men had 'high school and higher education' in Turkey (Hacettepe University Institute of Population Studies, 2019a). In our study, 36,0% of men and 24.3% of women have 'high school education and above.' This difference may be due to the majority of participated women in our study being married; this hinders the completion of their education to higher levels in Arab societies due to increased responsibilities incurred.

Concerning smoking prevalence, male participants had a smoking prevalence more than females. This finding was consistent with the Aleppo household survey, which found that men (57%) smoking more than women (17%) in Syria (Ward et al., 2006). These could reflect the culture of Arab societies that considers women's smoking contrary to Arab customs and traditions.

Our result showed that about one in two EMW (40,9%) had at least one miscarriage, while according to the findings of the 2018 TDHS Syrian Migrant Sample, about one in four EMW (27%) had at least one miscarriage (Hacettepe University Institute of Population Studies, 2019a). This result could be explained by the war conditions in which EMW has lived, leading to miscarriage.

Results revealed that one in thirty-three EMW (3%) had at least one induced abortion. This result was consistent with the 2018 TDHS Syrian Migrant Sample findings, which showed that one in twenty EMW (5%) had at least one induced abortion (Hacettepe University Institute of Population Studies, 2019a). This low percentage of induced abortion could be attributed to different reasons like Articles 525–532 of the Penal Code in Syria, which prohibits induced abortion, a religious culture that forbids induced abortion, they may do not know the law in Turkey, they do not have enough money to spend in private induced abortion in Turkey, and may be they can not reach the services of induced abortion.

The findings from this study also highlighted that the number of living children is an essential factor related to the use of contraceptive methods. Contraceptive use rises with rising the number of living children. This result was also established in the studies by (Hussain, 2011; Habyarimana and Ramroop, 2018). This finding is not unexpected because a woman with many children tends to limit childbirths; when the number of children increases, the women's financial pressure and responsibilities increase.

The findings revealed that approximately half of the currently married women participating in the study want to limit childbearing (47,6%). This result is in line with the 2018 TDHS Syrian Migrant Sample results, which showed that 43% of currently married Syrian women want to limit childbearing (Hacettepe University Institute of Population Studies, 2019a). At the Turkish community level, Most of the currently married women in Turkey want to control their future fertility (63%) (Hacettepe University Institute of Population Studies, 2019b).

This finding is attributed to the Arab culture that encourages more children's birth and creates large families and their living conditions of war that have killed many children.

In our study, we establish that the vast majority of the participants had moderate QOL that was evaluated with the SF-36.

These findings were appropriate, strengthened by a study performed by Daher et al. (2011), which found that HRQOL seemed moderately for Iraqi immigrants living in Malaysia. Contrary to this result, another study done by Abdo et al. (2019) found that Syrian refugees residing outside camps in Jordan still appear to be suffering from inadequate mental health, social relations, and environmental domains measured by (WHOQOLBREF) questionnaire. These could be explained by different instruments using in data collection for those studies, and the length of residence may be different.

Our study highlighted that QOL of males was better than QOL of females in all domains excepting the social functioning domain, with only significant differences due to sex in physical functioning. This consistent with another study where sex has not represented the factor influencing the scores of the SF-36 (Nante et al., 2016). Contradictory to our findings, researchers conducted a study in New York among Chinese immigrants that showed a significant difference according to sex was established for all HRQOL domains (Wyatt et al., 2014). Similar results were reported from a cross-sectional study aimed to get population standards of SF-36 health survey and the relationship of SF-36 domains with socio-demographic and economic variables in a city resident in Turkey where women reported lower scales of HRQOL domains compared to men (Demiral et al., 2006). Also similar results from the aging Iranian population, where men had MCS and PCS better than women (Tajvar et al., 2008), and amongst a sample of Turkish immigrants, female immigrant's quality of life was lower than that of male immigrants (Bayram et al., 2007).

While contrary results were reported from the study conducted in Sweden by using the WHOQOL-100 questionnaire, researchers informed that male Iranian refugees had the overall QOL and general health scores lower than Iranian females (Ghazinour et al., 2004).

Various studies indicate that being male is an index of improving physical and psychological health, where high social support among women is an index of improving physical and psychological health (Salinero-Fort et al., 2015).

In comparison to males in our study, females informed lower educational levels, higher marital status, and lower employment rates.

The difference may be directly related to women's status in general rather than being immigrants; the main factor may be the "gender" issue, which lines with a study among Lebanese peoples, where women scored lower than men in the stated QOL scales (Sabbah et al., 2003).

The results we have achieved can be clarified by the role of women in different societies. Females in Arab communities play a primary responsibility in raising children and caring for the home. Females tend to be less employed than men, and inequalities in education and income; these factors are often found to be disadvantageous to a woman's health. However, men are ordinarily the family and providers' chief for their requirements and work all day outside the home.

The study data demonstrate that age represents an affecting variable: moreover, persons younger than 29 years have the best results in four measures (PF, BP, GH, RP). These are consistent with another study where young respondents were found to be physically healthier than other age groups (Nesterko et al., 2013), and consistent with a study conducted among asylum seeker and refugees welcomed to Italy revealed that older refugees have poorer HRQOL (Nante et al., 2016). Also, Tajvar et al. reveal that elderly people living in Tehran, Iran undergo somewhat poor HRQOL (Tajvar et al., 2008). As Daher et al. indicate, this may be clarified by the fact that younger aged respondents suffer from lower illness due to the younger age group's more active lifestyle than older age groups and better accommodate new environmental conditions (Daher et al., 2011).

Data show a significant difference in PF and BP concerning educational level may be attributed to that immigrant who completed university will have better opportunities of work besides knowing the Turkish language and which may be due to a high degree of perception of health.

Contradictory to our findings, studies reported that educational attainment had not been characterized as factors affecting the scores of the SF-36 (Nante et al., 2016; Daher et al., 2011).

Our findings highlighted the significant difference in PF, RP, GH, and BP regarding marital status. Never married immigrants have the best outcomes in PF, RP, GH, and BP. This finding may be explained by that half of never-married samples are of age less than 29 years old. Contradictory to our findings, the group of married Turkish immigrants reported a significant difference in QOL from widowed and unmarried immigrants (Bayram et al., 2007).

In our study, immigrants who work were better in all QOL domains than immigrants who do not work, with a significant difference in PF, RP, GH, RE, and BP regarding employment status. This result, consistent with the study, has established a clear relationship between unemployment and poorer somatic and psychological health (Langens and Mose, 2006), and other cross-sectional design study conducted among 171 newly displaced Iraqi refugees in Jordan revealed that unemployment significantly expected low-level quality of life (Al-smadi and Tawalbeh, 2017), and study performed in Denmark in which social relationships and unemployment were important factors for predicting psychological health symptoms and low HRQOL (Carlsson et al., 2006).

In our opinion, employment affects the QOL of immigrants. These are due to several reasons; immigrants who work are financially more secure, have better connections, and fulfill their free time. These factors positively affect QOL. Alternatively, QOL among immigrants who do not work was lower than that in those who work. These may be due to financial dependence, lack of resources, income, lower social relations, and insufficient basic needs that create a hard socioeconomic state, negatively affecting QOL.

Our study found that immigrants with monthly income equal to or more than minimum wage were better in all QOL domains than immigrants with monthly income less than minimum wage.

These results were consistent with a study conducted among Latin American-born and Spanish-born individuals who stayed in Spain. Women and men with higher incomes reported significantly better psychological health (Salinero-Fort et al., 2015).

These findings can be explained by the same reason as employment status.

In our study, there was no relationship between the length of residence in Turkey and HRQOL; this is in line with another study where the length of stay is not associated with a poorer HRQOL (Nante et al., 2016). In our research, the time was always long, and there were few newcomers. This study may do not detect a difference because the population was very similar to each other. However, this result was contrary to the study performed among elderly Iranian in Sweden, which revealed the relationship between HRQOL and the length of time since the migration to Sweden varied with gender. Whereas among older Iranian men, additional years in Sweden were not associated with HRQOL. In contrast, with additional years in Sweden, older Iranian women revealed an increase in two of eight dimensions of the SF-36.

The findings of our study revealed that language influences PF, BP, VT, and SF. These are consistent with the Nante et al. performed study. Contradictory to our findings, Salinero-Fort, et al. established no statistically significant difference between QOL of Latin American-born immigrants settled in Spain and Spanish-born residents due to language. These might be explained by the fact that migrants in their study use the same language (Spanish) as the Spanish-born respondents, which could be a defensive factor through the integration procedure. In contrast, in our study, immigrants only know Arabic faces difficulties in integration into Turkish society and affecting the job opportunities available to them.

Inconsistent results are due to various causes. Firstly reason, immigrants are a very distinct cluster with various danger factors and defensive factors. The second reason is that several immigrant groups are in various nations, so various nations' results are comparable. Moreover, the last reason, QOL, is evaluated in different samples (population-based, focused on immigrants even with the state of origin, age group, health condition, and the reason for migration) and with relatively various methods (SWL, HRQOL, QOL, etc.) and valuation tools.

Although the data has provided the first database of its kind of Arabic-speaking immigrants, especially Syrian immigrants living in Turkey, few limitations are evident in the study and its interpretation.

The first limitation of our study is related to the type of study. The descriptive study does not reflect the association ship between HRQOL and independent factors and could not generalize the result on all Arabic speaking immigrants. During the planning phase, the researcher had already planned a cross-sectional study. Unfortunately, the necessary list of immigrants who live in Sultanbeyli did not be allowed to use it by the authority. Secondly, since the association for refugees, whose data was collected for the research, is open only on weekdays and working hours, only those who can come to this association on this day and during these hours could be interviewed. Another limitation is that only those volunteers who could spare time for research could be interviewed. Lastly, the lack of studies of HRQOL among the Syrian population in Syrian limited the comparison between Syrian immigrants in Turkey with Syrian living in Syria.

7.2 Conclusion

This study is a descriptive study conducted to assess health-related quality of life among Arabic speaking immigrants in Sultanbeyli–Istanbul, who are 18 age and older, and registered in the Association for Refugees in Sultanbeyli from 13 December 2019 and 17 January 2020. The participants' sociodemographic characteristics were studied. The association between socio-demographic features of the immigrants and reproductive health of ever and currently married women participants with the domains of QOL were also studied. Data were gathered using socio-demographic information form and the thirty-six Items Short Form Health Survey Questionnaire (SF-36).

The results of our study are as follows:

- More than half of the immigrants participate in the study are female.
- The majority of the participants are within the young age group (18-29 years).
- According to marital status, the percentage of never-married women lower than never-married men.
- The percentage of females married at the age of 17 and under was higher than the percentage of males married at the age of 17 and under.
- Males were more educated than females. The percentage of male participants with "high school and above" was higher than that of female participants with "high school and above.
- More than half of the male participants in our study have known Turkish, and about twenty-two percent of the females participating in the study have known Turkish.
- According to the length of residence in Turkey (months), the distribution of males and females was similar.
- Vey a lower percentage of the immigrants participating in the study covered by the Social Security Institution. At the same time, the male has more coverage by SGK than female.
- Most Syrian immigrants are covered by insurance for temporary protection, while a lower percentage of participants are covered by general health insurance in Turkey.

- Most immigrants participating in the study were not currently employed, and men were employed more than women.
- According to monthly income, most immigrant participants in the study have a monthly income below minimum wage (82,6 %).
- One in two EMW had at least one miscarriage, while one in thirty-three EMW had at least one induced abortion.
- Use of the Contraceptive method rise as the number of living children among currently married women participating in our study rising.
- Approximately half of the currently married women participating in the study want to limit childbearing.
- Arabic-speaking immigrants, especially Syrian immigrants residing in Turkey, have HRQOL that can be considered relatively moderate.
- The highest score domain was physical functioning, while the lowest result domain was the role limitation due to physical problems.
- Sex is not significantly associated with HRQOL in immigrants living in Sultanbeyli-Istanbul.
- A statistically significant difference was established in PF, GH, BP, and RP regarding the age. Immigrants in the '29 and under' age group have the highest scores while immigrants in the '50 and more' age group have the lowest scores.
- The difference was statistically significant in the scales: BP and PF regarding educational level. Immigrants who completed university have the best results in PF and BP; contrariwise, the worst scores are in the group have no education.
- A statistically significant difference was established in PF, RP, GH, and BP regarding marital status. In comparison with other categories, never married immigrants have the highest scores.
- The difference was statistically significant in the followed QOL scales: PF, GH, RP, BP, and RE, among the immigrants due to employment status, favor immigrants who are currently employed.

- The difference was statistically significant in the scales: MH, and VT, due to monthly income, favor immigrants who have an income equal to or more than minimum wage (2325 TL).
- A statistically significant difference was established in the scales: PF, SF, VT, BP, and MH due to immigrants' known language. Immigrants known English or Kurdish, in addition to Turkish, have the best scores.
- The difference was statistically significant in the scales: PF, BP, RP, and RE, regarding the number of living children. EMW participants who did not have any child have the highest results in PF, BP, RP, and RE; contrariwise, the worst results are in EMW participants who have seven children or more.
- There was no statistically significant relationship between domains of QOL due to the length of residence in Turkey (months), the age at first marriage, and contraceptive use amongst currently married women participants.

8. RECOMMENDATION

This study has provided useful information about HRQOL of Arabic-speaking immigrants, especially Syrian immigrants living in Sultanbeyli/ Istanbul/ Turkey. Based on the conclusion and findings gained throughout the study, the following recommendations would be reviewed:

1. Holding free Turkish language courses encourage immigrants to participate in them, particularly for women, because language is a fundamental part of the racial integration process.
2. Holding educational lectures for immigrants women about reproductive health, the importance of education completion, and the dangers of early marriage in suitable places.
3. Holding vocational courses for immigrants to create job opportunities for them, especially for women.
4. Psychological and social support should be programmed for immigrants to inhibit mental health problems, especially for women, older ages immigrants, and not working immigrants.
5. Social workers and psychologists at the Refugee Associations should supply psychological support to immigrants to enhance the quality of life.
6. Contraceptive methods counseling and family planning health services should be served in the Refugee Associations.
7. In the center of Associations for refugees, a nursery for the children should be open all day in the week's time to be able to increase the quality of life of women who have more children at home.

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10. ANNEXES

Annex. 1a

Information Form

This study is implemented to assess the health-related quality of life among Arabic speaking immigrants living in Sultanbeyli -Istanbul in 2019 by Asmaa Z F Mohammed.

1. Gender: 1. Male () 2. Female ()
2. When did you come to Turkey? (month-year) /
3. Since when do you live in Sultanbeyli? (month-year)/
4. Your Birth Date (Year):
5. Your current Marital Status:
 1. Never married 3. Divorced
 2. Currently Married 4. Widowed
6. If you are married, how old were you when you first married? Years old
7. Has you ever attended school?
 1. Yes 2. No
8. What is the highest level of school graduated from?
 1. Primary school 4. University
 2. Secondary school 5. Master's degree
 3. High School 6. PhD
9. Your Original Nationality:
10. What is your mother's language?
 1. Arabic. 2. Other (please specify)
11. What languages besides your mother tongue can you speak?
 1. No other language
 2. Turkish
 3. English
 4. Other (please specify)
12. Do you still work in a revenue-generating job?
 1. Employed 2. Unemployed
13. If you are working, please indicate your sector.
 1. Agriculture
 2. Industry
 3. Employer / Entrepreneur
 4. Public official

5. Other (please specify)
14. What is your position/status in your job?
- | | |
|---------------------------------|---------------------------------|
| 1. Employer | 5. Self-employed (regular) |
| 2. Paid employed (Normal) | 6. Self-employed (irregular) |
| 3. government official | 7. Unpaid family worker |
| 4. Seasonal / Temporary workers | 8. Other (please specify) |
15. Do you have social security?
- | | |
|--------|-------|
| 1. Yes | 2. No |
|--------|-------|
- 15a. Does your social security cover any health insurance?
- | | |
|--------|-------|
| 1. Yes | 2. No |
|--------|-------|
16. What is your average monthly household income? TL / Month
17. Can you tell me the total number of household member (including you) ?.....
18. **Before** coming to Turkey, you have any health problems diagnosed by a doctor / Did you have a disease?
- | | |
|--------|-------|
| 1. Yes | 2. No |
|--------|-------|
- 18a. If yes, please tell us about your illnesses.
1. (Specify)
 2. (Specify)
 3. (Specify)
 4. (Specify)
 5. (Specify)
19. **After** coming to Turkey, Have you ever had any health problem/disease diagnosed by a doctor?
- | | |
|--------|-------|
| 1. Yes | 2. No |
|--------|-------|
- 19a. If yes, please tell us about your illnesses.
1. (Specify)
 2. (Specify)
 3. (Specify)
 4. (Specify)
 5. (Specify)
20. Do you currently have any health problem/disease?
1. Yes (diagnosed by a doctor)
 2. Yes (not diagnosed by a doctor)
 3. No
- 20a. If yes, please tell us about your illnesses.
1. (Specify)
 2. (Specify)
 3. (Specify)
 4. (Specify)

5. (Specify)
21. If necessary (or recommended by the doctor), can you access the required treatment?
1. Yes, all treatments
 2. Yes, but some treatments
 3. No
22. Have you ever smoked? (Cigarettes or all tobacco products)
1. Yes
 2. No
- 22a. How old did you start smoking? years old
23. What is the source of the drinking water you use or the water you use daily?
1. Fountain water
 3. Tanker water
 4. Bottled water / Carboy water
 5. Other (Please specify)
24. What is the heating system of your home?
1. Central heating
 2. Natural Gas / Combi
 3. Stove
 4. Electric heater
 5. Other (Please specify)
25. How many rooms do you have in your home?
26. Is the kitchen separate from the rooms?
1. Yes
 2. No
27. Is your bathroom separate from other rooms?
1. Yes
 2. No

Annex. 1b

استبيان

تتم إجراء هذه الدراسة لتقييم نوعية الحياة المتعلقة بالصحة بين المهاجرين الناطقين باللغة العربية الذين يعيشون في منطقة سلطان بيلي – إسطنبول في عام ٢٠١٩ من قبل الباحثة أسماء محمد.

1. الجنس: 1. ذكر () 2. أنثى ()
2. تاريخ ميلادك (السنة):
3. متى وصلت إلى تركيا؟ (شهر / سنة) /
4. كم مضى على وجودك في سلطان بيلي؟ (شهر / سنة)
5. حالتك الاجتماعية الحالية :
 1. غير متزوج / 3. أرمل / 4. مطلق / 6. إذا كنت متزوجاً، كم كان عمرك عند زواجك الأول؟ سنة
 2. متزوج / 4. مطلق / 7. هل التحقت بالمدرسة ؟
 1. نعم 2. لا
 8. ما هو أعلى مستوى دراسي حصلت عليه؟
 1. الابتدائية 4. الجامعة
 2. المتوسطة 5. الماجستير
 3. الثانوية 6. الدكتوراه
9. الجنسية الأصلية:
10. ماهي لغتك الأم؟
 1. العربية 2. أخرى (يرجى التحديد)
11. ما هي اللغات الأخرى التي تتحدث بها إلى جانب لغتك الأم؟
 1. لا توجد لغة أخرى 4. أخرى (يرجى التحديد)
 2. التركية
 3. الإنجليزية
12. ما هو وضعك الوظيفي الحالي؟
 1. تعمل 2. لا تعمل
13. إذا كنت تعمل، حدد نوع العمل الذي تمارسه؟
 1. زراعة 4. موظف خدمات عامة
 2. صناعة 5. أخرى (يرجى التحديد)
 3. إدارة أعمال
14. ما هو منصبك الوظيفي في العمل؟
 1. موظف 5. موظف لحسابك الخاص (منتظم)
 2. أجير، عامل (منتظم) 6. موظف لحسابك الخاص (غير منتظم)
 3. موظف حكومي براتب 7. عامل أسرة غير مدفوع الأجر
 4. أجير يومي (موسمي، مؤقت) 8. أخرى (يرجى التحديد)

15. هل لديك ضمان اجتماعي ؟

1. نعم 2. لا

15 أ. هل الضمان الاجتماعي الخاص بك مغطى من قبل تأمين صحي ؟

1. نعم 2. لا

16. هل يمكنك إخبارنا عن متوسط إجمالي دخل الأسرة الشهري ؟ ليرة تركية/ شهر

17. هل يمكنك إخبارنا عن عدد أفراد أسرتك (بمن فيهم أنت) ؟

18. هل سبق تشخيصك بأي مشكلة صحية/ مرض من قبل طبيب قبل مجيئك إلى تركيا؟

1. نعم 2. لا

18 أ. إذا كان الجواب نعم، هل يمكن إخبارنا ما هو المرض؟

1. (يرجى التحديد) 4. (يرجى التحديد)

2. (يرجى التحديد) 5. (يرجى التحديد)

3. (يرجى التحديد)

19. هل سبق تشخيصك بأي مشكلة صحية/ مرض من قبل طبيب بعد مجيئك إلى تركيا؟

1. نعم 2. لا

19 أ. إذا كان الجواب نعم، هل يمكن إخبارنا ما هو المرض؟

1. (يرجى التحديد) 4. (يرجى التحديد)

2. (يرجى التحديد) 5. (يرجى التحديد)

3. (يرجى التحديد)

20. هل لديك أي مشكلة صحية أو مرض حاليًا؟

1. نعم (تم تشخيصه من قبل طبيب)

2. نعم (لم يتم تشخيصه من قبل طبيب)

3. لا

20 أ. إذا كان الجواب نعم، هل يمكن إخبارنا ما هو المرض؟

1. (يرجى التحديد) 4. (يرجى التحديد)

2. (يرجى التحديد) 5. (يرجى التحديد)

3. (يرجى التحديد)

21. هل تستخدم أي نوع علاج في حال الضرورة (أو بتوصية من الطبيب)؟

1. نعم استخدمه كله

2. نعم استخدم جزءًا منه

3. لا استخدم شيئًا منه

22. هل سبق لك التدخين (السجائر أو أي نوع آخر)؟

1. نعم 2. لا

22 أ. كم كان عمرك حين بدأت التدخين؟ سنة

23. ما هو مصدر الشرب و/ أو الاستخدام اليومي للمياه؟

1. مياه الأنابيب في المنزل 4. مياه معبأة في الزجاجات

2. مياه الآبار
3. صهاريج المياه
24. كيف يتم تدفئة منزلك في الشتاء؟
 1. تدفئة مركزية
 2. تدفئة منزلية/ سخان الكومبي
 3. موقد
25. كم عدد الغرف الموجودة في المنزل؟ (غرفة)
26. هل يوجد مطبخ منفصل؟
 1. نعم
 2. لا
27. هل يوجد حمام منفصل؟
 1. نعم
 2. لا
5. غيرها (يرجى التحديد)
4. سخان كهربائي
5. غيرها (يرجى التحديد)

Annex. 2a: SF-36

Please answer all questions in this questionnaire. If no question is clear, please choose the closest answer to your question. Choose one correct answer by ticking a circle on the correct answer:

1.	In general, how do you see your health?				
	1. Excellent	2. Very good	3. Good	4. Fair	5. Poor

2.	Compared to one year ago, how would you rate your health in general now?	
	1. Much better now than one year ago	2. Somewhat better now than one year ago
	3. About the same	4. Somewhat worse now than one year ago
	5. Much worse now than one year ago	

The following items are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much? (Choose one correct answer by ticking a circle on the correct number)		Yes, limited a lot	Yes, limited a little	No, not limited at all
3.	Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports	1	2	3
4.	Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf	1	2	3
5.	Lifting or carrying groceries	1	2	3
6.	Climbing several flights of stairs	1	2	3
7.	Climbing one flight of stairs	1	2	3
8.	Bending, kneeling or stooping	1	2	3
9.	Walking more than a mile	1	2	3
10.	Walking several blocks	1	2	3
11.	Walking one block	1	2	3
12.	Bathing or dressing yourself	1	2	3

<u>During the past four weeks</u>, have you had any of the following problems with your work or other regular daily activities due to your physical health? (Choose one correct answer by ticking a circle on the correct number)		
	Yes	No
13. Cut down the amount of time you spent on work or other activities	1	2
14. Accomplished less than you would like	1	2
15. You are limited in the kind of work or other activities.	1	2
16. Had difficulty performing the work or other activities (for example, it took extra effort)	1	2

<u>During the past four weeks</u>, have you had any of the following problems with your work or other regular daily activities due to any emotional problems (such as feeling depressed or anxious)? (Choose one correct answer by ticking a circle on the correct number)				
	Yes	No		
17. Cut down the amount of time you spent on work or other activities	1	2		
18. Accomplished less than you would like	1	2		
19. Did not do work or other activities as carefully as usual	1	2		
20. During the past four weeks, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups? (Choose one correct answer by ticking a circle on the correct number)				
1. Not at all	2. Slightly	3. Moderately	4. Quite a bit	5. Extremely
21. How much bodily pain have you had <u>during the past four weeks</u>? (Choose one correct answer by ticking a circle on the correct number)				
1. None. 2. Very mild. 3. Mild. 4. Moderate. 5. Severe. 6. Very severe.				
22. <u>During the past four weeks</u>, how much did pain interfere with your normal work? (including both work outside the home and housework) (Choose one correct answer by ticking a circle on the correct number)				
1. Not at all. 2. A little bit. 3. Moderately. 4. Quite a bit. 5. Extremely				

These questions are about how you feel and how things have been with you **during the past four weeks**. Please give the one answer that comes closest to the way you have been feeling for each question. How much of the time **during the past four weeks** (Choose one correct answer by ticking a circle on the correct number)

	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
23. Did you feel full of pep?	1	2	3	4	5	6
24. Have you been a very nervous person?	1	2	3	4	5	6
25. Have you felt so down in the dumps that nothing could cheer you up?	1	2	3	4	5	6
26. Have you felt calm and peaceful?	1	2	3	4	5	6
27. Did you have a lot of energy?	1	2	3	4	5	6
28. Have you felt downhearted and blue?	1	2	3	4	5	6
29. Did you feel worn out?	1	2	3	4	5	6
30. Have you been a happy person?	1	2	3	4	5	6
31. Did you feel tired?	1	2	3	4	5	6

32. **During the past four weeks**, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?
(Choose one correct answer by ticking a circle on the correct number)

1. All of the time
2. Most of the time
3. Some of the time
4. A little of the time
5. None of the time

How TRUE or FALSE is each of the following statements for you.
(Choose one correct answer by ticking a circle on the correct number)

	Definitely true	Mostly true	Don't know	Mostly false	Definitely false
33. I seem to get sick a little easier than other people.	1	2	3	4	5
34. I am as healthy as anybody I know	1	2	3	4	5
35. I expect my health to get worse.	1	2	3	4	5
36. My health is excellent	1	2	3	4	5

Annex. 2b

أجب رجاء عن كل الأسئلة الموجودة في الأسفل . في حال لم يكن السؤال واضحاً، يرجى اختيار الإجابة الأقرب للسؤال.

1.	كيف ترى صحتك بشكل عام؟				
	1. ممتازة	2. جيدة جداً	3. جيدة	4. لا بأس	5. ضعيفة

2.	مقارنة قبل سنة ، كيف تقيم صحتك الآن بشكل عام؟
1. أفضل بكثير الآن مقارنة قبل سنة واحدة	2. أفضل بشكل ما مقارنة قبل سنة واحدة
3. نفس الشيء تقريباً	4. أسوأ بشكل ما مقارنة قبل سنة واحدة
5. أسوأ بكثير مقارنة قبل سنة واحدة	

لا تقبطني مطلقاً	نعم، تقيدني قليلاً	نعم، تقيدني كثيراً	النقاط التالية تدور حول الأنشطة التي قد تقوم بها خلال يوم عادي. هل تفقدك صحتك الآن في مثل هذه الأنشطة؟ إذا كان كذلك، إلى أي حد؟ (اختر إجابة صحيحة واحدة بوضع إشارة دائرة حول الرقم الصحيح)
3	2	1	3. أنشطة قوية، مثل الركض، ورفع الأشياء الثقيلة، والمشاركة في الألعاب الرياضية الشاقة
3	2	1	4. أنشطة متوسطة، مثل تحريك طاولة أو دفع مكنسة كهربائية أو البولينج أو لعب الجولف
3	2	1	5. رفع أو حمل السلع
3	2	1	6. تسلق مجموعة متواصلة من الدرجات/ عدة طوابق
3	2	1	7. تسلق مجموعة واحدة من الدرجات/ طابق واحد
3	2	1	8. الانحناء، الركوع، أو الميلان
3	2	1	9. المشي أكثر من ميل واحد
3	2	1	10. المشي مسافة عدة مباني
3	2	1	11. المشي مسافة مبنى واحد
3	2	1	12. الاستحمام أو ارتداء الملابس

خلال الأسابيع الأربعة الماضية، هل عانيت أي من المشاكل التالية في عملك أو خلال الأنشطة اليومية المنتظمة الأخرى نتيجة لأي مشاكل عاطفية (مثل الشعور بالاكتئاب أو القلق)؟ (اختر إجابة صحيحة واحدة بوضع إشارة دائرة حول الرقم الصحيح)		
لا	نعم	
2	1	17. تقليل الوقت الذي تقضيه في العمل أو الأنشطة الأخرى
2	1	18. إنجاز أقل مما تريد
2	1	19. لم تقم بأداء العمل أو أي من الأنشطة الأخرى بعناية كالمعتاد
خلال الأسابيع الأربعة الماضية، هل عانيت أي من المشاكل التالية في عملك أو خلال الأنشطة اليومية المنتظمة الأخرى نتيجة لصحتك الجسدية؟ (اختر إجابة صحيحة واحدة بوضع إشارة دائرة حول الرقم الصحيح)		
لا	نعم	
2	1	13. تقليل الوقت الذي تقضيه في العمل أو الأنشطة الأخرى
2	1	14. إنجاز أقل مما تريد
2	1	15. كنت محدوداً في نوع العمل أو الأنشطة الأخرى
2	1	16. واجهت صعوبة في أداء العمل أو الأنشطة الأخرى (على سبيل المثال، استغرق الأمر جهداً إضافياً)

20. خلال الأسابيع الأربعة الماضية، إلى أي مدى تداخلت صحتك الجسدية أو العاطفية مع أنشطتك الاجتماعية العادية مع العائلة أو الأصدقاء أو الجيران أو المجموعات؟ (اختر إجابة صحيحة واحدة بوضع إشارة دائرة حول الرقم الصحيح)						
1. مطلقاً	2. قليلاً	3. إلى حد ما	4. كثيرًا	5. كثيرًا جدًا		
21. إلى أي حد عانيت ألمًا جسديًا خلال الأسابيع الأربعة الماضية؟ (اختر إجابة صحيحة واحدة بوضع إشارة دائرة حول الرقم الصحيح)						
1. لا يوجد	2. خفيف جدًا	3. غير قوي	4. متوسط	5. شديد	6. شديدًا جدًا	
22. خلال الأسابيع الأربعة الماضية، ما مدى تداخل الألم مع عملك العادي (بما في ذلك العمل خارج المنزل والعمل المنزلي)؟ (اختر إجابة صحيحة واحدة بوضع إشارة دائرة حول الرقم الصحيح)						
1. مطلقاً	2. قليلاً	3. إلى حد ما	4. كثيرًا	5. كثيرًا جدًا		
تدور هذه الأسئلة حول ما تشعر به وكيف كانت الأمور معك خلال الأسابيع الأربعة الماضية. يرجى إعطاء إجابة واحدة أقرب ما تكون إلى شعورك لكل سؤال. كم من الوقت خلال الأسابيع الأربعة الماضية... (اختر إجابة صحيحة واحدة بوضع إشارة دائرة حول الرقم الصحيح)						
	كل الوقت	معظم الوقت	نسبة جيدة من الوقت	بعض الوقت	قليلاً من الوقت	أبداً
23. شعرت أنك كنت مليئاً بالنشاط؟	1	2	3	4	5	6
24. كنت شخصاً عصبيًا؟	1	2	3	4	5	6
25. شعرت باكتئاب إلى حد أن لا شيء يشجعك؟	1	2	3	4	5	6
26. شعرت بالهدوء والسلام؟	1	2	3	4	5	6
27. كنت مليئاً بالطاقة؟	1	2	3	4	5	6
28. شعرت بالإحباط والكآبة؟	1	2	3	4	5	6
29. شعرت بالإرهاق؟	1	2	3	4	5	6
30. كنت شخصاً سعيداً؟	1	2	3	4	5	6
31. شعرت بالتعب؟	1	2	3	4	5	6
32. خلال الأسابيع الأربعة الماضية، ما مقدار الوقت الذي تداخلت فيه صحتك الجسدية أو العاطفية مع أنشطتك الاجتماعية (مثل زيارة الأصدقاء والأقارب، وما إلى ذلك)؟ (اختر إجابة صحيحة واحدة بوضع إشارة دائرة حول الرقم الصحيح)						
1. كل الوقت	2. معظم الوقت	3. بعض الوقت	4. قليلاً من الوقت	5. أبداً		

ما مدى صحة أو خطأ كلا من العبارات التالية بالنسبة لك. (اختر إجابة صحيحة واحدة بوضع إشارة دائرة حول الرقم الصحيح)					
خاطئة جداً	خاطئة إلى حد ما	لا أعلم	صحيحة إلى حد ما	صحيحة جداً	
5	4	3	2	1	33. يبدو أنني أصاب بالمرض بسهولة أكثر من الآخرين
5	4	3	2	1	34. أنا بصحة جيدة مثل أي شخص أعرفه
5	4	3	2	1	35. أتوقع أن تزداد صحتي سوءاً
5	4	3	2	1	36. صحتي ممتازة

Annex. 3b

For women only:

28. Have you ever given birth?

1. Yes 2. No

29. Have you ever given birth to a boy or girl who was born alive but died?

1. Yes 2. No

29a. How many boys have died?

29b. How many girls have died?

29c. How many have you had live births during your life in TOTAL? ...
births

30. How old were you during your FIRST pregnancy? year

30a. How old were you during your LAST pregnancy? year

31. Are you currently pregnant?

1. Yes 2. No

31a. When you got pregnant, did you want to get pregnant at that time,
to get pregnant later, or did you never want to have children?

1. I wanted it at that time 2. I wanted it later 3. I did not want it

31b. When you became pregnant, did your husband want you to get pregnant
want to get pregnant later, or didn't she ever want to have children?

1. He wanted it at the time 2. He wanted it later 3. He did not want it

32. Have you ever had a pregnancy that ended in a miscarriage?

1. Yes 2. No

32a. How many times have you miscarried? Number

33. Have you ever had a pregnancy that ended in an induced abortion?

1. Yes 2. No

33a. how many induced abortions have you had? Number

33b. Where was the abortion performed?

1. In the public hospital

2. Maternity

3. Private hospital

4. Private outpatient clinic
5. Private doctor
6. Other _____ (Please specify)

34. Now, I have some questions about the future. Would you like to have(a/another) child, or would you prefer not to have any (more) children?

- | | |
|-----------------------------------|----------------------------------|
| 1. I want to have children | 3. I cannot get pregnant anymore |
| 2. I do not want to have children | 4. I do not know |

35. Have you ever used anything or tried in any way to delay or avoid getting pregnant?

- | | |
|--------|-------|
| 1. Yes | 2. No |
|--------|-------|

35a. Which method have you EVER used or what have you done)

- | | |
|--------------------------------------|---------------------------------|
| 1. Morning after pills | 11. Lactational amenorrhea (LAM |
| 2. Oral contraceptive pills | 12. Vaginal ring |
| 3. Three monthly injectable / DMPA ” | 13. Dermal patch |
| 4. Monthly injectable / Misogyny | 14. Cu T IUD |
| 5. Male condom | 15. LNG IUD |
| 6. Female condom | 16. Implant |
| 7. Spermicide | 17. Diaphragm |
| 8. Withdrawal | 18. Cervical cap |
| 9. Sexual abstinence | 19. Tubal ligation of women |
| 10. Other (Please specify) | 20. Vasectomy |
| | 21. None of them |

35b. Which method are you using CURRENTLY?

- | | |
|--------------------------------------|---------------------------------|
| 1. Morning after pills | 11. Lactational amenorrhea (LAM |
| 2. Oral contraceptive pills | 12. Vaginal ring |
| 3. Three monthly injectable / DMPA ” | 13. Dermal patch |
| 4. Monthly injectable / Misogyny | 14. Cu T IUD |
| 5. Male condom | 15. LNG IUD |
| 6. Female condom | 16. Implant |
| 7. Spermicide | 17. Diaphragm |

8. Withdrawal
9. Sexual abstinence
10. Other (Please specify)

18. Cervical cap
19. Tubal ligation of women
20. Vasectomy
21. None of them

35c. Which method do you prefer to use?

1. Any method
2. Morning after pills
3. Oral contraceptive pills
4. Three monthly injectable / DMPA ”
5. Monthly injectable / Misogyny
6. Male condom
7. Female condom
8. Spermicide
9. Withdrawal
10. Sexual abstinence
11. Not SURE
12. Other (Please specify)

13. Lactational amenorrhea (LAM)
14. Vaginal ring
15. Dermal patch
16. Cu T IUD
17. LNG IUD
18. Implant
19. Diaphragm
20. Cervical cap
21. Tubal ligation of women
22. Vasectomy
23. None of them

35d. What is the reason that you do NOT use the “method mentioned above” currently?

1. The doctor does not advise.
2. Expensive.
3. Not available/access problems.
4. Hard to find here.
5. Do not know how to obtain it.
6. Do not know how to use it.
7. Husband objects.
8. Religious reasons.
9. Health concerns
10. Side effects.
11. Other (Please specify)

هذه الجزئية خاصة فقط بالنساء:

28. هل قمت بالإنجاب سابقًا ؟
1. نعم
2. لا
29. هل أنجبت ولدًا أو فتاة ولدوا أحياء ثم توفوا لاحقًا؟
1. نعم
2. لا
- 29 أ. إجمالًا، كم عدد الأولاد الذين توفوا؟
- 29 ب. إجمالًا، كم عدد الفتيات اللاتي توفين؟
- 29 ج. كم عدد المواليد الأحياء الذين أنجبتهن خلال حياتك؟ مولودًا حيًا
30. كم كان عمرك خلال حملك الأول؟ سنة
31. كم كان عمرك خلال حملك الأخير؟ سنة
32. هل أنت حامل حاليًا؟
1. نعم
2. لا
- 32 أ. في الوقت الذي أصبحت فيه حاملاً، هل كنت تريدين أن تصبحي حاملاً، هل كنت تريدين الانتظار حتى وقت لاحق، أم أنك لم ترغبي في إنجاب المزيد من الأطفال على الإطلاق؟
1. كنت أريد في ذلك الوقت
2. لاحقًا
3. لم أرغب على الإطلاق
- 32 ب. في الوقت الذي أصبحت فيه حاملاً، هل أراد زوجك أن تصبحي حاملاً، هل كان يريد الانتظار حتى وقت لاحق، أم أنه لم يريد أن ينجب مزيدًا من الأطفال على الإطلاق؟
1. كان يريد في ذلك الوقت
2. لاحقًا
3. لم يرغب على الإطلاق
33. هل سبق أن كنت حاملاً وانتهى الحمل بالإجهاض؟
1. نعم
2. لا
- 33 أ. بالإجمال، كم عدد المرات التي حصل بها إجهاض؟ مرة
34. هل سبق أن كنت حاملاً وانتهى بإجهاض متعمد؟
1. نعم
2. لا
- 34 أ. بالإجمال، كم مرة قمت بالإجهاض؟ مرة
- 34 ب. أين حدثت عملية الإجهاض؟
1. مستشفى حكومي
2. دار الأمومة
3. مستشفى خاص
4. عيادة خاصة
5. طبيب خاص
6. أخرى (يرجى التحديد)
35. الآن لدي بعض الأسئلة حول المستقبل. هل ترغبين في إنجاب (طفل/ طفل آخر)، أو هل تفضلين عدم إنجاب أطفال (أكثر)؟
1. أريد إنجاب طفل
2. لا أريد الإنجاب
3. لا يمكنني أن أحمل
4. لم أقرر/ لا أعرف

36. هل جربت استخدام أي شيء أو حاولت بأي وسيلة أن تأخري الحمل أو أن تتجنبيه؟
1. نعم
2. لا

36 أ. ما هي الطريقة التي سبق أن استخدمتها أو قمت بها؟

- | | |
|-------------------------------|-----------------------------------|
| 11. انقطاع الطمث المرضي "LAM" | 1. حبوب منع الحمل في اليوم التالي |
| 12. حلقة مهبلية | 2. حبوب منع الحمل عن طريق الفم |
| 13. لصاقه جلدية | 3. ثلاث حقن شهرية "DMPA" |
| 14. لولب رحمي نحاسي | 4. حقن شهرية |
| 15. لولب رحمي هرموني | 5. وافي ذكري |
| 16. طعم | 6. وافي أنثوي |
| 17. الحجاب العازل الأنثوي | 7. مبيد النطاف |
| 18. غطاء عنق الرحم | 8. الانسحاب |
| 19. ربط البوق | 9. الامتناع الجنسي |
| 20. قطع القناة الدافقة | 10. أخرى (يرجى التحديد) |
| 21. لا شيء مما ذكر | |

36 ب. أي الطرق التالية تستخدمها حالياً؟

- | | |
|-------------------------------|-----------------------------------|
| 11. انقطاع الطمث المرضي "LAM" | 1. حبوب منع الحمل في اليوم التالي |
| 12. حلقة مهبلية | 2. حبوب منع الحمل عن طريق الفم |
| 13. لصاقه جلدية | 3. ثلاث حقن شهرية "DMPA" |
| 14. لولب رحمي نحاسي | 4. حقن شهرية |
| 15. لولب رحمي هرموني | 5. وافي ذكري |
| 16. طعم | 6. وافي أنثوي |
| 17. الحجاب العازل الأنثوي | 7. مبيد النطاف |
| 18. غطاء عنق الرحم | 8. الانسحاب |
| 19. ربط البوق | 9. الامتناع الجنسي |
| 20. قطع القناة الدافقة | 10. أخرى (يرجى التحديد) |
| 21. لا شيء مما ذكر | |

36 ج. أي الطرق التالية تفضلين استخدامها؟

- | | |
|-------------------------------|--------------------------------|
| 11. انقطاع الطمث المرضي "LAM" | 1. أي واحد منهم |
| 12. حلقة مهبلية | 2. حبوب منع الحمل عن طريق الفم |
| 13. لصاقه جلدية | 3. ثلاث حقن شهرية "DMPA" |
| 14. لولب رحمي نحاسي | 4. حقن شهرية |
| 15. لولب رحمي هرموني | 5. وافي ذكري |
| 16. طعم | 6. وافي أنثوي |
| 17. الحجاب العازل الأنثوي | 7. مبيد النطاف |
| 18. غطاء عنق الرحم | 8. الانسحاب |
| 19. ربط البوق | 9. الامتناع الجنسي |

10. أخرى (يرجى التحديد) 20. قطع القناة الدافقة

22. لا شيء مما ذكر

23. غير متأكدة

36 د. لماذا لا تستخدمين أي من الطرق المذكورة أعلاه حاليًا؟

1. لم ينصح بها الطبيب
2. باهظة الثمن
3. غير متوفرة
4. يصعب إيجادها هنا
5. لا أعرف كيفية الحصول عليها
6. لا أعرف كيفية استخدامها
7. يعارضها زوجي
8. أسباب دينية
9. مخاطر صحية
10. آثار جانبية
11. أخرى (يرجى التحديد)

Annex. 4



Marmara Üniversitesi Tıp Fakültesi
Klinik Araştırmalar Etik Kurulu

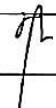
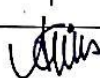
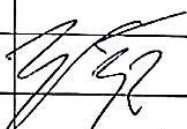
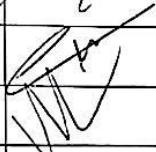
BAŞVURU BİLGİLERİ	PROTOKOL KODU	09.2019.726
	PROJE ADI	İstanbul - Sultanbeyli'deki Arapça konuşan göçmenler arasında sağlıkla ilgili yaşam kalitesinin değerlendirilmesi: kesitsel çalışma.
	SORUMLU ARAŞTIRICI ÜNVANI/ADI	Doç. Dr. Ayşe Nilüfer ÖZAYDIN

KARAR BİLGİLERİ

Tarih : 26. 07. 2019

Yukarıda başvuru bilgileri verilen araştırma başvuru dosyası ve ilgili belgeler araştırmanın gereke, amaç, yaklaşım ve yöntemleri dikkate alınarak incelenmiş ve gerçekleştirilmesinde sakınca bulunmadığı için Kurulumuzca onaylanmasına oy birliği ile karar verilmiştir. Onay sonrasında yapılacak her türlü proje değişiklikleri (katılımcılar, başlık vb.) veya protokol değişikliklerinin Etik Kurula bildirilerek proje onayının yenilenmesi gerekmektedir.

ÜYELER

Unvanı / Adı / Soyadı	Uzmanlık Dalı	Kurumu / EK Üyeligi	Onaylanan Proje ile ilişkisi	Toplantıya katılım	İmza
Prof.Dr. Haner DİREKENELİ	Romatoloji	M.Ü Tıp Fakültesi/ Başkan	☐ Var ☐ Yok	☐ Evet ☐ Hayır	
Prof.Dr. Tülin ERGUN	Dermatoloji	M.Ü Tıp Fakültesi/Başkan Yrd.	☐ Var ☐ Yok	☐ Evet ☐ Hayır	
Prof.Dr. Atila KARAALP	Farmakoloji	M.Ü Tıp Fakültesi/Üye	☐ Var ☐ Yok	☐ EVET ☐ HAYIR	
Prof. Dr. Şefik GÖRKEY	Tıp Tarihi ve Etik	M.Ü Tıp Fakültesi/Üye	☐ Var ☐ Yok	☐ Evet ☐ Hayır	
Prof.Dr. Handan KAYA	Patoloji	M.Ü Tıp Fakültesi/Üye	☐ Var ☐ Yok	☐ Evet ☐ Hayır	
Prof.Dr. M.Bakadır GÜLLÜOĞLU	Genel Cerrahi	M.Ü Tıp Fakültesi/Üye	☐ Var ☐ Yok	☐ Evet ☐ Hayır	
Prof.Dr. Semra SARDAŞ	Eczacı	M.Ü Eczacılık Fak/Üye	☐ Var ☐ Yok	☐ Evet ☐ Hayır	
Prof.Dr. Başak DOĞAN	Diş Hekimi	M.Ü Diş Hekimliği Fak/Üye	☐ Var ☐ Yok	☐ Evet ☐ Hayır	
Prof. Dr. Beste Melek ATASOY	Radyasyon Onkolojisi	M.Ü Tıp Fakültesi/Üye	☐ Var ☐ Yok	☐ Evet ☐ Hayır	
Doç. Dr. Elif KARAKOÇ AYDINER	Çocuk Sağlığı ve Hastalıkları	M.Ü Tıp Fakültesi/Üye	☐ Var ☐ Yok	☐ Evet ☐ Hayır	
Doç.Dr. Meltem KORAY	Diş Hekimi	İstanbul Üniv. Diş Hekimliği Fak/Üye	☐ Var ☐ Yok	☐ Evet ☐ Hayır	
Doç. Dr. Gürkan SERT	Hukukçu	M.Ü Tıp Fakültesi/Üye	☐ Var ☐ Yok	☐ Evet ☐ Hayır	
Doç.Dr: Figen DEMİR	Halk Sağlığı	Acıbadem Üniv. Tıp Fak.	☐ Var ☐ Yok	☐ Evet ☐ Hayır	
Doç.Dr. Pınar Mega TİBER	Biyofizik	M.Ü Tıp Fakültesi/Üye	☐ Var ☐ Yok	☐ Evet ☐ Hayır	
Gözde Aynur MİRZA	Sağlık Mensubu olmayan kişi	Serbest	☐ Var ☐ Yok	☐ Evet ☐ Hayır	

10. Curriculum vitae

Name	Asmaa Z F	Surname	Mohammed
Place of Birth	Saudi Arabia	Date of Birth	06/06/1989
Nationality	Palestinian	Tel	05340574643
E-mail	asom_2007_2008@hotmail.com		

Educational Level

	Name of the Institution where he/she was graduated	Start - Graduation year
Masters	-	
Undergraduate	The Islamic University of Gaza	2008-2012
High school	Mamdouh Sidam High School	2006-2007

Job Experience

Duty	Institution	Duration (Year - Year)
The Islamic University	Assistant	(2012-2013)
Noor Huda Optical Center	Optometry	(2013-2015)
Beisan Medical Center	Optometry	(2013-2015)

Foreign Languages	Reading comprehension	Speaking*	Writing*
English	very good	moderate	good
Turkish	good	good	good

	Math	Equally weighted	Non-math
ALES Grade	None	-	-
(Other) Grade	None	-	-

Computer Knowledge

Program	Use proficiency
Microsoft office	very good
SPSS 11.0	good

* Evaluate as very good, good, moderate, poor.

* I was awarded a scholarship from Presidency for Turks Abroad and Related Communities in 2016.

