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"*Bridging the Knowledge - Action Gap in Sexual Health Literacy:*

A Cross-Sectional Analysis of Access to Healthcare among

18-29-Year-Old Turkish and Syrian Males in Istanbul."

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Abstract

Background: Access to sexual healthcare is a significant challenge, particularly for the male population, an area that remains under-researched. This study delves into the factors influencing access to sexual healthcare services among young adult males in Istanbul, with a special focus on the role of sexual health literacy. The study explores the journey from patient-physician interaction and active engagement in the appraisal of health knowledge and risk, to the practical translation of this knowledge into the utilization of sexual healthcare services. ***Methods***: An anonymous e-survey, conducted in a cross-sectional format, gathered data on sexual health knowledge, literacy (assessed through the Health Literacy Questionnaire), self-reported perceived risk for STIs, indicators of risk, and perceived barriers to sexual healthcare. The survey aimed to capture a comprehensive picture of the various factors affecting access to sexual healthcare. ***Results***: The research revealed a generally low access rate to sexual healthcare services among the study participants, coupled with significant disparities in service utilization, knowledge, literacy, and risk perception. Notably, it was observed that education and proactive interaction with healthcare providers were linked to enhanced knowledge. The study also identified crucial connections between the level of knowledge, active self-management, and other factors in influencing risk perception and access to healthcare services. ***Conclusion:*** The findings underscore the need for comprehensive sexual education and literacy programs that are culturally appropriate and suggest changes in service delivery methods to be more proactive and confidential. Peer education emerged as a potential strategy. The study highlights the importance of accurate public health risk messaging and need for bridging the cognitive gap in risk appraisal. The knowledge-action gap to access requires further research to investigate disparities in access to health information, including longitudinal and qualitative studies to understand the role of appraisal of information in health literacy and healthcare seeking behaviour.

Keywords*:* Sexual Healthcare Access, Young Adult Males, Istanbul, Sexual Health Literacy, Health Literacy Questionnaire, Risk Perception, Cross-Sectional Study, Public Health, Behavioral Interventions.

Contents

List of Abbreviations:

AIDS - Acquired Immunodeficiency Syndrome

AOR - Adjusted Odds Ratio

ART - Anti-retroviral Therapy

CDC - Centers for Disease Control and Prevention

CI - Confidence Interval

COR - Crude Odds Ratio

df - Degrees of Freedom

EU/EEA - European Union/European Economic Area

HBV - Hepatitis B Virus

HCPs - Healthcare Professionals

HIV - Human Immunodeficiency Virus

HLQ - Health Literacy Questionnaire

HPV - Human Papilloma Virus

IOM - International Organization for Migration

IQR - Interquartile Range

LB - Lower Bound of the Confidence Interval

L - Likelihood Ratio

M-W test - Mann-Whitney U test

MSM - Men Who Have Sex With Men

NSD - Norwegian Centre for Research Data

NVS - Newest Vital Sign

PID - Pelvic Inflammatory Disease

REALM - Rapid Estimate of Adult Literacy in Medicine

REC - Regional Registered Research Ethical Committees

SD - Standard Deviation

SE - Standard Error

SEM - Standard Error of the Mean

Sig - Significance level or p-value

SPSS - Statistical Package for the Social Sciences

STI - Sexually Transmitted Infection

TPR - Temporary Protection Right

TB - Tuberculosis

TSD - Service for Sensitive Data

UB - Upper Bound of the Confidence Interval

UiO - University of Oslo

UNAIDS - Joint United Nations Programme on HIV/AIDS

UNHCR - United Nations High Commissioner for Refugees

USIT - University Center for Information Technology

Var - Variance

WHO - World Health Organization

χ^2 - Chi-square test

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Chapter 1: Introduction

Defining the Problem:

Sexually transmitted infections (STIs) persist as a critical public health issue globally. The World Health Organization (WHO) reports that over one million STIs are acquired daily, signifying a substantial epidemiological burden. An estimated 376 million new infections per annum are attributed to common STIs such as chlamydia, gonorrhea, syphilis, and trichomoniasis. (1) Recent data indicates a sustained rate of approximately 30,000 new HIV diagnoses annually within the EU/EEA, translating to roughly 6 cases per 100,000 population. (2)

Despite international consensus on the imperative nature of testing, notable disparities in infection burden and access to diagnostic and healthcare services are evident, disproportionately impacting migrant communities. (3-5) Consequently, addressing healthcare access barriers for these vulnerable populations is essential for effectively integrating immigrant minorities into sexual healthcare frameworks and enhancing their participation in testing and screening programs.

Chapter 2: Background and Literature Review

2.1- Sexually Transmitted Infections (STIs)

STIs are a group of infections or illnesses caused by various agents transmitted through sexual contact. These infections can be transmitted through sex, sharing sex toys, or genital contact and can affect different anatomic body sites, including genitals, rectum, anus, mouth, and throat. (1, 3, 5) Susceptible, uninfected persons are prone to catch these infections when they engage in sexual contact with infectious persons. The primary pathogens behind these conditions are subdivided into bacteria, viruses, and parasites. Important bacterial STIs include chlamydia, gonorrhea, and syphilis. Key sexually transmitted viruses of high importance include HIV (Human Immunodeficiency Virus), HBV (Hepatitis B Virus), and HPV (Human Papilloma Virus). Trichomoniasis, for example, is a parasitic infection. However, other medically significant STIs also exist. (1, 3, 5)

STIs often have long infectious periods, and many tend to be asymptomatic for all or some of this time, meaning they could show no symptoms at all. (3, 5) Thus, they often go undiagnosed, and if someone does not know their status, they might transmit these infections to others unknowingly.

Reports on STIs and numbers from different countries and health-regulatory bodies, despite many of these infections going undiagnosed or underdiagnosed, remain alarming on a global aspect. The WHO estimates more than one million daily incidences of new STI cases and more than 370 million annually. (1) According to the European Center for Disease Prevention and Control, in 2017 alone, the EU/EEA member states reported more than 400,000 chlamydia infections, almost 90,000 new gonorrhea infections, and more than 33,000 new syphilis cases. (2) Additionally, over the past decade, almost 30,000 new HIV diagnoses have been reported each year in the EU/EEA. (6) However, these trends varied within each individual country. For example, there has been a significant increase in some STIs in the U.K., such as chlamydia, syphilis, gonorrhea, and shigella, accompanied by some decrease in HIV and genital warts due to certain successful efforts. (5) In Türkiye, according to data issued by the Public Health Agency of Türkiye and the Ministry of Health, by the end of

2019, there were 24,237 HIV positive cases reported and 1,927 AIDS cases. (7) As per World Health Organization's data, new diagnoses in Türkiye increased by 452%. (8) While new diagnosis rates decline globally, there's a rapid growth in Türkiye.

2.2- Disparities in the Burden of STIs

Anyone who has sexual encounters is at risk of contracting an STI, but some groups are more affected. The burden of STIs is not evenly distributed, with apparent discrepancies between different age groups, sexes, and communities. (1, 5, 9) Young adults are the most affected group by STIs and HIV. (1, 2, 5, 6, 9, 10) People aged 20-24 have the highest rates of STIs in the EU/EEA. (6) Nearly half of the new STI diagnoses in the U.K. in 2018 were among young people (15-24 years old). (5) Young heterosexual women are more likely to be diagnosed with an STI compared with their male counterparts. (5, 10) Sexual minority men, or men who have sexual encounters with other men (MSM), are also disproportionately affected by STIs, including HIV. (3, 5)

Racial and ethnic discrepancies also exist, with immigrants and ethnic minorities having higher rates of STIs/HIV. (2, 3, 5, 11) An immigrant/international migrant is defined as "any person who lives temporarily or permanently in a country where they were not born and has acquired significant social ties to this country." (12) Around 37% of the new HIV diagnoses in the EU/EEA area in 2015 were among immigrant populations. (11) According to the CDC's 2018 annual surveillance report, unacceptably high levels of chlamydia, gonorrhea, syphilis, and other STIs continue to persist among ethnic minorities and immigrants in the United States. (2) Doganay M. argues in his article on the impacts of the refugees of the Syrian civil war on infectious diseases and biosecurity in Türkiye that refugees are more prone to sexually transmitted diseases. (13) Unfortunately, many general or unique pre-migratory or post-migratory factors exist and intersect, favoring this inequality.

Other high-risk groups with a high burden of STIs/HIV include transgender individuals, sex workers, and homeless people. (1, 5) Recognizing the intersectional nature of the factors that might exacerbate inequalities and discrepancies in the magnitude of these infections among these various populations is important.

2.3- Risk Factors for STIs

The context of practicing sexual behavior and expressing sexuality can become high-risk and abnormal. Risky (i.e., “high risk”) sexual behavior has been defined by researchers as sexual activities and practices that expose the person to a higher risk of contracting STIs. (14) Important risky behaviors include unprotected condom-less sexual relationships, multiple sexual partners, alcohol or drug use, engagement in sex work, and engagement in sex with a partner of unknown STIs/HIV history. (3, 5, 14, 15) Early sexual debut and premarital sexual relationships are also included in the definition of risky sexual behaviors. (14) Additionally, increased online sexual activity and the use of online dating applications such as “Tinder” have been linked to a higher number of previous sexual partners. (16) Other risk factors include being young, having low knowledge about STIs, having had previous STIs, being HIV positive, and having legal or familial conflicts. (5, 14) Some STIs have special routes of transmission, such as HIV and hepatitis B and C viruses, which are blood-borne infections (i.e., transmitted through blood contact) as well. Additional risk factors for these blood-borne infections exist and include injecting drugs and sharing syringes, receiving unsafe injections or blood transfusions, unsterile cutting or piercing, and being exposed to accidental needle sticks (particularly in health workers). (9)

2.4- Impacts of STIs

2.4.1- Physical Signs and Symptoms

STIs, other than HIV, can have a range of physical signs and symptoms. Many infections are asymptomatic and could go unnoticed. (3) Localized or systemic symptoms could include having an unusual or odd-smelling urethral/vaginal/anal discharge, painful or burning urination, pain during sexual intercourse, anogenital ulcers or blisters, anogenital warts, sore swollen lymph nodes particularly in the groin area but sometimes more widespread, fever, rash over the trunk, hands or feet. (5, 17) Depending on the organism causing the infection and the host, signs and symptoms may appear a few days after exposure or may take years before any noticeable problem. (5, 17)

As for HIV, the symptoms depend on the stage of the infection. (9) 80 percent of the cases are characterized by an influenza-like illness that occurs 2-6 weeks after contracting the virus, with symptoms including fever, headache, rash, or sore throat. (9) As HIV progresses, the host's immunity weakens, and other symptoms occur due to contracted other infections and could include swollen lymph nodes, weight loss, fever, diarrhea, and cough. (9)

2.4.2- Morbidity

Complications due to STIs have a profound impact on sexual and reproductive health. Untreated, STIs can cause medical problems even in the absence of symptoms. Long-term morbidities include pelvic inflammatory disease (PID), ectopic pregnancies, infertility, immunodeficiency, and AIDS, cancers like cervical or anal cancer, and fetal and perinatal health problems, in addition to many other conditions (3, 5, 18, 19). These morbidities are not confined to the genitals. For example, untreated genital chlamydia can cause painful conditions that affect the joints (reactive arthritis) and the liver (hepatitis); or if transmitted vertically to a child from the mother during birth, might lead to blindness (3, 5, 18, 19). Without treatment, HIV infection progresses into its last stage known as AIDS, where patients could also develop severe illnesses such as tuberculosis (TB), cryptococcal meningitis, severe bacterial infections, and cancers such as lymphomas and Kaposi's sarcoma (9). Additionally, individuals may get infected with more than one STI at the same time (3, 5, 18, 19). This might be due to the fact that STIs share a common mode of transmission. Also, infection with STIs has been proven to facilitate the transmission of HIV as well (3, 5, 17-19). Therefore, those who have tested positive for an STI are advised to test for other STIs, including HIV (3, 5, 18, 19). Most bacterial STIs can be cured, and early diagnosis and treatment reduce the risk of complications; however, antibiotic resistance has become a problem for some, especially gonorrhea (3, 5).

2.4.3- Psychosocial Impact

Getting infected with an STI can be very distressing and raises many concerns regarding its implications and medical manifestations, testing, social fear and stigma, and implications on

interpersonal relationships between partners, family members, and communities. All these concerns are translated in the healthcare-seeking behavior and could impose barriers to accessing services.

2.5- Access to STIs Testing Services

Testing for STIs is a key intervention. Not only does it ensure that an individual can get prompt diagnosis and treatment, but it also helps to prevent the onward transmission of undiagnosed cases. Similarly, testing for HIV represents the “entry point to the HIV continuum of care”. It links diagnosis to treatment initiation and adherence to ART (Anti-retroviral therapy) (5). The UNAIDS initiated the 90-90-90 HIV treatment plan in 2014 for HIV where the 1st target states that “by 2020, 90% of all people living with HIV will know their HIV status” (20). And to achieve such a target, it is important to improve access to testing.

Increasing access to STIs and HIV testing services is one of the public health priorities and is crucial to slow down the evolving epidemics of STIs. Screening and testing reduce infectivity at the community level and reduce transmission rates as more people know their status (5). Identifying people with STIs allows for not only the benefit of treatment but also for prevention education, HIV testing, identifying HIV-infected persons in need of care, and partner notification for STIs or HIV infection. And since young adult immigrant minorities are disproportionately affected by STIs and HIV, it is critical to understand the barriers and the facilitators to these services to break the chains of transmission.

2.6- Sexual Healthcare Services and Policies in Türkiye

During the past two decades, there has been a shift in sexual health policies in Türkiye. Between 2003 and 2007, a collaborative project between the Turkish Ministry of Health and European Commission emerged and significantly promoted sexual health policies in the Turkish healthcare system (21). Sexual health services’ standards were listed and identified STI prevention and family planning as core components. This was seen as a shift towards rights-based sexual health policy. A national action plan for 2005-2015 was issued, however, it got halted in early 2010, and afterward, a shift in policy was seen with the marginalization

of sexual health policies (21). In the government's 2014-2018 national development plan, references to sexual health were removed, which undermined the autonomy of sexual health in Türkiye (21).

Despite the shift in policies, there has been no reduction in the universal social insurance package. STIs (including HIV) testing and treatment services continue to be provided freely (8, 21). The publication of the Turkish Ministry of Health on HIV/AIDS control program in 2019 promised to strengthen STI testing and treatment services (21). In addition, private hospitals and private clinics provide these services for a charged fee.

Confidential and anonymous testing is not an option in Turkish hospitals. However, some district municipalities, especially in Istanbul, have challenged the national policy and provided confidentiality and anonymity for these services (8, 21). In Istanbul, the district of Sisli has offered anonymous testing since 2014, in response to appeals from LGBT communities (21). Besiktas district followed afterward with the same service. The Positive Living Association also provides similar services in two centers in Istanbul (8).

2.7- Syrian Refugees: Access to Healthcare in Türkiye

Syrian refugees in Türkiye have their rights to exist and rights to services guaranteed under the Temporary Protection Right (TPR). Türkiye grants TPR to Syrian asylum seekers who have registered with the United Nations Higher Commission on Refugees (UNHCR) or an associated government entity (22). TPR has been in effect since 2014 and guarantees Syrian migrants identity cards, which allow access to legal rights and social services such as healthcare, education, and work permits. Registered refugees can seek healthcare services at family practice primary care services, Syrian refugee health clinics, or any Ministry of Health public hospital (23). They can use all primary health services, including preventive care, immunization and vaccinations, women's and reproductive health services, child health services, and other services (22, 23). They are transferred to private hospitals or University Health Centers for tertiary care if required. Refugees are guaranteed a 20% co-pay on the cost of medications, and all other health expenses, including hospitalization and surgical care, are also covered (23). All refugees are offered voluntary testing, counseling, and medication

treatment for the STIs (24). However, unregistered migrants are not guaranteed access to care (22, 23).

2.8- Challenges to Accessing Sexual Healthcare Services

A recent cohort from Türkiye assessed how far Türkiye is from the UNAIDS 90-90-90 targets and found that 72% and 74% of all HIV patients had been diagnosed in 2016 and 2017, respectively (25). This shows that Türkiye is still short of the first target (i.e., getting 90% of HIV cases diagnosed). As for the other targets, 92% of diagnosed cases were on ART (2nd target), while 70.2% were virally suppressed (3rd target) (25). Another cohort from Türkiye found that 49.4% of newly diagnosed HIV cases between 2003 and 2016 were late presenters, half of which presented with advanced HIV disease (26). More work is needed to improve access and utilization of testing services.

The barriers preventing this population from accessing these services are varied and challenging. These factors are usually categorized into three main levels: individual, structural, and social level.

2.8.1- Individual Level Barriers

Individual-level barriers can be sub-classified into demographic factors and factors relating to knowledge and health literacy, attitudes, and behaviors. Age is an important factor in accessing services, with increasing age linked to higher odds of having been tested for STIs including HIV (5, 27). In general, male gender is considered a barrier to accessing testing services (5). This is usually explained by women being more likely to have been tested for STIs/HIV during their lifespan, as such tests are often part of antenatal screening programs, and women are generally more involved in healthcare services. Other factors such as the level of education attained, and income level may also represent challenges and barriers to target services, with a higher level of either being associated with higher odds of testing (5, 27). Similarly, self-identifying as homosexual correlates with higher odds of testing (5, 27). This might be due to heavy awareness and screening campaigns among sexual minority groups everywhere. Being married or in a monogamous relationship has been reported as a barrier to

testing as well (5). In a cohort that examined late presentation of HIV infection in Türkiye, married individuals were usually late presenters (26). This is usually explained by fear of breaches of confidentiality and societal consequences.

Migration-Related Factors

Acculturation usually increases knowledge about STIs/HIV and familiarity with the new health system and rights to services (28). However, being a second-generation immigrant is considered a barrier (29). Also, not speaking the language of the host country is a barrier for both testing and entering the healthcare system (15, 28, 29). Syrian refugees in Türkiye face the language barrier within the Turkish health system, as not all health facilities in Türkiye have capable interpreters (22, 30-32). Not being able to use the language of the health system and the local language makes it very difficult for effective health communication to happen and causes a delay in health communication. For instance, an interesting randomized clinical trial was conducted in Türkiye where it was determined that health education given to Syrian refugee women in their own language led to a significant positive effect on breast and cervical cancer awareness (33).

Factors Related to Knowledge, Attitudes & Behaviours

Knowledge about STIs/HIV has been measured in many studies and it has been found that higher knowledge is a facilitator of testing, whereas lower knowledge is a barrier (5). Less educated individuals have been found as late presenters of HIV infection in Türkiye (26).

Familiarity with the nature of the testing services (e.g., anonymity of test) and knowledge of how to navigate the healthcare system and how to reach health information are factors that ease the utilization of STI testing services (5). For example, Syrian refugees in Türkiye find navigating the Turkish health system as an obstacle for treatments. Syrian refugees may not be well informed about their personal rights and their entitlements under the TPR. They could lack information about what health services are available in Türkiye and what services they are entitled to with their health cards (22, 30).

Lack of symptoms and feeling healthy is a critical barrier. Symptoms have been identified as the main reason for people to attend health services appointments (17, 26). This highlights the need for innovative recruitment techniques to be able to reach participants from outside

health centers, which would probably not attend to health facilities as many of the STIs are usually asymptomatic.

Individual perception of risk has been examined in different studies. The lower the perception of risk, the more of a barrier it acts (5, 27). Those who perceive themselves as at higher risk of acquiring HIV, for example, are more likely to get tested (5, 34).

Engaging in a risky sexual behavior has been found as a trigger for testing (27, 34, 35). Important risky behaviors include condom-less sex, multiple sexual partners, drug use, and engagement in sex work and engagement in sex with a partner of unknown STIs/HIV history (16, 27, 35).

Additionally, having been tested previously for an STI/HIV or hearing that a friend has tested positive for HIV, for example, have been found to be facilitators to subsequent testing (34). Lastly, fear of testing positive and subsequent consequences such as a partner leaving, or family denial are important barriers to STIs/HIV testing (5, 34).

The Challenge of Health Literacy

Health literacy has gained global attention in the last decades (36). The term "health literacy" goes back to the 1970s (37) and is defined as "the personal characteristics and social resources required for individuals and communities to access, understand, appraise, and use information and services to make decisions about health" (36). It is a wide, multifaceted, and multidimensional concept that addresses environmental, political, and social factors that determine health, and encompasses a variety of skills and competencies a person develops over their lifespan that allow them to seek out, access, understand, and utilize health information to improve health and avoid risks (36, 38-41). It is mediated by education level and is affected by culture, language, and the characteristics of health-related settings (38, 39, 41, 42).

Health literacy is a barrier to care and a strong predictor of health. Limited health literacy significantly affects health and associates with high health system costs (36). Low levels of literacy have been linked to a wide range of health-related outcomes including less participation in health-promoting and disease detection activities (36), lower use of preventive medical services such as mammography screening for breast cancer (41, 43) and screening for

cervical cancer (44), inadequate management of long-term conditions such as HIV infection (36, 37, 41), riskier health choices such as higher rates of smoking, poor adherence to medication, increased hospitalization and rehospitalization, and ultimately increased morbidity and mortality (36). Thus, increasing the costs and charges on both the individual and the health system.

Unfortunately, as our societies keep modernizing, a health literacy crisis in Europe and beyond keeps unveiling (36). According to the European health literacy survey which was conducted in eight European countries, 47% of the respondents showed insufficient or problematic health literacy (45). This could be explained by the increasing unhealthy lifestyle markets globally as well as the increasing complexity of health systems which makes it harder for individuals to properly navigate the health system and to take better informed decisions regarding their own health. In addition, education systems are often behind when it comes to providing skills and competencies for people to adequately handle these challenges (36). Ozdemir et al. assessed the level of health literacy in Türkiye by using two different measures: REALM (a word recognition and pronunciation test) and NVS (a test which involves interpretation of a nutritional label) and found that 58.7% of participants had an adequate level of health literacy on REALM compared to 28.1% on the NVS test (39). However, this study did not include the assessment of information and decision-making skills that people make for health, thus limiting the results.

Immigrants, in general, score lower on health literacy scales than native populations (32, 36, 37). They usually have significant language and health literacy difficulties which are usually exacerbated by other cultural and economic challenges (32, 46). This translates into having poorer access to both health information and disease prevention and care services which may explain disparities and inequalities in the burden of diseases (32, 36, 37). In a population study conducted by the IOM and WHO, a total of 7105 Syrian refugees in Türkiye participated in this mixed-methods design. Health literacy levels were inadequate or problematic in 82.8% of the participants (32). In another cross-sectional study assessing general health literacy and associated factors among Syrians under TPR residing in Gaziemir district in Izmir, which is the second-largest city in Türkiye, 70.8% out of the 280 participants

had inadequate general health literacy, and 22.7% had problematic levels, and only around 7% had adequate to excellent levels (47).

2.8.2- Structural Factors

Structural barriers are those that are outside one's own control. They can worsen the health status of an individual, increase vulnerability to diseases and infections, and precipitate negative outcomes of the disease.

Location of facilities and waiting times for services have been identified as barriers for testing (5). Also, routine mandatory screening is viewed as discriminatory against immigrants in general and acts as a barrier as well (28). However, Syrian refugees in Türkiye are offered voluntary testing for STIs rather than obligatory (24). Structural financial barriers such as the costs of STI testing and treatment services and lack of governmental funding impose barriers on the utilization of these services (21). Also, a lack of health insurance, for example, has been found to impact individuals' access to healthcare services in Türkiye (48).

And lastly, the legal status of immigrants plays a big role as well. Undocumented status means no entitlement to health services and the fear of deportation escalates the problem (11, 28). Syrian refugees who are not registered under the TPR are not guaranteed access to healthcare including sexual health services (13, 22-24).

2.8.3- Social Factors

Barriers that are social in nature are probably the most interesting when we talk about STI and sexual healthcare. It is interesting how social views concerning these topics constitute hurdles for certain populations that need to surmount to benefit from services when available and effective. Despite services being there and being effective, this does not guarantee that they would be utilized. And when underutilized, these are situations usually known as "missed opportunities". And deciding on whether to seize an opportunity or simply to just avoid it is usually conditioned by these societal factors as well as the factors discussed before.

Immigrants fear testing positive for an HIV test due to related social consequences (11, 29). Perceived lack of support from families, friends, relatives, or religious leaders are a few

of the main reasons for fearing to test. This could be explained by the fact that HIV/AIDS is still a lifetime infection and progressed stages of the disease are of significant morbidity and mortality. It might be different from other STIs in being of higher seriousness; but it resembles other STIs through sharing some common societal barriers.

Out of the main social barriers to STIs and HIV testing are the stigmas that surround these infections, the shaming, and the discrimination (5, 27, 35).

2.8.4- The Stigma

Si2ce the early start of the HIV/AIDS era, there has been a parallel epidemic of stigma that affects those who are infected with it. Similarly, other STIs are stigmatized as well.

Defining Stigma

Stigma is a socially constructed process of shaming and marginalizing individuals of certain characteristics and or identities. In the context of STIs, stigma has been defined as 'an attribute or label that sets a person apart from others and links the labeled person to undesirable characteristics' (49, 50). The CDC defines HIV stigma as "negative attitudes and beliefs about people living with HIV. It is the prejudice that comes with labeling an individual as part of a group that is believed to be socially unacceptable" (51).

Goffman described three types of stigma manifestations (29, 50). The first relates to "abominations of the body" and this could be seen as body deformities or symptoms of a disease (50). In understanding sexual seeking behavior, Mapp et al. highlighted the idea of how symptoms of STIs can trigger health-seeking behavior and "disrupt ideas of the self, causing feelings of self-disgust, loss of innocence, and shame" (52). The second type of stigma relates to taboo behaviors (i.e., "blemishes of individual character") and the third type is "tribal" in its nature and relates to race, nation, or religion (50). Thus, with these three characteristics being shared by STIs, it becomes clear how HIV/STIs are prone to stigmatization (50, 53).

Sources of Sigma

The nature of STI/HIV-associated stigma is complex and has many sociocultural roots. Negative perceptions and the mistreatment that stems from it are associated with individual beliefs and attitudes, as well as cultural and religious norms (52). STIs are associated with taboo behaviors and sexuality topics such as sexual orientation (e.g., homosexuality), gender identity, sexual rights, sex work, and substance use (52). Topics like infidelity to a partner and pre-marital casual sex may be involved which are considered immoral among various cultures. Thus, they are seen usually as "symbols of immoral behavior" (52). Historically, women have been blamed and judged for STIs much more than men as some believed that women were vectors of these infections; and thus, women tend to be more affected by stigma (54). In addition, religiosity associates with higher levels of shame and stigma (52). Eventually, this culture of stigma feeds on many other factors to grow such as media and education where inappropriate images or inappropriate terms are used (52). For example, Julia Marcus from the department of population medicine at Harvard Medical School, argues in one of her latest commentaries published in 2020 that the continued use of ambiguous and stigmatizing language in the scientific literature such as "unsafe sex," "risky sex," "risky sexual behavior," or "high-risk sexual behavior," continues to feed the stigma surrounding STIs and change into more neutral terms should be enacted in order to reduce stigma (52). Also, it is very important to highlight the role of misconceptions and wrong information about STIs in general and HIV specifically (51).

Forms and Contexts of Stigma

STIs/HIV-related stigma can be experienced in various forms and throughout different contexts.

A- Internalized (Self) Stigma

Internalized stigma refers to the extent of validation and endorsement of the negative feelings and acceptance of discredited status as valid, and development of negative self-image (51). This type of stigma has been studied repeatedly in the context of HIV and has been found to be associated with greater depressive symptoms, lower treatment-seeking behavior, and lower adherence to treatment (29, 51). The fear of discrimination and self-stigmatizing beliefs such as self-shaming and self-blaming not only undermine health-seeking behavior but

also damage the emotional and mental well-being. Self-stigma has been found to be a barrier to STI/HIV testing (5, 29, 51).

B- Healthcare Stigma

Many studies report HIV/STI-related stigma within healthcare settings (55). Negative attitudes of healthcare professionals (HCPs) towards people of black race, for example, who are infected with STI/HIV are reported repeatedly (29, 49, 56).

Agnes et al. explored the experiences of immigrant black women living with HIV within healthcare settings in Belgium. However, it is important to note that this study was limited by purposive sampling and snowballing technique which might have caused research bias. They had a good number of participants, and although most of the participants did not report stigmatizing behaviors from HCPs, they were able to construct knowledge about causes and consequences of stigma in this context. The main causes were 'linkage of HIV to immoral behavior' where participants perceived HIV as a foreign disease and felt blamed for it; 'Fear of contamination'; and 'Lack of proper knowledge and awareness of HIV transmission' (54).

The forms of stigma experienced in the same study varied from delayed/denial of care, excessive precautions, unlawful disclosure of status, and blame and humiliation (52). Whereas consequences varied from reporting undermined self-esteem and mental health, non-disclosure of status to non-HIV treating personnel, and avoidance or delay in seeking help (56). Thus, it is important to address this barrier as such experiences may leave people afraid to seek out healthcare services.

In a Turkish qualitative study on HIV-related stigma, all participants had experiences of being treated differently from physicians or nurses (50). They experienced hesitation of delivery of healthcare due to fear of contagion (50). Thus, the forms of stigma experienced in healthcare vary from delayed/denial of care, excessive precautions, unlawful disclosure of orientation or status, and blame and humiliation (49, 51, 52). Whereas consequences varied from reporting undermined self-esteem and mental health, non-disclosure of status to non-HIV treating personnel, and avoidance or delay in seeking help (49, 51, 52). Thus, it is important to address this barrier and to recognize the intersectional layers of the stigma

arising from stigma towards STIs and HIV and the stigma towards sexual orientation as such experiences may leave people afraid to seek out healthcare services.

C- Other Forms of Stigma

Other forms include stigma and discrimination related to employment/at-work, or community and household level stigma. These usually include discriminatory practices such as termination or refusal to renew work contracts or forcing infected individuals to leave their home and so on. Most of the HIV-positive participants in qualitative research on HIV-related stigma acknowledged their fears of losing their jobs if disclosing their HIV status to their workplaces and many had fears of losing their family support (50).

D- Intersectional Stigma

People living with HIV are prone to higher levels of stigma due to the intersectionality between stigma and other oppressive and discriminating rejection culture imposed by society. Mutual, overlapping, and multilevel forms of discriminative inequities have been theorized to impact the level of STI/HIV testing including STI/HIV-related stigma, sexism, racism, and homo/transphobia (29, 57).

2.9- Rationale for the Study and Study Significance

STIs lead to various medical and psychological consequences in millions of men globally, causing acute illnesses, long-term disabilities, and death. Many of these conditions are treatable and preventable, yet certain barriers need to be addressed. Research has shown that men from immigrant minorities are disproportionately affected by both the magnitude of these conditions and the inhibitory barriers that impede their access to sexual healthcare services.

Due to methodological limitations and a low access rate among Syrians, the study was unable to perform subgroup analyses for Turkish and Syrian men separately. Instead, an integrated analysis was conducted, which provided insight into how various factors interplay among both groups. This approach is crucial for understanding the utilization patterns of sexual healthcare services and allows for improvements in sexual healthcare policies and service delivery. These enhancements could ultimately increase access to these services and reduce the prevalence of these conditions in the community. While significant gaps in

knowledge remain, especially regarding access among specific subgroups, this study contributes to a broader understanding of the barriers to sexual healthcare services and highlights the need for tailored approaches to address these challenges. The findings underscore the importance of considering the diverse needs of different populations in sexual health literacy programs and policy formulations.

Research Question

"What factors influence access to sexual healthcare services among young adult Syrian and Turkish males, and how do elements such as sexual health literacy and perceived risk interact and differ between these two groups?"

Aim

To investigate the determinants of access to sexual healthcare services among Syrian and Turkish young adult males living in Istanbul, with a focus on understanding how variations in sexual health literacy, risk behaviors, and perceived risk influence this access.

Objectives

a. Assess the impact of socio-demographic and economic backgrounds on access to sexual healthcare services among young adult Syrian and Turkish males in Istanbul.
b. Examine the role of health literacy dimensions in facilitating or impeding access to sexual healthcare services, focusing on differences between Syrian refugees and Turkish nationals.
c. Investigate the level and sources of knowledge about STIs among the study population and its influence on healthcare access, with a comparative analysis between Syrian and Turkish young adult males.
d. Evaluate the prevalence and impact of STI-related risk behaviors on access to sexual healthcare services, comparing the experiences of Syrian and Turkish young adult males.
e. Understand the variations in STI risk perception between Syrian and Turkish young adult males and how this perception influences their healthcare-seeking behavior.
f. Explore individual, social, and structural barriers affecting access to sexual healthcare services as perceived by Syrian and Turkish young adult males.
g. Contrast the level and nature of access to sexual healthcare services, including STI or HIV testing and diagnoses, between Syrian and Turkish young adult males.
h. Recommend targeted interventions and policy modifications to improve access to sexual healthcare services for Syrian and Turkish young adult males in Istanbul, addressing identified barriers and enhancing sexual health literacy.

Chapter 3: Methodology

3.1- Introduction to Methods

This chapter details the type of the study with its methods and instrument that were used to grasp ideas on the associated factors to access to sexual healthcare among 18-29 years old males residing in Istanbul. The methodology was designed to explore the barriers and enablers that affect the utilization of and access to sexual healthcare services within our specified demographic group. This methodological framework sets the stage for the empirical findings that follow and ensures that the study's objectives are addressed systematically and rigorously.

3.2- Study Setting and Description of the Study Population

The study was conducted in Istanbul, Türkiye, utilizing an online questionnaire survey administered primarily through the tool "Nettskjema." This tool, developed by the IT center at UiO, is designed for user-friendliness, security, and privacy, adhering to Norwegian privacy requirements. It enables respondents to submit answers anonymously from mobile devices without collecting IP or email addresses.

Istanbul's selection was strategic; it's a highly populated metropolitan area with a high number of registered Syrian refugees, facilitating swift recruitment. (58) As of 2020, Istanbul's population exceeded 15 million. By May 2021, Türkiye hosted over 3.67 million Syrian refugees, with more than 525,000 registered in Istanbul, representing 14.3% of the city's population and 3.5% of Istanbul's total population. Specifically, male Syrian refugees aged 19-29 constituted 13.7% of the refugee population, equating to around 72,000 individuals within the target age range for the study. (59) Top of Form

3.3- Research Design

This was a cross-sectional study in its design. The design was chosen for its efficiency in measuring the prevalence of access to sexual healthcare services and the associated variables at a single point in time.(60) This method was particularly suitable for achieving the

objectives of this research, as it facilitated the concurrent examination of various factors, which is both time-saving and cost-effective, aligning well with the constraints of a self-funded master's degree thesis project.(60)

3.3.1- Participant Selection and Sampling

The nettskjema survey link was distributed on social media groups in Istanbul, especially Syrian support groups. Convenience sampling and snowballing techniques were utilized, with online anonymous survey to ensure inclusivity. Measures were taken to ensure the confidentiality of participant data throughout the study.

3.3.2- Inclusion and Exclusion Criteria

The inclusion criteria for participants in this study were as follows:

a- Either Syrian refugees or Turkish nationals.
b- Males aged between 18 and 29 years.
c- Residency in Istanbul for a period exceeding 12 months.
d- Ability to read Turkish or Arabic and provide informed consent.

The exclusion criteria specified that individuals would not be considered for participation if they:

a- Had never been sexually active, meaning no sexual experiences at all.
b- Refused to provide informed consent.

3.3.3- Measurements

Access to sexual healthcare: Initially, we defined access to sexual healthcare primarily as the use of HIV or STI testing services within the 12 months prior to the study among sexually active individuals. However, due to lower-than-expected prevalence rates, we adjusted our approach. We expanded the definition of access to include any of the following within the previous 12 months: STI testing, HIV testing, visiting an assigned family doctor, or receipt of an STI diagnosis. Each of these indicators represents a distinct path for individuals to

potentially obtain sexual healthcare services they need. We then created a new binary variable denoting “access” within 12 months' timeframe.

Sexual health literacy: To effectively measure sexual health literacy among the study participants, we employed a dual approach. STI knowledge was assessed through a set of five questions adapted from previous literature, tailored to our target population.(61, 62) These included two incorrect statements (“All sexually transmitted infections can be cured”; “You can tell from someone’s appearance whether they have HIV or not”) and two correct statements (“It is easier to contract HIV if a person has another sexually transmitted infection” and “Hepatitis B is a sexually transmitted infection”). Answer options included true, false, or not sure. Participants' responses were scored for accuracy, with a correct answer receiving one point and an incorrect or unsure response receiving zero. One multiple-answer question challenged participants' knowledge on the routes of transmission of HIV. They were asked to identify correct transmission modes of HIV/AIDS from—contaminated needles, mosquito bites, from mother to baby during birth, hugging, kissing, vaginal sex, anal sex, shared toothbrush, and shared bathroom. Among the options, only five were true, including contaminated needles, vertical transmission to the baby during birth, vaginal or anal sex, and shared toothbrush. A correct answer for each question scored 1 point, and an incorrect answer or “not sure” answer scored 0. Overall, the knowledge score was measured on a scale from 0 to 9.

In addition, the health literacy questionnaire (HLQ) was used to assess subjects’ general health literacy level within various dimensions. The development of this instrument was guided by the WHO definition of health literacy and has been out since 2013. (38,39,41,42) It is a self-report questionnaire of high quality and encompasses 44 items within 9 scales. Each of these scales measures a distinct construct of general health literacy. Subjects will be asked to indicate how strongly they “disagree” or “agree” with a statement or to indicate how “difficult” or “easy” a given task for them is. The first five domains had possible scores from 1 to 4 while the other four scales had a possible range score from 1 to 5.

Self-Perceived Risk: Participants were asked to rate their perceived risk of contracting STIs on a scale from 1 (no risk) to 5 (very high risk).

Sexual Health and Indicators of Risk: We measured participants' sexual activity (both ever and in the last 12 months) and a range of risk indicators. These indicators included the number of sexual partners (in the last 12 months), engagement in unprotected sexual encounters, (ever and in the previous 12 months) use of dating applications or websites for casual sexual encounters (cybersex) , frequency of condom use (on a Likert scale from 1 to 5 with never to always) , self or partner's use of alcohol use before or during sexual encounters and age at first sexual experience. ('early sexual debut' was considered when 1st sexual experience was before the age of 16.)

Utilization of Healthcare Services: This aspect focused on the use of STI/HIV services and visits to primary care physicians (PCPs) in the past 12 months. It also included whether participants had been diagnosed with an STI within the same timeframe.

Preferred Source for Knowledge: A single-answer question was used to determine the preferred sources for sexual health information. Options included various traditional and digital media such as radio, television, mobile phones (SMS or calls), social media, email, posters, leaflets, billboards, and community events. These sources were then categorized into four groups: health professionals, digital media, traditional media, and other sources including family and community.

Perceived Barriers to SHC: Participants were asked to identify barriers they faced in accessing sexual health services. These barriers were categorized into three levels:

1- **Individual-Level Barriers:** Included lack of knowledge about where to access services, affordability, fear of a positive test result, and perceived irrelevance of sexual health services.
2- **Social-Level Barriers:** Encompassed negative attitudes of healthcare workers and feelings of shyness or embarrassment.
3- **Structural-Level Barriers:** Addressed the lack of nearby health centers, concerns about confidentiality and privacy, perceived low quality of healthcare services, and time constraints.

3.4- Sample Size and Power Calculation

By using a confidence level of 95 % and allowing a margin of error of 5 % (alpha= 0.05) with a 50 % population proportion; using “Raosoft” online sample size calculator software, the sample size for this study has been calculated as 386. However, after handling of data, the 282 were initially included into the study where the analysis for sexual health literacy was done. Then only 224 participants were included in the other analyses, due to certain limitations mentioned ahead.

3.5- Ethical Considerations

This study did not receive any financing.

License for use of HLQ was purchased and included in appendices. (*Appendix-A*)

Recruitment of participants did not commence until final written ethics approval had been received from the Regional Registered Research Ethical Committees (REC) of Oslo. *(Appendix-B)*. Additionally, ethical clearance was obtained from Yeditepe University in Türkiye *(Appendix-C)* and Oslo University in Norway. *(Appendix-D)*

We also received acceptance from the NSD (Norwegian Centre for Research Data) in Norway to handle data correctly and protect the privacy and confidentiality of participants. *(Appendix-E)* No personal data were handled at all during the study.

Participants were given an information leaflet at invitation where the study was explained in detail. *(Appendix-F)* Also, an informed consent form *(Appendix-G)* at the beginning of the online survey, where the study was explained, including what it entails, its outcomes, and possible risks to them. These were included in Arabic or Turkish languages. Participants were informed of their right to leave the study at any time. Submission of results was the cut-off point for them to cancel their participation.

Storage of data was done using TSD. The TSD (in Norwegian, Service for Sensitive Data) is designed for storing and post- processing sensitive data in compliance with the Norwegian “Personal Data Act” and “Health Research Act”. TSD is developed and maintained by USIT at the University of Oslo and supports research activities run at Norwegian public institutions.

TSD provides virtual servers, backup-systems, storage-systems, high performance computing facility and databases all confined within in a highly secured environment. Storage in TSD makes use of a dedicated portion of the storage facility “Astrastore” provided by NorSTore, the Norwegian data infrastructure provider. In addition, TSD offers a large set of software tools for data management and analysis. TSD allows secure data harvesting, time-point studies and strong identification of the respondents.

3.6- Pilot Study and Main Data Collection

After a nearly year-long setback caused by the outbreak of COVID-19 and having to leave Norway due to visa issues, our research journey took an unexpected turn. We initially attempted to conduct our research in Türkiye, but it faced rejection by the ethical committee for reasons that remained somewhat unclear. Subsequently, we underwent a third transformation of the project by shifting the focus to a comparative study between Syrian and Turkish populations. This entire process spanned a year, filled with challenges and adaptations.

Following the acquisition of all necessary ethical clearances, we conducted a pilot study to validate our research instrument and methodology. Between September 20, 2021, and October 1, 2021, we recruited 30 participants. The analysis of this pilot study uncovered some questions that were not well-understood by the participants, prompting us to refine and clarify them. Additionally, we decided to remove one question related to HIV from the instrument. We assessed Cronbach's alpha for all scales, which yielded promising results, affirming the reliability of our measurements. Adaptations to the instrument were done such as deleting some questions. For example, a separate question about perceived risk to HIV was deleted.

With the instrument finalized (*Appendix-H*), data collection began in early January 2022 and continued until mid-April 2022. We primarily used social media groups and convenience sampling. However, engaging Syrian participants proved to be challenging initially, as many were hesitant to participate due to the sensitive nature of the topic or concerns about data privacy, despite our assurances of stringent data protection measures. To overcome this hurdle, I, as the lead researcher, ventured into areas densely populated by Syrians, changing

locations daily to diversify our sample. Despite the difficulties, by mid-April, we successfully completed this demanding phase of our research.

The anonymous, online, and sensitive characteristics of this study has made it not possible to assess a response rate. However, there was a sensed difficulty in recruiting participants, particularly Syrians, most likely due to lack of trust, concerns about sensitive data and sensitivity of the topic itself. Despite knowing and speaking the Arabic language at a native level, despite explaining the study and data handling, and despite the detailed study leaflets and informed consents, these challenges continued throughout the recruitment phase

3.7- Data Analysis

We employed a diverse array of statistical methods to conduct a comprehensive analysis of our dataset. Initially, we collected 355 survey responses, but to maintain data integrity, we rigorously applied inclusion and exclusion criteria. Respondents who completed the survey abruptly (within less than 2-3 minutes) or displayed indications of straight lining in their responses were excluded from our refined dataset. Consequently, the initial literacy description analysis was conducted on a final dataset consisting of 282 participants. Subsequently, the sample size was further reduced to 224 individuals who reported engaging in sexual activity within the preceding 12 months.

To analyze our study population comprehensively, we utilized descriptive statistics encompassing sociodemographic factors, health literacy, knowledge levels, risk perception, service utilization, perceived barriers, and sexual healthcare access. This systematic approach facilitated meaningful comparisons between Turkish and Syrian individuals, identifying disparities. For categorical variables, we employed chi-square tests, while for continuous variables that did not follow a normal distribution, we utilized the Mann-Whitney U test.

To handle literacy scores, we computed the mean of individual scales, yielding a composite mean score for each dimension. This mean score served as the cutoff value for literacy levels within each domain, with a score at or above considered adequate and below considered inadequate. Similarly, for knowledge, we determined the total score, using the median as the cutoff value for levels.

Associations with access were initially assessed using crude odds ratios and 95% confidence intervals through binary logistic regression analysis. However, to account for the effects of other variables and respect the theoretical and statistical significance of predictor variables, we included most of the variables in our model, encompassing age, income, education, relationship status, health insurance, knowledge, risk perception, source of knowledge, literacy, and access as outcome variables. This comprehensive approach revealed significant results among the adjusted odds ratios and unearthed previously masked findings.

For analysis, version 22 of IBM SPSS was utilized. A p-value of 0.05 was employed to denote significance.

Chapter 4: Results

4.1- Introductory Overview

The main purpose of this study was to examine recent access to sexual healthcare among 18–29-year-old males living in Istanbul, and ultimately assess its predictors and compare the results between Syrian refugees and Turkish locals. For these purposes, we measured general health literacy levels, knowledge about STIs and HIV, risk perception for STIs acquisition, sexual behaviors, utilization of healthcare services such as Testing for HIV or other STIs, perceived barriers for these services in addition to demographic and socioeconomic factors. This chapter presents the results of the study, which were obtained through an anonymous e-survey administered with a sample size of 282 participants. The findings of this study are significant because they provide insight regarding the knowledge, practices, and risk perceptions among vulnerable population, which can inform the development of targeted literacy and interventions programs and public sexual health promotion campaigns. The results are presented in six main sections that would cover the characteristics of the sample, sexual health literacy, sexual practices and risk perception, perceived barriers to utilization of services, and access to SHC services.

4.2- Participants' Socioeconomic and Demographic Traits

The total number of male participants included in the study was 282. Participants' demographic, socioeconomic and health-related details balanced against their ethnicity are displayed in *Table-1*.

Among 282 participants, 160 (56.7%) were Syrian, while the remaining 122 (43.3%) were Turkish. All participants were males as indicated by study inclusion criteria. Among 282 participants, 160 (56.7%) were Syrian, while the remaining 122 (43.3%) were Turkish. All participants were males as indicated by study inclusion criteria. As for the age distribution within the sample, 55% of participants fell into the 18 to 25 age group, with the remaining 45% aged between 26 and 29. A similar age distribution was noted among Syrian and Turkish ethnic subgroups.

Table 1: Sociodemographic and Economic Characteristics of Sample (N=282)

Variable	Category	**Turkish**	**Syrian**	Total
Age group	18 – 25 years	63(38.5%)	92 (39.4%)	155 (55%)
	26 – 29 years	59 (61.5%)	68 (60.6%)	127 (45%)
Relationship Status	In a relationship	24 (19.7%)	45 (28.1%)	69 (24.5%)
	Not in relationship	98 (80.3%)	115(71.9%)	213 (75.5%)
Education [(1)] *	< High School	10 (8.2%)	36 (22.5%)	46 (16.3%)
	= High School	31 (25.4%)	58 (36.3%)	89 (31.8%)
	> High School	81 (66.4%)	66 (41.3%)	147 (52.1%)
Monthly Income*	No or Low	10 (8.2%)	49 (30.6%)	59 (20.9%)
	Moderate	81 (66.4%)	91 (56.9%)	172 (61.0%)
	High	31 (25.4%)	20 (12.5%)	51 (18.1%)
Health Coverage*	State Insurance	96 (78.7%)	58 (36.3%)	154 (54.6%)
	Private Insurance	31 (25.4%)	26 (16.3%)	57 (20.2%)
	None	14 (11.5%)	76 (47.5%)	90 (31.9%)

***Note**: Analysis was performed on 282 participants including 122 Turkish and 160 Syrian participants. Chi-square tests were conducted to examine the significance of differences between these two ethnic cohorts with a chosen significance level of $p < 0.05$.*

Regarding relationship status, the majority (75.5%) were not in committed relationships, including those who were single, separated, or divorced. Only a minority (24.5%) reported

being in a partnership, marriage, or a relationship with a sole partner. The breakdown of relationship status was similar for both Turkish (80.3% single, separated, or divorced) and Syrian (71.9% single, separated, or divorced) participants.

When looking at educational attainment of the two groups, distinct results emerged. In contrast to 66.4% of Turks and 41.2% of Syrians, totaling 52.1% of the sample, who had completed higher education (Bachelor's, Master's, Doctorate, or equivalent degrees), a smaller proportion of Turkish participants (8.2%) and a larger percentage of Syrian participants (22.5%) did not complete primary school or receive formal education. Meanwhile, 25.4% of Turks and 36.2% of Syrians reported that they had completed high school or its equivalent as their highest achieved educational level

As for individual monthly income, 20.9% of participants, including 8.2% of Turkish participants and 30.8% of Syrian participants, had no or low monthly income, equivalent to or less than the minimum wage at the time of data collection. The majority of 61% had a moderate monthly income, with 66.4% of Turkish and 56.9% of Syrian participants falling into this income range. Only a small percentage (18.1%) were considered to have a high monthly income, including 25.4% of Turks and 12.5% of Syrians.

There was also a significant difference in health insurance coverage, with 88.5% of Turkish participants reporting possession of private and/or social health insurance, compared to a lower percentage of 52.5% among Syrian participants. This also translated with 29.5% of our participants reporting absence of health insurance coverage State Insurance was significantly more common among Turkish participants (78.7%) compared to Syrian participants (36.3%). Meanwhile, private insurance was reported by 25.4% of Turkish participants and 16.3% of Syrian participants.

As shown in Table 1, we conducted Pearson chi-square test of significance and examined the association between participants' ethnicity and sociodemographic variables. The p-value for the chi-square statistic was less than 0.001, indicating a significant difference in the distributions of highest completed educational level, possession of state health insurance, lacking any form of health coverage and individual monthly income between Turkish and

Syrian participants. Thus, there is a significant association between ethnicity and these sociodemographic factors.

We also evaluated self-reported Turkish language proficiency among Syrian participants. Out of the 160 participants, 23.8% reported a good to proficient level, 23.1% reported a poor level, while more than half of the group reported a fair level of proficiency.

4.3- Sexual Health Literacy Analysis

4.3.1- Overview of Sexual Health Literacy

In this section of the thesis, we explore the participants' sexual health, aiming to gain valuable insights into their behaviors and practices, particularly in terms of accessing sexual healthcare services. We begin by examining their knowledge levels related to STIs and HIV and identifying their preferred sources of knowledge. We then conduct an in-depth analysis of their performance across various domains of general health literacy, as measured by the HLQ assessment tool. Finally, we investigate the variations in sexual health literacy within different sociodemographic characteristics while identifying significant associates. Throughout this part, we draw comparisons between Syrian and Turkish cohorts.

4.3.2- Sexual Health Knowledge

Four statements were asked whether true or false. 68.9 % of Turks and 61.3 % of Syrians knew that not all STIs can be cured. In contrast to a majority approximating 80 % of Turkish individuals who knew that one cannot tell from someone’s appearance whether they have HIV or not, around 52 % of Syrian participants were either unsure or answered incorrectly. Interestingly, most of the participants, including 66.4 % of Turks and 85 % of Syrians, did not know or were not sure whether having a concurrent STI other than HIV would make it easier to contract HIV, and only 49.2 % of Turks and 34.4% of Syrians knew that Hepatitis B is a sexually transmitted infection.

In addition to these statements, participants’ knowledge of five different transmission routes of HIV were assessed using a multiple answer question. Most of our participants were

able to identify contaminated needles and vaginal / anal routes of sex as virus spreading mechanisms. In addition, only minorities in each group answered incorrectly and picked mosquito bites, hugging, kissing, or sharing a bathroom as infection transfer routes. However, less than half of the individuals within both cohorts, comprising remarkably around 47% and 43% of the Turks and Syrians respectively, failed to identify the possibility of vertical transmission of HIV from mother to baby during vaginal delivery. Peculiarly, our results show that those who truly knew that HIV can be contagious through sharing a toothbrush were less than 30 % and 17% of the subjects from Türkiye and Syria respectively.

4.3.3- Composite Score of Knowledge Regarding STIs and HIV

To attain a more generalized understanding about participants' knowledge levels of STIs, we constructed a composite score scale with possible range from zero to nine by adding one point for every correct answer. Total knowledge scores were computed among overall sample, and as the data did not show normal distribution, the median score was used as a cutoff value with scores equal to or above it indicates adequate to high level and scores below it considered inadequate.

The overall median knowledge score was 5.0, with an interquartile range (IQR) ranging from 3.0 to 7.0. Among Turkish participants, the median score was 6.0, with an IQR from 4.0 to 7.0, while Syrian participants had a lower median score of 4.0, with an IQR ranging from 3.0 to 6.0. We performed a Mann-Whitney U test (M-W test) to examine variations in knowledge scores between Turkish nationals and Syrian refugees in our sample. We observed a U statistic of 7245.5, along with a p-value less than 0.001, indicating a highly significant difference. The Cohen's d effect size estimate for standardized mean scores was 0.48, which is remarkably close to the benchmark of 0.5, signifying a moderate effect size. Our findings suggest that the difference in STI knowledge between Turkish and Syrian groups in noteworthy but not substantially huge.

4.3.4- Preferred Sources of Sexual Health Knowledge

Understanding that participants' information seeking behaviour for sexual topics play a crucial role in accessing reliable and high-quality health information, which can consequently impact one's access to sexual healthcare services, we instructed each survey respondent to specify their single preferred source of information. The respondents' answers were reorganized into four distinct categories: healthcare professionals, digital media, traditional media, and family/community sources. This categorization allowed for a more structured analysis of their preferred sources of information which was followed by conduction of chi-square tests to assess differences in preferred sources between Syrian and Turkish participants.

Among 282 participants, 45.8% favored digital sources, such as mobile phones or internet websites, as their preferred choice for obtaining sexual health knowledge. Remarkably, Syrian respondents demonstrated a greater preference toward digital sources (54.9%) compared to Turkish participants (33.9%). Doctors and other healthcare professionals were also a popular choice for both groups, though Turks (52.5%) presented a higher inclination towards this category compared to Syrian individuals (23.3%). Meanwhile, traditional media such as newspapers or posters and community and private sources including family and friends were less favored by both cohorts. The Pearson chi-square tests confirmed a statistically significant association between nationality and preferred sources for sexual health knowledge ($\chi^2 = 29.03$, $p < 0.001$).

4.3.5- General Health Literacy Across Nine Domains

In our research, we implemented the 42-item Health Literacy Questionnaire to evaluate health literacy in the context of sexual health, adhering to the original questionnaire design without any customizations. Originally designed for general health literacy, we chose to apply the HLQ to explore various dimensions of health literacy within the sphere of sexual health. This comprehensive questionnaire, with its broad range of questions, provided valuable insights into participants' sexual healthcare. It thoroughly explored their grasp of healthcare concepts, their knowledge base, their aptitude for navigating health-related information, their

interactions with healthcare providers, and their proficiency in self-health management. We followed the guidelines of data handling and analysis to aggregate interrelated items into nine different sets where each represent a different literacy dimension.

Participants' performances within each literacy domain are detailed in Figure-1 and Table-2. Figure-1 displays histograms illustrating the distribution of the nine literacy scales mean scores among participants. Meanwhile, Table-2 presents a comprehensive complementary examination of the scales detailing descriptive metrics including mean scores, standard deviations, 95% confidence intervals, standard error of the mean, variance, skewness and kurtosis of the scales. Together, they provide a clear understanding of the overall health literacy performance exhibited by our study participants.

It is worth noting that the data within most of the scales did not follow the normal pattern, however, we relied on the robustness of the HLQ measures to represent central tendency.

Within the scales of range 1-4, there was a somewhat consistent and moderately perceived response pattern among the 282 participants. Within the five scales, the scores ranged from 2.29 to 2.70 for means and 0.56 to 0.66 for standard deviations. In the domains of 'Feeling understood and supported by healthcare professionals,' and 'Having sufficient information to manage health', participants exhibited mean scores around 2.3, closer to the lower end of the scales (minimum of 1), indicating relatively low literacy levels within these two dimensions, and standard deviations of 0.66 and 0.57 respectively. However, they were less likely to face problems with appraising or comprehending health information (mean 2.7, SD 0.56) or actively manage their health (mean 2.56, SD 0.56) and perceived a moderate level of social support when sick (mean 2.68, SD 0.59).

As we shift our focus to the scales with a range of 1-5, it becomes evident that moderately low levels of health literacy were observed across the four dimensions. Despite standard deviations approximating 0.8 to 0.9, indicating some variability in scores among participants within these domains, the calculated mean scores consistently leaned towards the lower ends of the scales. With means ranging from 2.65 to 2.78, it is apparent that participants in this study reported moderately low levels of ability to actively engage with healthcare

professionals, navigate the healthcare system, find reliable and trustworthy information, and understand health information sufficiently to make informed decisions.

4.3.6- Variations of Literacy Levels

To better understand health literacy, we categorized participants into ‘Adequate’ and ‘Inadequate’ levels across all nine domains. The mean value for each scale was used as a cutoff level for performance with those scoring below the sample mean allocated into ‘inadequate’ level within the respective scale. This categorization allows us to take a closer look on those who are lagging behind and opens doors for interventions.

Among the 282 participants, we noticed that literacy levels displayed a fair degree of uniformity, with most scales exhibiting a rather even distribution between those with 'adequate' and 'inadequate' levels. However, a few domains showed distinct patterns. For instance, the aspects related to 'feeling supported by healthcare professionals' and 'having adequate health management information.' Approximately 57% and 62% of the participants leaned towards 'inadequate' literacy here, suggesting some challenges that are more likely tı be general among the population.

Effects of Sociodemographic Traits on Literacy Levels

We examined the effect of participants’ sociodemographic traits and associations with their levels of literacy across the nine scales. The distributions of literacy levels were analyzed within ethnicity, age, education, income, relationship status, and access to health coverage groups. Pearson Chi-square tests were utilized to compare associations. Across our entire study cohort, we observed a clear and consistent trend: individuals of Turkish ethnicity, those in older age brackets, those with higher income levels, those with more advanced education, and those with access to health coverage consistently demonstrated higher health literacy levels. For instance, within the domain of ‘actively managing health’, it was notable that more than two-thirds to three-quarters of participants falling into any of the subgroups linked to Turkish ethnicity, moderate to high income, tertiary education completion, age above 25, or access to health coverage demonstrated adequate literacy in this aspect. On the contrary, participants identifying as Syrian, those with lower income, less educational attainment,

younger age, or lacking insurance faced more pronounced challenges in actively managing their health. This pattern persisted across all nine scales and was marked by both its constancy and statistical significance. ($p < 0.001$)

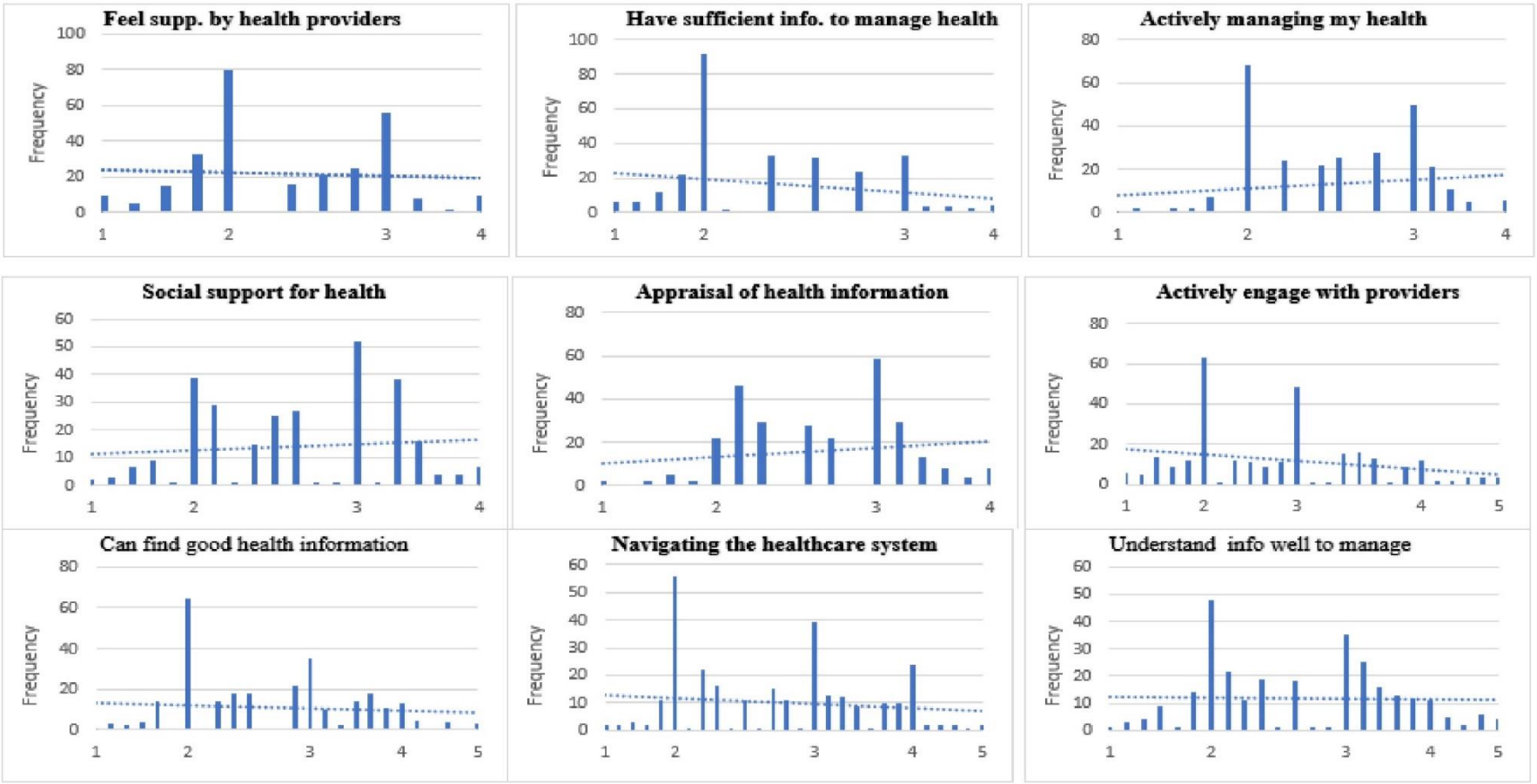
In the context of relationship status, our analysis revealed that it did not exert a statistically significant influence on the literacy levels observed within any of the nine scales.

Table 2: Descriptives of Nine Health Literacy Domains (N=282)

Literacy Domain:	Mean ± SD	(95% CI)	SEM	Var	Skewness (SE)	Kurtosis (SE)
Scale Range: 1-4						
Feel supported by providers	2.33 ± .66	(2.25, 2.41)	.04	.44	.363 (.145)	-.104 (.289)
Have sufficient info. to manage health	2.29 ± .57	(2.22, 2.36)	.03	.33	.545 (.145)	.635 (.289)
Actively manage health	2.56 ± .56	(2.50, 2.63)	.03	.32	.173 (.145)	-.324 (.289)
Social support	2.68 ± .59	(2.61, 2.75)	.04	.35	-.141 (.145)	-.408 (.289)
Appraisal of health info.	2.70 ± .56	(2.61, 2.77)	.03	.31	-.042 (.145)	-.042 (.145)
Scale Range: 1-5						
Active engagement with prof.	2.65 ± .88	(2.55, 2.76)	.05	.77	.058 (.289)	.058 (.289)
Navigating the healthcare system	2.78 ± .78	(2.69, 2.87)	.05	.61	.356 (.145)	.356 (.145)
Ability to find good information	2.75 ± .80	(2.65, 2.84)	.05	.64	-.393 (.289)	-.393 (.289)
Understand info enough to act	2.78 ± .82	(2.68, 2.88)	.05	.67	.408 (.145)	.408 (.145)

Table Note: *Analysis was conducted with a sample of 282 participants, and the nine literacy domains were derived from the 42-item Health Literacy Questionnaire. Abbreviations utilized in the table: N (Sample Size), SD (Standard Deviation), CI (Confidence Interval), SEM (Standard Error of the Mean), Var (Variance), SE (Standard Error).*

Figure* 1*: Distribution of Participants by Health Literacy Scores (N=282)



4.4- Risk Indicators and Risk Perception: A Comprehensive Examination

4.4.1- Overview of Sexual Behaviours and Risk Perception

In this section of the thesis, we delve into the behaviors and practices of participants that are pertinent to the risk of contracting HIV and other STIs. Investigating these actual risk factors and the associated practices is imperative for our analysis of accessibility to HIV/STI testing within our sample. To enhance the accuracy of our data and mitigate any potential recall bias, we restricted our queries in parts of our instrument to events and behaviors that occurred during the year immediately preceding participation in the study. Hence, we limited our analysis to individuals who confirmed their sexual activity within the year preceding the study (N'=224). Only two significant risk indicators, namely early sexual debut and engaging in unprotected sexual relationships with unfamiliar partners, both extending beyond the 12-month timeframe preceding participation, were retained in the study due to their significant relevance in assessing actual risk.

4.4.2- Analysis of Sexual Behaviors and Indicators of HIV/STI

Among the 224 participants, 102 were Turkish nationals, while 122 were Syrian.

A notable proportion of individuals within our ethnic subgroups, comprising 20 participants from the Turkish cohort and 29 participants from the Syrian cohort, reported an early sexual debut, accounting for 21.9% of the total sample. A somewhat higher percentage of participants (30.4%), including 33 Turks and 35 Syrians, disclosed that they had engaged in unprotected sexual intercourse more than 12 months prior to the study. The Pearson chi-square test was performed and showed no significant association between either early sexual debut or engaging in unprotected sexual relationships with unfamiliar partners over a year before the study, as indicated by $\chi^2 = 0.56$, $p = 0.45$, and $\chi^2 = 0.35$, $p = 0.55$, respectively.

Table 3 displays a comparative analysis of self-reported risk indicators for any STI, including HIV, within the 12 months leading up to the study, and shows differences between

Syrian and Turkish participants. Clearly, a substantial majority of 73.7% of participants reported having multiple sexual partners, with 133 individuals reporting numbers ranging from two to nine, and another 32 participants reporting having ten or more sexual partners. In contrast, only 26.3% of the participants reported having a single sexual partner.

A similar distribution was observed within ethnic subgroups, with 30.4% of Turkish nationals and 23.0% of Syrians reporting a single sexual partner, while the greater portion had multiple sexual partners. Moreover, a comparable distribution of participants engaging in unprotected sex with unfamiliar partners was noted between Turkish and Syrian individuals, with roughly half of both groups participating in this behavior. Regarding alcohol use, 47.8% of our survey respondents, including 55.9% of Turks and 45.0% of Syrians, reported either their own or their partners' use of alcohol during or just before a sexual encounter. Also, approximately 55% of both Syrian and Turkish cohorts reported using apps or websites for the purpose of hookups. As for the frequency of condom use, approximately 23% of the participants reported consistent condom use. The same percentage was seen within the two subgroups. In contrast, 11.8% of Turkish young males and a higher percentage of 21.3% of Syrians reported never using condoms despite having sexual relationships in the 12 months prior to the study. The largest portion of participants, however, accounting for around 60%, reported inconsistent condom use, with responses ranging from seldom to mostly. Among those who never used condoms, 57.9% did not have a relationship, while the rest were married or partnered.

Table 3: Comparison of STI/HIV risk exposure indicators between Syrian and Turkish participants over the preceding 12 months (N=224)

			Ethnic Group			Pearson Chi-square	
			Turkish	**Syrian**	Total	**χ^2 value**	***p*-value**
Number of sexual partners	1	N	31	28	59	1.82	0.40
		%	30,4%	23,0%	26,3%		
	2 – 9	N	56	77	133		
		%	54,9%	63,1%	59,4%		
	≥ 10	N	15	17	32		
		%	14,7%	13,9%	14,3%		
Unprotected casual sex	Yes	N	49	67	116	0.07	0.30
		%	48.0%	54.9%	51.8%		
	No	N	53	55	108		
		%	52.0%	45.1%	48.2%		
Alcohol-enhanced sex	Yes	N	57	50	107	4.94	**0.03***
		%	55.9%	41.0%	47.8%		
	No	N	45	72	117		
		%	44.1%	59.0%	52.2%		
Cybersex	Yes	N	56	70	126	0.14	0.71
		%	54.9 %	57.4%	56.3%		
	No	N	46	52	98		
		%	45.1%	42.6%	43.8%		
Frequency of Condom Use	Never	N	12	26	38	3.88	0.14
		%	11.8%	21.3%	17.0%		
	Inconsistent	N	66	67	133		
		%	64.7%	54.9%	59.4%		
	Always	N	24	29	53		
		%	23.5%	23.8%	23.7%		

Note: The analysis was conducted on a sample size of N'=224, consisting of individuals who reported being sexually active within the last 12 months before the study. Significant values are shown in bold. Abbreviations used in the table (n) Count; (%) Percentage within Ethnic Group; (χ^2) Pearson Chi-Square Test Value; p-value) Probability Value Significant with $p < 0.05$.

4.4.3- Total Exposure Risk and Risk Perception

Participants' Actual total exposure risk score was calculated based on their responses to our risk assessment items related to indicators of risk for STIs. Each component was assigned a specific weight to reflect its relative importance in contributing to overall STI risk. The individual component scores were then aggregated to produce an overall Actual Composite Risk score, which ranged from 6 to 18.

When looking at the composite actual risk perception score for the entire sample, we find that the median score is consistently 18.0, with an interquartile range (IQR) of 5.0. This signifies that approximately half of the participants recorded scores between 13.0 and 18.0, while the other half ranged from 18.0 to 23.0. Upon examining the Turkish and Syrian subgroups, we observe that both groups share an identical median score of 18.0. However, there is a minor distinction in their IQR. Specifically, the Turkish group maintains a tighter IQR of 5.0, whereas the Syrian group displays a slightly broader IQR of 7.0. This indicates that, despite their matching median scores, the Syrians demonstrate somewhat greater variability in their actual risk when compared to the Turkish cohort.

We conducted the Mann-Whitney U test to compare the Sexual Risk Total Scores between Syrian and Turkish groups, and the results showed no statistically significant difference ($p = 0.464$).

We used the median score of 18.0 as a cutoff value for actual risk levels, with participants scoring less than 18 considered to have 'minimal to low actual risk' while those scoring 18 or above considered to have 'moderate to high risk'. We found that a comparable proportion of individuals within subgroups, approximately 57% of both Turks and Syrians, had a moderate to high actual risk for STIs.

The results for perception of risk varied among subgroups. For Turkish participants, we observed that 21.6% perceived their risk as minimal, 36.3% as low, 26.5% as moderate, and 15.7% as high to very high. Among Syrian participants, 15.6% reported minimal risk, 45.9% perceived low risk, 33.6% considered their risk as moderate, and only 4.9% categorized it as high to very high. A chi-square test was performed to examine the association between perceived risk levels and nationality of origin, revealing a significant relationship ($\chi^2 = 9.82$,

df = 3, p = 0.020). Following, we regrouped the variable into two levels, with 60% of the 242 participants perceiving their risk as 'minimal to low,' with similar proportions observed among both Syrians and Turks. The remaining participants perceived their risk for getting infected with any STI as 'moderate to very high.' However, when the variable was grouped into "minimal to low" and "moderate to high" levels of perceived risk, a chi-square test showed no significant association between these risk levels and nationality of origin ($\chi^2 = 0.305$, df = 1, p = 0.581). This demonstrates that the relationship between ethnicity and perceived risk among our sample participants is influenced by the specific way the data is categorized.

We further explored the relationship between perceived risk levels and actual risk levels, while comparing across the ethnicity of participants. Among Turkish participants with minimal to low actual risk, a substantial 70.5% perceived their risk as similarly low, while 29.5% surprisingly considered it moderate to high. For those with moderate to high actual risk, 48.3% remarkably saw their risk as minimal to low, while 51.7% acknowledged it as moderate-to-high. As for Syrian participants, among those with low actual risk, the majority of around 70% perceived their risk as minimal to low, while around 30% viewed it as moderate-to-high. In contrast, among those with moderate to high actual risk, a majority of 55.1% saw their risk as minimal to low, while 44.9% characterized it as moderate-to-high.

Pearson chi-square tests were utilized to assess significant discrepancies between participants' actual risk and their perceived risk for STI acquisition. Within the Turkish group, a substantial difference was observed, indicating a significant discrepancy ($\chi^2 = 5.05$, p = 0.025). Conversely, in the Syrian cohort, the test did not reveal a significant divergence ($\chi^2 = 2.75$, p = 0.10). Across the total sample of 242 participants, a notable difference was identified, yielding $\chi^2 = 7.52$, p = 0.006.

4.5- Utilization of Healthcare Services

4.5.1- Overview of Section

In this section, we examined the use of three different, yet interrelated sexual healthcare services, including testing for HIV, testing for other STIs, and visiting assigned primary care

providers. We believe that the evaluation of the utilization of these services would provide valuable insights into access to sexual healthcare. We also examined the perceived barriers to these services that were reported by our study participants.

4.5.2- Disparities in Sexual Healthcare Services Utilization

Table 4 compares healthcare service utilization among the Syrian and Turkish populations, based on a sample size of N' = 224 individuals who reported being sexually active within the last 12 months prior to the study. Based on participants' self-reported use of services, we were able to calculate utilization rates of services within two-time frames; within 12 months prior to the study and all-time and portray some significant disparities in use.

Utilization of HIV Testing Services: 100 participants out of 224 reported receiving a test for HIV at an earlier point in time. This translated into an overall all-time HIV-testing rate of 47%. However, a much lower rate of only 19.2% was revealed within the 12 months frame. In addition, Turks had higher rates of HIV testing with 49% ever testing and 19.2% recently testing, in comparison to Syrians who had 41% and 12.3% all-time and recent testing rates respectively.

Utilization of Other STI Testing Services*:* Our survey found that the utilization rates for other STI tests were lower when compared to HIV testing. In terms of all-time testing, minimal variations were seen between the groups, with an overall rate of around 38% and a consistent rate within both Turkish and Syrian populations. Also, within the previous 12 months, 14.7% of all participants, comprising roughly 20% of Turks and 10.7% of Syrians, reported receiving recent tests.

Utilization of Primary Care Provider Services: Our analysis found that almost 25% of our sample, including around 35% of Turks and 15% of Syrians, had sought care at their assigned primary care provider within the 12 months prior to the study. Similarly, with an overall utilization rate of 47.8%, a major difference was noted between subgroups, as all-time primary care service utilization rates approximated 70% among Turks and a much lower rate below 30% among Syrians.

Table 4: Utilization of healthcare services among Syrian and Turkish participants (N=224)

Service	Utilization Period	Utilization Rate			Pearson Chi-square	
		Overall	Turkish	Syrian	χ^2 value	*p*-value
HIV Testing	Within 12 months	19.2%	27.5%	12.3%	8.23	**0.004***
	All-time	44.6%	49.0%	41.0%	1.45	0.228
Other STIs Testing	Within 12 months	14.7%	19.6%	10.7%	3.54	0.060
	All-time	37.9%	38.2%	37.7%	0.007	0.935
Family Doctor Visit	Within 12 months	24.1%	35.3%	14.8%	10.76	**<.001****
	All-time	47.8%	69.6%	29.5%	35.8	**< .001****

Note: The analysis was conducted on a sample size of N'=224, consisting of individuals who reported being sexually active within the last 12 months before the study. Significant values are shown in bold.

Abbreviations used in the table: (HIV) Human Immuno-deficiency Virus, (STI) Sexually Transmitted Infection, (χ^2) Pearson Chi-Square Test Value, (p-value) Probability Value, Significant with $p < 0.05$, (*) Significant at 0.01 level, (**) Significant at 0.001 level.

4.5.3 - Perceived Barriers to Sexual Healthcare

We investigated participants' perceptions regarding barriers to sexual healthcare, such as HIV or STI testing, and compared the results between Turkish and Syrian subgroups. This analysis yielded distinctive results. We organized these barriers into three primary categories: Individual, structural, and social barriers. The results are summarized in Table 5.

Starting with individual-level barriers, significant differences were observed between the two subgroups. Among 224 participants, almost 61% reported having at least one of the several individual barriers, with around 53% of Turkish and 67% of Syrian participants,

respectively. A Chi-Square analysis highlighted these differences with a statistically significant result ($\chi^2 = 4.74$, $p = 0.03$). Syrians demonstrated a higher level of uncertainty (27.9%) in accessing services compared to their Turkish counterparts (11.8%), a difference supported by a Chi-Square value of 8.83 ($p = 0.003$). Concerns regarding the affordability of services were more pronounced among Syrians (32.8%) than Turks (15.7%), supported by a Chi-Square value of 8.66 ($p = 0.003$). Additionally, 28.4% of Turkish and 15.6% of Syrian individuals feared a positive test result ($\chi^2 = 5.45$, $p = 0.020$). Regarding the perceived importance of sexual health services, 31.15% of Syrians viewed them as unimportant, while only 10.78% of Turkish participants shared this view, resulting in a highly significant Chi-Square value of 13.48 ($p < 0.001$).

Regarding structural-level barriers, around 45% of the total sample reported perceiving at least one barrier within this category. Disparities between Turkish and Syrian participants were noted, with 52.9% of Turks encountering at least one structural barrier compared to 38.5% of Syrians ($\chi^2 = 4.66$, $p = 0.031$). Turkish participants faced more pronounced time constraints (19.61%) compared to Syrians (5.74%), revealing a significant difference supported by a Chi-Square value of 10.08 ($p = 0.001$). Concerns regarding the proximity of health centers showed minimal disparity, with 8.04% of Turks and 7.84% of Syrians reporting this issue, without a statistically significant variation ($\chi^2 = 0.009$, $p = 0.923$). Moreover, Turks raised concerns about the lack of confidentiality or privacy, with 23.8% expressing worry, while 29.4% of Syrians shared similar concerns; however, statistical analysis did not reveal significant differences ($\chi^2 = 3.43$, $p = 0.064$). Regarding the quality of healthcare services, 17.86% of Turkish participants and 18.63% of Syrians shared concerns in this regard, with no statistically significant variations ($\chi^2 = 0.076$, $p = 0.783$).

Shifting our focus to social barriers, 61.16% of all participants reported facing at least one social barrier, including 47% of Turks and 73% of Syrians. Such a high contrast was supported with a highly significant Chi-Square value of 15.678 ($p < 0.001$). Around one third of Syrians, compared to a quarter of Turkish individuals, reported concerns regarding negative attitudes from healthcare workers ($\chi^2 = 5.74$, $p = 0.017$). Additionally, most participants (55%) expressed feeling shy or embarrassed as a social barrier, with Turkish participants (42.2%) experiencing this less frequently than Syrians (66.4%) ($\chi^2 = 13.205$, $p < 0.001$)

Table 5: Variation of access to sexual healthcare across perceived barriers (N=224)

Perceived Barrier		n	%	Access		No Access		Pearson chi square	
				n	%	n	%	χ^2)	p-value
Having at least 1 individual barrier	**Yes**	136	60.7%	39	45.9%	97	69.8%	12.63	**<0.001**
	No	88	39.3%	46	54.1%	42	30.2%		
'I don't know where to get these services.'	**Yes**	7	8.2%	39	28.1%	46	20.5%	12.7	**<0.001**
	No	78	91.8%	100	71.9%	178	79.5%		
'I cannot afford the cost of these services.'	**Yes**	9	10.6%	47	33.8%	56	25.0%	15.17	**<0.001**
	No	76	89.4%	92	66.2%	168	75.0%		
'I am afraid positive test result.'	**Yes**	22	25.9%	26	18.7%	48	21.4%	1.61	0.20
	No	63	74.1%	113	81.3%	176	78.6%		
'I don't think they are important."	**Yes**	7	8.2%	42	30.2%	49	21.9%	14.91	**<0.001**
	No	78	91.8%	97	69.8%	175	78.1%		
Having at least 1 Structural barrier	**Yes**	101	45.1%	42	49.4%	59	57.6%	1.03	0.309
	No	123	54.9%	43	50.6%	80	42.4%		
'Lack of center in close proximity.'	**Yes**	9	10.6%	9	6.5%	18	8.0%	1.28	0.272
	No	76	89.4%	130	93.5%	206	92.0%		
'Lack of confidentiality / privacy.'	**Yes**	21	24.7%	32	23.0%	53	23.7%	0.08	0.77
	No	64	75.3%	107	77.0%	171	76.3%		
'Low-quality health care services.'	**Yes**	17	20.0%	23	16.5%	40	17.9%	0.43	0.51
	No	68	80.0%	116	83.5%	184	82.1%		
'I don't have time to go.'	**Yes**	12	14.1%	15	10.8%	27	12.1%	0.55	0.46
	No	73	85.9%	124	89.2%	197	87.9%		
Having at least 1 Social barrier	**Yes**	137	61.2%	44	51.8%	93	66.9%	5.09	**0.024**
	No	87	38.8%	41	48.2%	46	33.1%		
'Negative attitudes of healthcare workers.'	**Yes**	18	21.2%	41	29.5%	59	26.3%	1.88	0.17
	No	67	78.8%	98	70.5%	165	73.7%		
'Feeling shy or embarrassed.'	**Yes**	40	47.1%	84	60.4%	124	55.4%	3.81	**0.05**
	No	45	52.9%	55	39.6%	100	44.6%		

Table Note: The analysis was conducted on a sample size of N'=224, consisting of individuals who reported being sexually active within the last 12 months before the study. Significant values are shown in bold. Abbreviations used in the table: (χ^2) Pearson Chi-Square Test Value, (p-value) Probability Value, Significant with $p < 0.05$, (*) Significant at 0.01 level, (**) Significant at 0.001 level.

4.6- Regression Analyses

4.6.1- Introduction to Section

In this last section of our analysis, we present the interesting interplay of our primary variables and the accessibility of SHC services, which are expected to exert a substantial impact. To achieve our objective, we conducted a multivariable logistic regression analysis to investigate the factors that influence the level of sexual health knowledge and perception of susceptibility to STIs. Furthermore, we employed another multivariable logistic regression analysis to explore the factors that are significantly associated with accessing services. A performance summary is provided for each model, and a summary of key findings is presented after. By the end of this section, a comprehensive understanding of the various dynamics that either facilitate or impede the access of young adult males to sexual healthcare will be established.

In our study, we used two approaches for analysis. First, we applied simplified models with the backward Wald technique to explore how knowledge and perceived risk levels are related. This method helped us focus on specific aspects of health behavior. Second, we used a comprehensive model to understand the broader factors affecting access to healthcare. This approach gave us a more complete picture of what influences people's ability to get healthcare services. The results are presented in this section.

4.6.2- Determinants of Sexual Health Knowledge (STI knowledge)

The model presented in Table 5 has undergone 26 iterations and achieved an accuracy of 79%. This is a relatively high accuracy rate, suggesting that the model is effective in predicting knowledge level. The Leme-show test, with a p-value of 0.943, indicates a good fit of the model with a supporting Chi-square statistic at 2. 89. The model's likelihood ratio is 196.98, and it has a Cox & Snell R Square value of 0.384 and a Nagelkerke R Square value of 0.515. These R Square values suggest that 38.4 % to 41.5% of the variance in knowledge levels could be explained and indicate a moderate explanatory power of the model. The

Omnibus test shows a p-value of less than 0.001, which indicates that the model as a whole is statistically significant.

In this analysis, several important determinants of knowledge were identified. First, the active engagement with healthcare professionals significantly enhances knowledge levels. Individuals who actively engage with their healthcare providers are about twice as likely to have higher knowledge levels, as indicated by an Odds Ratio of 2.16 and a p-value of 0.04. Similarly, having a history of HIV testing is a strong predictor of increased knowledge, with those who have been tested for HIV more than three times as likely to have greater knowledge (OR = 3.37, $p < 0.01$). The condom uses related risk standardized score also shows a significant negative correlation with knowledge; thus, higher risk pertaining to less use of condoms is associated with lower knowledge about STIs (OR= 0.43)
a higher reliance on protection using condoms is associated with higher knowledge). Furthermore, tertiary education plays a crucial role, with individuals holding such education being over four times more likely to have higher knowledge levels (OR = 4.23, $p < 0.001$). Other factors like age group, social barriers, income, and private insurance were also examined, but they did not show a statistically significant impact on knowledge in this model.

4.6.3- Significant Associations of Perceived Risk to STIs

The model for determining the factors influencing perceived risk achieved is presented in Table 7. It has an accuracy of 72.3%, indicating a solid predictive capability. The Lemeshow test result of 0.783 and a Chi-square statistic of 4.76 suggest a good fit for the model. The likelihood ratio (L) of 239.0, along with Cox & Snell and Nagelkerke R Square values of 0.240 and 0.325 respectively, demonstrate a moderate level of explanatory power with 24% to 32.5% of variance explained by our model.

Adequate knowledge about STIs significantly increased the likelihood of perceiving a higher risk (OR = 1.78, p = 0.01), while those with an adequate appraisal of health information were less likely to perceive a high risk (OR = 0.29, p = 0.01). Experiencing social barriers was linked to a higher perceived risk (OR = 2.12, p = 0.03), and interestingly, having private insurance correlated with a lower perceived risk (OR = 0.38, p = 0.03). Participants

who had been tested for STIs other than HIV at least once, or who had visited a family doctor ever, were more likely to perceive a higher risk, though these associations were marginally significant. Lastly, engaging in unprotected casual sex in the past 12 months was a strong predictor of higher perceived risk (OR = 3.62, $p < 0.001$).

Table 6: Simplified model for associated factors to sexual health knowledge

Category (*Reference*)	Wald	df	Sig.	OR	95% CI LB	95% CI UB
Can actively engage w/ doctors *(ref. Inadequate)*	4.25	1	**0.04**	2.16	1.04	4.47
Tested for HIV Ever *(ref. never)*	10.16	1	**<0.01**	3.37	1.60	7.10
Condom Use Risk z-score [(1)]	17.72	1	**<0.001**	0.43	0.29	0.64
Perceived at least 1 social- level barrier *(ref. No)*	3.03	1	0.08	0.52	0.25	1.09
Age group: 26-29 years *(ref. 18-24)*	5.15	1	**0.02**	2.50	1.13	5.50
Tertiary education *(ref. ≤ high school)*	12.78	1	**<0.001**	4.23	1.92	9.31
Moderate income *(ref. other)*	1.84	1	0.18	1.72	0.79	3.74
Private Insurance *(ref. other)*	2.15	1	0.14	2.08	0.78	5.57
Constant	9.71	1	<0.01	0.21		

***Note**: Multivariable logistic regression analysis was run on 224 participants. Wald backward conditional iterations was used. Significant associations at $p \leq 0.05$. Significant results are marked with bold.*

***Abbreviations**: Wald (Wald chi-square test statistic), df (Degrees of freedom), Sig (Significance level or p-value), CI (Confidence Interval), LB (Lower Bound of the Confidence Interval), UB (Upper Bound of the Confidence Interval), ref. (Reference category or group in analysis).*

(1) Condom Uses Risk Z score: This represents a standardized score for the frequency of condom use, with the score being inverted. Higher values indicate less frequent use of condoms, whereas lower values indicate more frequent use.

Table 7: Simplified model for associated factors of perceived risk for STIs (N=224)

Category (*Reference*)	Wald	Df	Sig.	OR	95% CI	
					LB	UB
Adequate knowledge level *(ref. Inadequate)*	7,02	1	**0,01**	1,78	1,16	2,72
Actively managing health *(ref. Inadequate)*	2,83	1	0,09	2,19	0,88	5,43
Adequate appraisal of info. *(ref. Inadequate)*	7,05	1	**0,01**	0,29	0,12	0,72
Perceived social barriers *(ref. No)*	4,85	1	**0,03**	2,12	1,09	4,13
Private insurance (ref. No private)	4,97	1	**0,03**	0,38	0,16	0,89
Tested for STIs other than HIV, ever *(ref. Never)*	3,60	1	**0,05**	1,97	0,98	3,97
Visited family doctor ever *(ref. never)*	2,97	1	0,09	1,88	0,92	3,86
Unprotected Casual Sex in previous 12 months *(ref. No)*	13,86	1	**<0,001**	3,62	1,84	7,14
Alcohol-enhanced sex in previous 12 months *(ref. No)*	3,22	1	0,07	0,56	0,29	1,06
Constant	8,46	1	<0,01	0,24		

Note: Multivariable logistic regression analysis was run on 224 participants. Wald backward conditional iterations was used. Significant associations at p ≤ 0.05. Significant results are marked with bold.

Abbreviations: *Wald (Wald chi-square test statistic), df (Degrees of freedom), Sig (Significance level or p-value), CI (Confidence Interval), LB (Lower Bound of the Confidence Interval), UB (Upper Bound of the Confidence Interval), ref. (Reference category or group in analysis).*

4.6.4- Associations of Access to Sexual Healthcare

Table 8: Associations of various factors with access to sexual healthcare: Analysis of bivariate and multivariate models in a study of 224 Participants

Categories *(Reference)*	Bivariate			Multivariate		
	COR	**95% CI**	**p-value**	**AOR**	**95% CI**	**p-value**
Ethnicity: Syrian (*ref. Turkish*)	**0.30**	(0.17 - 0.53)	< 0.001	0.42	(0.15, 1.23)	0.113
Age Group: 26-29 years (*ref. 18-25*)	**1.39**	(1.22 – 1.58)	< 0.001	**1.26**	(1.04 - 1.52)	0.018
In a relationship (*ref. not in a relationship*)	0.89	(0.47 - 1.69)	0.719	0.86	(0.31 - 2.36)	0.765
Education level: Tertiary *(ref. ≤ high school)*	**5.47**	(2.96 - 10.10)	< 0.001	2.02	(0.69 - 5.97)	0.201
Low income *(ref. high income)*	**0.09**	(0.03 - 0.31)	< 0.001	0.32	(0.06 - 1.84)	0.201
Moderate income *(ref. high income)*	**0.50**	(0.27 - 0.92)	0.025	0.73	(0.25 - 2.10)	0.554
State health coverage *(ref. no state insurance.)*	**1.94**	(1.10 - 3.42)	0.021	0.50	(0.15 - 1.63)	0.250
Private health coverage *(ref. no private insurance.)*	**5.95**	(2.95 - 12.02)	< 0.001	2.13	(0.75 - 6.09)	0.158
Source of knowledge: Health prof. *(ref. all other sources)*	**2.75**	(1.57 - 4.84)	< 0.001	0.99	(0.44 - 2.25)	0.985
Low perceived susceptibility to STIs *(ref. moderate-high)*	**0.33**	(0.19 - 0.60)	< 0.001	0.43	(0.17 - 1.08)	0.071
Minimal perceived susceptibility to STIs *(ref. moderate-high)*	**0.43**	(0.22 - 0.83)	0.013	1.87	(0.58 - 6.09)	0.298
Perceived at least 1 individual barrier *(ref. no)*	**0.37**	(0.21 - 0.64)	< 0.001	**0.42**	(0.19 - 0.93)	0.033
Perceived at least 1 structural barrier *(ref. no)*	1.32	(0.77 - 2.28)	0.310	1.41	(0.59 - 3.37)	0.437
Perceived at least 1 social barrier *(ref. no)*	**0.53**	(0.30 - 0.92)	0.025	0.88	(0.37 - 2.12)	0.779
Sexual health knowledge z-score *(ref. -)*	**3.11**	(2.16 - 4.48)	< 0.001	**2.84**	(1.56 - 5.14)	<0.001

Moderate to high actual risk *(ref. low)*	1.15	(0.67 - 1.99)	0.615	**3.05**	(1.23 - 7.55)	0.016
Feel supp. by health providers *(ref. inadequate)*	1.68	(0.97 - 2.89)	0.062	2.43	(0.78 - 7.57)	0.127
Having sufficient info. to manage health *(ref. inadequate)*	1.24	(0.72 - 2.13)	0.449	0.83	(0.25 - 2.71)	0.752
Actively managing health *(ref. inadequate)*	1.07	(0.63 - 1.85)	0.793	**4.01**	(1.09 - 14.76)	0.037
Social support for health *(ref. inadequate)*	0.99	(0.57 - 1.70)	0.957	0.37	(0.12 - 1.12)	0.079
Appraisal of health info. *(ref. inadequate)*	0.85	(0.50 - 1.47)	0.570	**0.12**	(0.03 - 0.54)	0.006
Can actively engage w/ providers *(ref. inadequate)*	1.34	(0.78 - 2.31)	0.289	0.83	(0.20 - 3.50)	0.797
Navigating the healthcare system ***(ref. inadequate)***	1.51	(0.87 - 2.59)	0.140	0.81	(0.22 - 3.04)	0.756
Finding good health information *(ref. inadequate)*	1.63	(0.94 - 2.81)	0.081	0.28	(0.06 - 1.41)	0.122
Understand info. well to act *(ref. inadequate)*	1.31	(0.76 – 2.24)	0.336	1.76	(0.49 - 6.40)	0.390

Table Note: This analysis was conducted on a sample of 224 participants. Values with a p-value of 0.05 or less, indicating statistical significance, are highlighted in bold for ease of reference. Abbreviations used in the table include AOR (Adjusted Odds Ratio), CR (Crude Ratio), CI (Confidence Interval), and p-value (probability value).

Each of the variables included in the study has theoretical significance. All of these factors have been linked by several studies to healthcare access or utilization. Dismissing any of these factors on the basis of statistical significance alone would become indefensible. Moreover, in doing so, we would have failed to recognize valuable insights that we only gained from the fair interplay of all the parameters together.

The table provides a summary of the findings of our univariate and multivariate regression analyses. It includes crude and adjusted odds ratios, together with their corresponding p-values and confidence intervals at the 95% level of confidence. The results revealed that ethnicity plays a significant role, with Syrians having lower odds of accessing sexual healthcare compared to Turks in the bivariate analysis (Crude Odds Ratio [COR] = 0.30), but

this association was not significant in the multivariate analysis (Adjusted Odds Ratio [AOR] = 0.42). Also, Age was another influential factor; individuals aged 26-29 had higher odds of accessing healthcare compared to the 18-25 age group (AOR = 1.26). However, being in a relationship did not significantly affect healthcare access in either analysis. Similarly, Education level emerged as a key determinant, with those having tertiary education more likely to access healthcare (COR = 5.47), although this association weakened after adjustment (AOR = 2.02). Income level was a significant predictor in the bivariate analysis, particularly for low income (COR = 0.09) and moderate income (COR = 0.50) groups, but this significance was not retained in the multivariate model.

Health coverage, both state and private, initially showed a strong association with increased access to healthcare (State: COR = 1.94; Private: COR = 5.95), but these associations were not statistically significant in the multivariate analysis.

The role of health professionals as a knowledge source was noteworthy in the bivariate model (COR = 2.75), but not in the multivariate model (AOR = 0.99). Perceived susceptibility to STIs was significantly associated with healthcare access, especially for those with low (COR = 0.33) and minimal (COR = 0.43) perceived susceptibility.

Individual barriers significantly reduced the likelihood of accessing healthcare (COR = 0.37, AOR = 0.42), whereas structural and social barriers did not show a significant association in either analysis.

Participants with higher sexual health knowledge scores were more likely to access healthcare (AOR = 2.84). Those with moderate to high actual risk were more likely to access healthcare in the multivariate model (AOR = 3.05).

In the adjusted analysis, actively managing health was significantly associated with increased access to healthcare services, with adjusted OR of 4.01 (95% CI: 1.09 to 14.76, p = 0.037). However, this association was not significant in the unadjusted model. Similarly, for appraisal of health information, the adjusted model showed a significant association, with an AOR of 0.12 (95% CI: 0.03 to 0.54, p = 0.006), indicating that adequate appraisal of health information was associated with reduced access to healthcare services. Again, this relationship was not significant in the unadjusted analysis.

Chapter 5: Discussion

5.1- Overview of Study and Results

Ensuring access to sexual healthcare services is a cornerstone of advancing public health, with significant implications for both individuals and communities. Our study aimed to explore factors impacting sexual healthcare access among 18-29-year-old Turkish and Syrian males in Istanbul and compare these factors between the two ethnic groups. The analysis included 224 participants, 120 Syrian and 102 Turkish, but was limited in ethnic subgroup analysis due to methodological constraints. Nevertheless, we conducted an integrated analysis to identify key factors and challenges affecting their engagement with sexual healthcare. This study fills a crucial research gap and provides valuable insights for public health policy, healthcare services, and tailored interventions, including sexual literacy programs, to meet the specific needs of these communities.

We examined a comprehensive network of individual behaviors, sociodemographic factors, perceived barriers, and health literacy. Age emerged as a significant determinant, with older individuals accessing healthcare more consistently in both unadjusted and adjusted analyses. Ethnicity appeared to influence access initially, showing higher utilization among Turkish men compared to Syrians; however, this difference was not significant after adjusting for confounders. While educational attainment was strongly associated with access in unadjusted analysis, its impact diminished when considering other variables. Sexual health knowledge, health literacy skills, and actual risk for STIs drove access, but perceived susceptibility lost significance after adjustment, revealing hidden effects. Our findings also showed that individual-level barrier perceptions significantly hindered access, highlighting areas needing intervention.

We addressed research questions about barriers and facilitators to SHC among young Turkish and Syrian males in Istanbul, discussing the implications of these findings. We organized our discussion into themes around socioeconomic factors, sexual health literacy, behaviors, perceived STI susceptibility, and perceived SHC barriers, building on existing

research and suggesting policy changes. Finally, we outlined study limitations and proposed future research directions.

5.2- Access to Sexual Healthcare: Unveiling Ethnic Disparities

Our study reveals a concerning low prevalence of access to sexual healthcare services, at 39.7%, suggesting significant obstacles for a large population segment. This issue is exacerbated by disparities between ethnic groups, with a 52.9% access rate among Turks versus only 25% among Syrian refugees.

Our results are consistent with those from an IPSOS survey, which identified "access to treatment" as a significant challenge within the Turkish healthcare system. (63) A recent study presenting data from Çukurova University Medical School Hospital in Adana shows that late presentations to HIV care have increased in Türkiye. The rate of "late diagnosed" cases increased significantly during the pandemic to 55.8% compared to 44.2% previously, and the rate of "advanced diagnosed" cases increased significantly from 20.6% to 30.1%.(64) Additionally, projections by Yaylali E. suggest a 27% rise in Türkiye's HIV incidence by 2040, emphasizing the urgency of addressing these healthcare access issues.(65) Furthermore, 31.4% of a 4761 sample reported never having tested for HIV in a study that looked at awareness and knowledge about pre-exposure prophylaxis (PrEP) and HIV testing among Türkiye's MSM population.(66) In the same study, younger and Arabic-speaking youth reported lower rates of HIV testing, with a p-value of 0.001, indicating disparities in interaction with services among ethnic minorities. Disparities in access to healthcare, including sexual healthcare among Syrian refugees in Türkiye, were also noted, supporting our findings. (22-24,30-33,68,70)

The consequences of limited access to testing for STIs and HIV, in particular, and other sexual health services in general, are significant. Individuals who can't easily get healthcare services are more likely to have infections that go unnoticed and untreated, increasing the risk of unknowingly spreading these diseases, many of which are silent and do not show symptoms.(64,69) Broader impacts mark risks for unintended pregnancies, untreated STIs, and delayed diagnoses, which can ultimately affect the sexual, emotional, psychological, and physical well-being of the population.(64,69) A continuum of SHC access disparities could

exacerbate the gap, especially for marginalized communities like refugees, who often face additional challenges regarding healthcare.(22-24,30-33, 64,67,68,70,71) These findings underscore the importance of inclusive policies and targeted interventions to ensure equitable access to sexual health services for all individuals, regardless of their background or circumstances, as a key step towards achieving social justice and inclusivity.

Overall, our research aligns with the literature in emphasizing the critical need for substantial improvements in testing and diagnosis methods. Using the data at hand, we will further investigate the factors significantly impacting service utilization and access to sexual healthcare, concluding with suggested interventions to alleviate the identified issues.

5.3- Theme: Socioeconomic Characteristics and Access to SHC

Here we discuss the relationship between access to SHC and sociodemographic and economic factors, including ethnicity, age, education, income, health coverage, and Turkish-language proficiency. In our initial findings, ethnicity stood out as a significant factor influencing sexual healthcare access, with Syrian participants less likely to seek services compared to their Turkish counterparts. However, this clear-cut distinction based on ethnicity diminished when we considered additional factors, indicating a web of complex influences beyond ethnic lines. Similarly, the effects that education, income, and health insurance seemed to have on healthcare access were lessened when a multivariate analysis was used, showing that the factors that affect healthcare use are complex and linked.

In contrast, age remained a consistent predictor in our adjusted model, with older individuals in our study demonstrating a higher propensity for healthcare engagement. This sole sociodemographic variable's enduring significance suggests that age-related factors uniquely contribute to the pursuit of sexual healthcare services.

5.4- Theme: Sexual Health Literacy and Access to SHC

5.4.1- Introduction to theme

This section delves into the impact of STI knowledge and health literacy on engaging with sexual healthcare services. We focus on the crucial role of sexual health literacy in enabling access and discuss the wider implications of our findings.

5.4.2- Sexual Health Knowledge: Mapping ‘Power Blocks’

Understanding the factors influencing sexual health knowledge is vital for comprehending its effect on healthcare access and informing effective educational strategies and policies. In Table 6, our multivariate logistic regression analysis identified significant associations with 'knowledge.' Active engagement with healthcare providers and tertiary education completion correlated with higher sexual health knowledge. Having ever tested for HIV was also linked to enhanced knowledge, while a higher risk of contracting STIs was associated with lower knowledge. Relationship status significantly influenced sexual health knowledge, implying that existing knowledge impacts awareness.

The ability to actively engage with healthcare providers significantly correlated with higher sexual health knowledge. Other factors, such as sufficient information to manage health, actively managing health, and finding good health information, showed higher odds but did not reach statistical significance. Our study thus suggests a significant link between improved sexual health knowledge and adequate health literacy skills, especially in active interaction. This aligns with Albright AE and Allen RS's findings that higher literacy is linked to greater HPV knowledge and fewer misconceptions. (71) Active interaction between patients and health professionals is a crucial factor in enhancing awareness and knowledge about STIs.

Patient-provider relationships and active patient involvement significantly impact health outcomes and reduce healthcare costs. (72, 73) Dang et al. found that trust in the clinician-patient relationship is most effective when initiated early, through reassurances, encouraging

questions, explaining test results, using non-judgmental language, and discussing treatment goals. (72) Patient attitudes, such as willingness to ask questions, are crucial for enhancing involvement in healthcare. Tools like 'AskShareKnow' and online applications have been beneficial in preparing patients for appointments. (73) Implementing similar tools could increase perceived engagement and empower patients in their sexual well-being.

To enhance patient engagement and sexual health knowledge, educational programs for both patients and healthcare professionals are vital. Healthcare providers should be trained to use welcoming, considerate language, particularly for sensitive topics like sexual health. Patients could benefit from educational courses on appropriate language use and the importance of active engagement.

Language barriers, especially among Syrian refugees, are another key element to target for enhancing sexual health knowledge. More than half of Syrian participants reported only moderate Turkish language proficiency, impacting the patient-provider relationship, as language barriers can hinder healthcare access and information for Syrian refugees and immigrants. (22-24,30-33,68,70)

Other predictors of sexual health knowledge included tertiary education (OR = 5.547) and relying on healthcare professionals as the primary knowledge source. However, Turkish males were more likely to choose health professionals, while Syrian immigrants preferred digital media. Addressing these preferences is crucial for preventing misinformation and ensuring access to quality health information in culturally and linguistically acceptable ways. (81)

Individuals with higher STI risk showed a negative association with knowledge, indicating a need for proactive STI-information seeking behavior. Prior HIV testing experiences also correlated with better sexual health knowledge, emphasizing the role of healthcare services in providing comprehensive information.

Relationship status was inversely related to sexual health knowledge (OR = 0.321), suggesting that individuals in relationships might seek less information about sexual health. Healthcare providers and educators should address this gap by providing accessible resources to those in relationships.

In conclusion, proactive engagement with health professionals, education, and previous service utilization are key. Targeting high-risk individuals with interactive educational programs could raise awareness and access to SHC among young men in Istanbul.

5.4.4- The Power of Knowledge: An Empowering Force to Sexual Well-being

Previously, we explored how health literacy influences knowledge. Here, we examine the critical link between knowledge and service access.

Our study highlights sexual health knowledge's pivotal role in facilitating access. The final model showed a significant association between total knowledge score and access probability, with enhanced knowledge almost tripling the likelihood of engaging in sexual healthcare. This underscores knowledge's transformative power in promoting interaction with medical services and aligns with research on sexual healthcare determinants. (86-90) Good knowledge facilitates informed decisions for sexual well-being.

Designing and implementing awareness and sexual education initiatives could be transformative in enhancing service access, reflecting in community health promotion and reduced healthcare costs. Notably, Turkish participants were more knowledgeable about STIs than Syrians, indicating a need for culturally appropriate education in refugees' mother tongue.

The acceptance and effectiveness of such programs among the targeted population warrant further study. We did not test variables on sexual education program acceptance or effectiveness but built on our findings through literature review.

5.4.5- Effectiveness and Acceptability of Sexual Educational Programs

The effectiveness and acceptability of sexual educational programs in Türkiye might be questionable to many. Experimental research conducted by Ataman H. and Kömürcü N. assessed the effectiveness of sexual and reproductive health education among Turkish adolescents who used alcohol or illegal drugs. It divided the adolescents into control and

treatment groups based on the frequency of training. The findings revealed that repeated education significantly improved sexual health knowledge, underscoring the importance of ongoing and repetitive education in this context.(87) Another experimental study, with a substantial sample size of 3941 participants, implemented in Mersin in Türkiye, highlighted the importance of delivering accurate sexual and reproductive health information to young individuals.(89) It revealed the positive influence of peer-led training programs, where forty-one volunteer students from Mersin University School of Medicine served as peer trainers in the city, each educating a group of 100 peers aged between 15 and 20 years. The results emphasized the effectiveness of such initiatives in enhancing awareness and knowledge about sexual and reproductive health, particularly during the vulnerable period of adolescence. (90)

Among Syrian refugee adolescent girls in Lebanon, following a peer-led model to develop a SRH pertaining to this population was advised due to its effectiveness. However, challenges related to community acceptance of such programs were pointed out. (89) Another recent study in Lebanon investigated the effectiveness of formal education and communication with mothers on sexual health knowledge, particularly HIV knowledge, among adolescent displaced Syrian girls. This study confirmed that education plays a significant role in increasing HIV knowledge, even outweighing the influence of maternal communication. (90) A separate study in Türkiye revealed a positive correlation between fathers' attitudes regarding their parental role in sex education and their actual sexual communication with their children. (91)

Therefore, we conclude that the effectiveness of sexual education programs could be maximized when introduced at an early age within the formal education system, as well as through implementation of peer-led initiatives. Nevertheless, challenges related to parental and societal acceptance of such programs continue to be a topic of debate.

Moreover, our results are consistent and adds to a body of existing research that has examined the determinants of sexual healthcare. (79,93,94–99) There appear to be a consensus on the facilitating effect of good knowledge on seeking sexual healthcare based on an informed decision of individuals to look after their sexual well-being. Conversely, it is harder to use these services when limited awareness and knowledge exist. (94–99)

On the other hand, the incongruity between knowledge acquisition and subsequent behavioral action is exemplified in the study conducted by Hatice Bal-Yılmaz et al. (80) Their research revealed that although nursing students in Izmir, Türkiye, demonstrated a substantial understanding of Human Papilloma Virus, this did not translate into a commensurate rate of HPV vaccination, with a striking 98% abstaining from the vaccine.

The later findings touch on what's known as the Knowledge-Action Gap. It's a state where an increase in knowledge, through education, for example, does not inherently result in behavioral action and the implementation of suggested health policies. (108) Thus, it underscores the complexity of translating theory into practical knowledge, which is pivotal for individuals to take care of their well-being. Most importantly, this aligns with our argument that interactive awareness and educational programs could help fill the gap. Hence, it becomes crucial to assess further and research the effectiveness and acceptance of interactive and proactive sexual health educational programs as they seem valuable for tailoring targeted educational and resonating interventions.

As we move forwards and discuss other interrelated factors, one shall develop a more comprehensive understanding of sexual health literacy and access to SHC.

5.4.6- The Role of Health Literacy

The health literacy scales revealed, as well, interesting insights about the functional skills that are involved in the process that eventually leads to service utilization. These scales are part of the HLQ, which is a multidimensional tool that assess various aspects of health literacy. (89) Overall, participants demonstrated moderate performance across the nine health literacy domains, indicating room for improvement in health literacy skills within the context of sexual health. It was remarkable that Turkish participants had significantly higher health literacy levels compared to their Syrian counterparts. Furthermore, significant variations in health literacy were evident across various socioeconomic factors, including age, income, education, and access to health coverage. Notably, two dimensions, “actively managing my health” and “appraisal of health information”, showed distinct associations with chances of accessing sexual healthcare services.

Managing Sexual Health: Proactive Self-efficacy

Among the literacy domains, "Actively Managing Health" demonstrated a remarkable positive association with access (AOR: 3.63, 95% CI: 0.99 - 13.25, p = 0.05). Adequate skills in actively managing own health had an isolated effect that increased the likelihood of access above three folds. This is indeed an interesting finding. This scale particularly looks at whether individuals are proactive about their health and feel responsible for their decisions. (98-100)

Our results indicate that adults who take a proactive approach to their well-being and prioritize their sexual health are more likely to seek medical advice and consult with health professionals for timely diagnoses and treatments. Adequate skills within this domain are most likely to be associated with preventive healthcare, as people would be engaged with regular activities that have beneficial outcomes on health such utilization of services and continuity of care. Therefore, we highlight the need for enhancing target groups' sense of responsibility through active self-management and self-care training programs, as well as the imperative for adapting the methods of delivery of suitable sexual care services to better align with their needs.

Our findings are consistent with those of other studies that have looked into the connection between access to SHC services and proactive self-management. According to Camara et al.'s study (100) on self-collection for HPV-based cervical screening, people are more likely to participate in health-promoting behaviors, such as cancer screening, when they have access to the knowledge and tools needed to actively manage their health. Moreover, an app-based self-management program was tested in a randomized controlled pilot study conducted by Shim et al. (101) for people living with HIV (PLWH) during the COVID-19 pandemic. The research proved the efficacy of digital health tools in enhancing self-management behaviors and increasing self-efficacy. The study also confirmed reduction of perceived stigma among PLWH. These outcomes, along with ours, provide more evidence on the positive impact of proactive sexual health management on healthcare access. However, the advancement in self-management practices through app-based programs parallels a need for digital sexual health literacy, which reinforces the necessity to adapt to the evolving scenario of the delivery of healthcare services and information.

Appraisal of Sexual Health Information

'Appraisal of health information' dimension of health literacy significantly associates with access to sexual health care. Individuals who evaluate, select and understand health information would be able to reach an informed decision to act upon their health needs, gains and losses.

As healthcare shifts toward a patient-centered care and digital and online health information proliferate, the significance of health information appraisal as an essential skill for individuals seeking sexual healthcare becomes increasingly important. (81,82, 105)

However, the result was surprising as the association between these two factors exhibited a reduced odds ratio, indicating that individuals with higher skills in appraising health information had a lower likelihood of accessing sexual health care services. This finding is indeed unexpected, as one might anticipate a higher utilization of services among those with superior information appraisal skills.

The appraisal of health information, as described in the literature, encompasses several key competencies that enable individuals to effectively evaluate, select, and apply health-related knowledge for informed decision-making (83) Basic competence serves as the fundamental building block, equipping individuals with essential literacy and information literacy skills, as well as basic knowledge about sexual health. An open-minded perspective enables the lookup of information through applying one's predisposition competence. Identification competency acts as an essential guide to identify the relevant pieces of information before subsequently assessing the quality of said information through checkpoints. Finally, selection competency represents where one must carefully choose suitable resources. By applying appraisal competencies to sexual literacy individuals become equipped to make informed decisions about their sexual health and access sexual healthcare effectively.

As we compare our findings with other relevant studies, we observe a more complex relationship. For example, appraising general health information tends to be more associated with visits to primary care services, thus indicating a positive connection between appraisal skills and healthcare access. (105) On the other hand, another study found that limited literacy and appraisal competencies associated with increased unwanted visits to emergency

service. (106) This suggests that the link between appraisal and healthcare access can be different depending on the type of healthcare service being looked at. Individuals with strong appraisal skills may be more inclined to seek primary care services for general health concerns, as they are better equipped to assess and understand their own health status. However, when it comes to urgent or acute medical needs, these individuals may rely on their appraisal skills to determine if a visit to the emergency room is necessary, potentially resulting in fewer visits overall. As such, the relationship between appraisal skills and healthcare access is complex and can vary depending on the specific healthcare service being considered and the perceived need for the service.

Moving closer, when it comes to sexual healthcare services, it becomes extremely important to explore how individuals perceive and evaluate these services, as well as how they perceive their need for them. (83,110) Our findings indicate that the appraisal of sexual health information was linked to a reduced likelihood of seeking sexual healthcare services. This prompts us to examine the potential reasons behind this phenomenon.

For example, in one study that explored sexual health literacy-related factors in university students, having symptoms was a significant associated appraisal factor. (107-109) As we draw parallels to our own findings, it becomes evident that certain individuals may view STI testing services primarily as diagnostic tools for symptomatic sexually transmitted diseases. Consequently, the absence of symptoms might lead to a significant underestimation of their perceived need for sexual healthcare services. In line with this concept, in the same study, participants indicated that the number and relevance of symptoms, their severity, and potential outcomes significantly guided their decision to seek healthcare. Therefore, raising awareness regarding the fact that many sexually transmitted infections can be symptom-free and go unnoticed becomes very critical. Thus, we emphasize the significance of advocating for regular testing, irrespective of the presence of symptoms. We also emphasize the importance of examining the factors that influence the perceived need for sexual healthcare services. Further qualitative research on the perspectives of Turkish and Syrian young adult males regarding testing and sexual healthcare is needed.

Our findings gain further context from Weinstein and colleagues' critical analysis, which reviewed around 60 studies exploring the connection between risk perception and behavior.

(109) This extensive review identified significant conceptual and methodological issues in much of the existing research. Key problems included a reliance on correlational data and a lack of control for past behavior, highlighting the difficulty in conclusively determining the relationship between risk perception and behavior. Weinstein and team particularly pointed out the limitations of cross-sectional study designs, common in this research area. These designs often fail to fully explore the motivational hypothesis, which posits that belief in the efficacy of precautionary behavior to reduce risk drives individuals to act, and that perceived risk tends to decrease once preventive actions are taken. (112)

Therefore, in studies where risk perception and behavior are measured simultaneously, a negative relationship is often expected. Weinstein and colleagues advocate for longitudinal studies, where risk perception is assessed at one point and subsequent behavior later, with adjustments for past behavior. This approach would offer a clearer understanding of how risk perceptions change over time and affect decision-making and behavior. Such methodology could clarify the complex relationships we observed in our study between risk perception, sexual health literacy, and health behavior, which shifted when adjusted for different factors. Our study, while insightful, underscores the need for more longitudinal research in the field to unravel the dynamic and potentially reciprocal relationship between risk perception and sexual health behavior.

Having explored the critical role of sexual health literacy and its influence on SHC access, we now can move on to discuss another pivotal aspect of our study. This next section examines the interplay between sexual risk behaviors, individual perceptions of risk, and the perceived barriers to accessing sexual healthcare.

5.5- Navigating Sexual Health: Indicators of Risk, Perceptions, & Barriers

5.5.1- Introduction to Theme

This theme examines the relationships between objective STI risk, individuals' perceived risk to STIs, perceived barriers to SHC and their engagement with these services. We analyze

how these elements interact, providing a conceptual map of the dynamics influencing healthcare seeking behavior and access. This theme is enriched by contrasting findings between Turkish and Syrian groups, derived from descriptive statistics, revealing cultural and systemic factors affecting sexual health practices. The aim is two-fold: to highlight the interconnectedness of these factors and to offer insights for public health initiatives tailored to the unique challenges and needs of these communities in accessing sexual healthcare.

5.5.2- Determinants of Perceived Susceptibility to STIs

Our analysis focused on factors influencing the perception of STI risk. A key finding was the strong positive association with engaging in unprotected casual sex with unfamiliar partners. Young men involved in unprotected sex in the preceding year were about 360% more likely to perceive their risk as moderate to high compared to those who did not. This finding highlights the potential for behavioral intervention in STI prevention.

Our study also emphasized the significant role of sexual health literacy in shaping risk perception, acting through both knowledge and appraisal of information. Better understanding of STIs was linked to heightened awareness of associated risks, underscoring the importance of comprehensive sexual health education in STI prevention, in line with other studies (44, 47, 48). However, a notable discordance was observed between objective and subjective risk assessment among adequately knowledgeable young men.

5.5.3- Interplay of Sexual Health Literacy, Risk Perception, and Utilization of SHC Services

Our study's findings illuminate the intricate interplay between sexual health literacy, including knowledge, risk perception, and access SHC services. A critical aspect we identified is the strong influence of sexual health literacy on individuals' engagement with SHC. This includes both their knowledge of STIs and the appraisal of health information, which collectively shape their perception of STI risks.

We observed that individuals with a better understanding of STIs generally had a stronger awareness of potential risks. This underscores the importance of comprehensive sexual health

education in influencing individuals' perceptions and subsequent healthcare-seeking behaviors. However, there's a noticeable gap between possessing knowledge about STIs and the actual application of this knowledge in healthcare utilization. Many study participants, despite being adequately knowledgeable about STI risks, self-reported a low perceived risk, even when exposed to actual high-risk scenarios. This discordance between objective risk and subjective risk perception is a key area for public health interventions.

In terms of accessing SHC services, we found that increased risk perception was generally associated with higher utilization of these services. However, this relationship becomes less straightforward when adjusted for actual sexual behaviors. This suggests that while heightened risk perception may drive individuals towards healthcare services, it alone may not be sufficient for effective healthcare utilization. This complexity was further highlighted by the discrepancy between individuals' perceived risk of STIs and their actual sexual behaviors, mirroring findings from the Natsal-3 survey conducted by Clifton et al. (108). A significant portion of our participants engaged in high-risk behaviors yet underestimated their susceptibility to STIs, aligning with observations in the British population where a majority perceived themselves as being at minimal or no risk despite unsafe sex practices (108).

These insights emphasize the need for public health messaging that accurately informs individuals about the risks associated with certain sexual behaviors and the importance of utilizing SHC services appropriately. Health promotion efforts should not only raise awareness about the dangers of unprotected sex and other high-risk behaviors but also encourage proper healthcare usage. Our study, in conjunction with the Natsal-3 survey findings, strongly suggests that interventions should be tailored to bridge the cognitive gap in risk perception and practical barriers in accessing healthcare. (108)

To enhance the effectiveness of these interventions, educational awareness and knowledge-promoting programs should incorporate proactive self-management health literacy programs. These programs would empower individuals to act on their knowledge and use healthcare services more effectively. The goal is not just to make people more aware of the risks but to equip them to use healthcare services in the right way, thereby enhancing both individual and public health outcomes.

5.6- Limitations of the Study

Our study was conducted during a period marked by the COVID-19 pandemic faced many challenges that are important to consider. The pandemic itself might have had an impact on participants' answers because of the limitations and prevailing health concerns at the time, which might have changed their regular health behaviours and access to medical care.

Self-reported data constituted an additional important limitation. While this approach is common in research, participants in our survey might have been inclined to underreport behaviors they perceive as socially undesirable or to overreport those seen as more acceptable. To add, the specific focus on this demographic means that our findings may not be applicable to other groups or regions, given the unique cultural and healthcare context of Istanbul.

Moreover, our sampling methods, including snowballing and convenience sampling, might have introduced a certain level of bias. These techniques might not fully represent the broader population, as they tend to include individuals who are more easily accessible or within the researchers' immediate networks. This limitation raises concerns about the generalizability of our findings, as they might not accurately reflect the experiences of all young adult Turkish and Syrian males in Istanbul.

The study also faced the issue of potential non-response bias, where those who chose not to participate might differ significantly from those who did, possibly skewing the results. Furthermore, the cross-sectional design of our study limits our ability to establish causality in the observed relationships between sexual health literacy, perception, and access to healthcare services. This is a notable drawback, as longitudinal studies would be more effective in understanding these dynamics over time.

Lastly, our study was unable to conduct detailed subgroup analyses between Syrian and Turkish participants due to the low access rate among these groups, which restricts our ability to draw specific conclusions about the differences and similarities in their healthcare access and behaviors.

Due to time constraints, the discussion in our study did not extensively explore the impact of perceived barriers and interplay with risk indicators. This aspect remains an area open for

further investigation, as understanding the influence of these barriers and interactions could provide deeper insights into the challenges faced by young adult Syrian and Turkish males in accessing sexual healthcare services.

5.7- Conclusion and Future Recommendations

In summary, our study underscored the disparities in access to sexual healthcare between Turkish and Syrian young adult men living in Istanbul. Risky sexual behaviours are prevalent within the demographic, however there is a mismatch with risk perception, especially among Turkish males, despite having more adequate knowledge regarding STIs. It highlighted the crucial role of sexual health literacy in bridging the gap between awareness and action in the context of sexual health. We discovered a positive cascade effect stemming from patient-doctor interactions and active engagement with health professionals and proactive health management. Firstly, increased interactions with healthcare providers lead to heightened sexual health knowledge. This enhanced knowledge then increases the likelihood of individuals undergoing testing, particularly for STIs and HIV. Furthermore, proactive health management, which is strongly tied to knowledge, further amplifies the likelihood of testing. By addressing the gap between theoretical concepts and practical knowledge, we can facilitate increased access to sexual healthcare services, thereby reducing disparities and adverse outcomes. Knowledge is not just about being aware of risks and healthcare options; it is about translating that awareness into proactive behaviors. Educating individuals, especially within the young adult Syrian and Turkish male populations, can empower them to make informed decisions regarding their sexual health. This empowerment is key to reducing the existing disparities in access to healthcare and mitigating the potential negative health outcomes associated with these disparities.

Furthermore, our study suggests that focusing on individual-level barriers is crucial for improving healthcare access. While our discussion did not extensively delve into the impact of these barriers, recognizing and addressing them is essential for effective interventions. Future studies and initiatives should aim to understand and dismantle these barriers, enabling smoother access to sexual healthcare. Ultimately, by enhancing sexual health literacy and addressing both knowledge gaps and individual-level barriers, we can foster a more equitable

healthcare environment, where every individual, regardless of background, has the knowledge and means to access the necessary sexual healthcare services.

To conclude, studies with bigger sample sizes should be conducted to be able to get more evidence on specific barriers to ethnic minorities as Syrian refugees in Türkiye. Longitudinal studies might be more appropriate to understand the role of appraisal of health information. Moreover, qualitative studies and focused group discussions should be conducted to understand sexual health related seeking behaviour among young adults, which will allow the characterization and bridging of the knowledge –access gap. The social and psychologic dimensions and their interrelationships with sexual wellbeing and their influence on access to sexual healthcare should be studied.

References

1. World Health Organization (WHO). Sexually Transmitted Infections (STIs) [Internet]. 2019 [cited 2019]. Available from: https://www.who.int/en/news-room/fact-sheets/detail/sexually-transmitted-infections-(stis)
2. European Centre for Disease Prevention and Control (ECDC). Annual Epidemiological Report for 2017: Sexually Transmitted Diseases. 2017 [cited 2023]. Available from: https://www.ecdc.europa.eu/en/publications-data/monitoring/all-annual-epidemiological-reports
3. The Family Planning Association (FPA). STI Overview [Internet]. 2019 [cited 2023]. Available from: https://www.fpa.org.uk/medical-professional/sti-publications/
4. Maatouk I, Cristaudo A, Morrone A. Sexually Transmitted Infections and Migration. In: Morrone A, Hay R, Naafs B, editors. Skin Disorders in Migrants. Cham: Springer; 2020. Available from: https://doi.org/10.1007/978-3-030-37476-1_18
5. British Association for Sexual Health and HIV (BASHH). The State of the Nation Report: Sexually Transmitted Infections in England. 2020. Available from: https://bashh.org/news/news/bashh-tht-release-state-of-the-nation-report-on-stis-in-england/.
6. European Centre for Disease Prevention and Control. Public health guidance on HIV, hepatitis B and C testing in the EU/EEA: An integrated approach. Stockholm: ECDC; 2018. doi:10.2900/79127
7. Ministry of Health Türkiye, Agency of Public Health. HIV and AIDS Statistics. 2020 [cited 2023]. Available from: https://www.tuseb.gov.tr/.
8. Positive Living Association (PLAP). HIV in Türkiye [Internet]. 2016 [cited 2023]. Available from: https://www.pozitifyasam.org/en/hiv-infection-in-Türkiye/.
9. World Health Organization (WHO). HIV/AIDS [Internet]. 2023 [cited 2023]. Available from: https://www.who.int/news-room/fact-sheets/detail/hiv-aids.
10. Garcia MR, Leslie SW, Wray AA. Sexually Transmitted Infections. In: MedlinePlus [Internet]. Bethesda (MD): National Library of Medicine (US); 2023 May 30. Available from: https://www.ncbi.nlm.nih.gov/books/NBK560808/.

11. Fakoya I, Álvarez-Del Arco D, Monge S, Copas AJ, Gennotte A-F, Volny-Anne A, et al. HIV testing history and access to treatment among migrants living with HIV in Europe. J Int AIDS Soc. 2018;21(Suppl 4):e25123. doi:10.1002/jia2.25123
12. United Nations. International Migration; Global Issues [Internet]. [cited 2023]. Available from: https://www.un.org/en/global-issues/migration
13. Doganay M, Demiraslan H. Refugees of the Syrian Civil War: Impact on Reemerging Infections, Health Services, and Biosecurity in Türkiye. Health Secur. 2016;14(4):220-5; doi:10.1089/hs.2016.0054
14. Chawla N, Sarkar S. Defining "High-risk Sexual Behavior" in the Context of Substance Use. J Psychosexual Health. 2019;1(1):26-31. doi:10.1177/2631831818822015
15. Kuehne A, Koschollek C, Santos-Hövener C, Thorlie A, Müllerschön J, Mputu Tshibadi C, et al. Impact of HIV knowledge and stigma on the uptake of HIV testing - Results from a community-based participatory research survey among migrants from sub-Saharan Africa in Germany. PLoS One. 2018;13(4):e0194244. doi:10.1371/journal.pone.0194244
16. Shapiro GK, Tatar O, Sutton A, et al. Correlates of Tinder Use and Risky Sexual Behaviors in Young Adults. Cyberpsychol Behav Soc Netw. 2017;20(12):727-734. doi:10.1089/cyber.2017.02791
17. Li J, Yue X, Wang Y, Gong X. First Responses to the Symptoms of Sexually Transmitted Infections and Treatment-Seeking Behavior Among Men Who Have Sex With Men in 13 Cities in China. Sex Transm Dis. 2020;47(1):28-33. doi:10.1097/OLQ.0000000000001074
18. Unemo M, Bradshaw CS, Hocking JS, et al. Sexually transmitted infections: challenges ahead. Lancet Infect Dis. 2017;17(8):e235-e279. doi:10.1016/S1473-3099(17)30310-9
19. St Louis ME, Wasserheit JN, Gayle HD. Janus considers the HIV pandemic--harnessing recent advances to enhance AIDS prevention. Am J Public Health. 1997;87(1):10-12. doi:10.2105/ajph.87.1.10

20. Joint United Nations Programme on HIV/AIDS. Global AIDS strategy 2021-2026: End inequalities. End AIDS [Internet]. 2021 [cited 2023 Nov 17]. Available from: https://digitallibrary.un.org/record/3937510
21. Yilmaz V, Willis P. Challenges to a Rights-Based Approach in Sexual Health Policy: A Comparative Study of Türkiye and England. Societies. 2020;10:33. Available from: https://doi.org/10.3390/soc10020033
22. Alawa J, Zarei P, Khoshnood K. Evaluating the provision of health services and barriers to treatment for chronic diseases among Syrian refugees in Türkiye: A review of literature and stakeholder interviews. Int J Environ Res Public Health [Internet]. 2019;16(15):2660. Available from: http://dx.doi.org/10.3390/ijerph16152660
23. Tayfur I, Günaydin M, Suner S. Healthcare Service Access and Utilization among Syrian Refugees in Türkiye. Ann Glob Health. 2019;85(1):42. DOI: https://doi.org/10.5334/aogh.2353
24. Ergönül Ö, Tülek N, Kayi I, Irmak H, Erdem O, Dara M. Profiling infectious diseases in Türkiye after the influx of 3.5 million Syrian refugees. Clin Microbiol Infect. 2020;26:307-12. DOI: https://doi.org/10.1016/j.cmi.2019.06.022
25. Mete B, Gunduz A, Bolukcu S, et al. HIV care in Istanbul, Türkiye: How far is it from the UNAIDS 90–90–90 targets? Int J STD AIDS. 2019;30(13):1298-1303. doi:10.1177/0956462419866342
26. Karaosmanoğlu HK, Mete B, Gündüz A, Aydin OA, Sargin F, Sevgi DY, Durdu B, Dökmetaş İ, Tabak F. Late presentation among patients with human immunodeficiency virus infection in Türkiye. Cent Eur J Public Health. 2019;27(3):229-34. doi:10.21101/cejph.a5416
27. Deblonde J, De Koker P, Hamers FF, Fontaine J, Luchters S, Temmerman M. Barriers to HIV testing in Europe: a systematic review. Eur J Public Health. 2010 Aug;20(4):422-32. Available from: https://doi.org/10.1093/eurpub/ckp231
28. Blondell SJ, Kitter B, Griffin MP, Durham J. Barriers and Facilitators to HIV Testing in Migrants in High-Income Countries: A Systematic Review. AIDS Behav. 2015;19(11):2012-24. doi:10.1007/s10461-015-1095-x

29. Taylor TN, DeHovitz J, Hirshfield S. Intersectional Stigma and Multi-Level Barriers to HIV Testing Among Foreign-Born Black Men From the Caribbean. Front Public Health. 2020 Jan 10;7:373. doi:10.3389/fpubh.2019.00373
30. Doğan N, Dikeç G, Uygun E. Syrian refugees' experiences with mental health services in Türkiye: "I felt lonely because I wasn't able to speak to anyone". Perspect Psychiatr Care. 2019;55(4):673-80. doi:10.1111/ppc.12400
31. Sevinç S. Nurses' Experiences in a Turkish Internal Medicine Clinic With Syrian Refugees. J Transcult Nurs. 2018;29(3):258-64. doi:10.1177/1043659617711502
32. World Health Organization. Regional Office for Europe. Assessing the health literacy and health communication needs of Syrian refugees in Türkiye. Copenhagen: World Health Organization. Regional Office for Europe; 2020. Available from: https://iris.who.int/handle/10665/359577
33. Erenoğlu R, Yaman Sözbir Ş. The Effect of Health Education Given to Syrian Refugee Women in Their Own Language on Awareness of Breast and Cervical Cancer, in Türkiye: a Randomized Controlled Trial [published correction appears in J Cancer Educ. 2020 Jan 30]. J Cancer Educ. 2020;35(2):241-247. doi:10.1007/s13187-019-01604-4
34. Lui CW, Dean J, Mutch A, Mao L, Debattista J, Lemoire J, Howard C, Whittaker A, Hollingdrake O, Fitzgerald L. HIV Testing in Men Who Have Sex with Men: A Follow-up Review of the Qualitative Literature since 2010. AIDS Behav. 2018;22(2):593-605. doi: 10.1007/s10461-017-1752-3
35. Wurm M, Neumann A, Wasem J, Biermann-Stallwitz J. Zugangsschwellen zu HIV-Test-Angeboten – Eine systematische Literaturanalyse [Barriers to Accessing HIV Testing Services - A Systematic Literature Review]. Gesundheitswesen. 2019;81(3):e43-e57. doi:10.1055/a-0668-5621
36. Kickbusch I, Pelikan JM, Apfel F, Tsouros AD. Health literacy: the solid facts. Copenhagen: World Health Organization. Regional Office for Europe; 2013. Available from: https://iris.who.int/handle/10665/326432
37. Gele AA, Pettersen KS, Torheim LE, Kumar B. Health literacy: the missing link in improving the health of Somali immigrant women in Oslo. BMC Public Health. 2016 Nov 3;16(1):1134. doi:10.1186/s12889-016-3790-6

38. Osborne RH, Batterham RW, Elsworth GR, Hawkins M, Buchbinder R. The grounded psychometric development and initial validation of the Health Literacy Questionnaire (HLQ). BMC Public Health. 2013 Jul 16;13:658. doi:10.1186/1471-2458-13-658
39. Ozdemir H, Alper Z, Uncu Y, Bilgel N. Health literacy among adults: a study from Türkiye. Health Educ Res. 2010;25(3):464-77. doi:10.1093/her/cyp068
40. Abel T, Hofmann K, Ackermann S, Bucher S, Sakarya S. Health literacy among young adults: a short survey tool for public health and health promotion research. Health Promot Int [Internet]. 2015;30(3):725–35. doi:10.1093/heapro/dat096
41. Levy H, Janke A. Health literacy and access to care. J Health Commun [Internet]. 2016;21 Suppl 1(Suppl):43–50. doi:10.1080/10810730.2015.1131776
42. Institute of Medicine, Board on Neuroscience and Behavioral Health, Committee on Health Literacy. Health literacy: A prescription to end confusion. Kindig DA, Panzer AM, Nielsen-Bohlman L, editors. Washington, D.C., DC: National Academies Press; 2004. doi: 10.17226/10883
43. Luque JS, Logan A, Soulen G, Armeson KE, Garrett DM, Davila CB, et al. Systematic review of mammography screening educational interventions for Hispanic women in the United States. J Cancer Educ [Internet]. 2019;34(3):412–22. doi:10.1007/s13187-018-1321-0
44. Kim K, Han H-R. Potential links between health literacy and cervical cancer screening behaviors: a systematic review: Potential links between health literacy and cervical cancer screening. Psychooncology [Internet]. 2016;25(2):122–30. doi:10.1002/pon.3883
45. Sørensen K, Pelikan JM, Röthlin F, Ganahl K, Slonska Z, Doyle G, et al. Health literacy in Europe: comparative results of the European health literacy survey (HLS-EU). Eur J Public Health [Internet]. 2015;25(6):1053–8. doi:10.1093/eurpub/ckv043
46. Kreps GL, Sparks L. Meeting the health literacy needs of immigrant populations. Patient Educ Couns [Internet]. 2008;71(3):328–32. doi:10.1016/j.pec.2008.03.001
47. Elamin ASM. İzmir'in Bir Mahallesinde Yaşayan Geçici Koruma Altındaki Suriyelilerde Sağlık Okuryazarlığı ve Sosyo-Demografik Özelliklerle İlişkisinin İncelenmesi [Health Literacy and Its Association with Socio-Demographic Characteristics Among Syrians Under Temporary Protection Living in a Neighborhood

of İzmir] [Master's thesis]. İzmir: Dokuz Eylül Üniversitesi Sağlık Bilimleri Enstitüsü; 2018. DEU.HSI.MSc-2015970091. Available from: https://acikbilim.yok.gov.tr/handle/20.500.12812/577841

48. Ercan Sahin N, Aslan F, Emiroglu ON. Health status, health behaviours and healthcare access of lesbian, gay, bisexual and transgender populations in Türkiye. Scand J Caring Sci [Internet]. 2020;34(1):239–46. doi:10.1111/scs.12759
49. Nöstlinger C, Rojas Castro D, Platteau T, Dias S, Le Gall J. HIV-Related discrimination in European health care settings. AIDS Patient Care STDS [Internet]. 2014;28(3):155–61. doi:10.1089/apc.2013.0247
50. Kasapoglu A, Saillard E, Kaya N, Turan F. AIDS related stigma in social relations: A qualitative study in Türkiye. The Qualitative Report [Internet]. 2011 [cited 2023 Nov 17]; doi:10.46743/2160-3715/2011.1314
51. Centers for Disease Control and Prevention. HIV Stigma: Lets Stop HIV Together [Internet]. 2022 [cited 2023 Nov 17]. Available from: https://www.cdc.gov/stophivtogether/hiv-stigma/index.html
52. Hood JE, Friedman AL. Unveiling the hidden epidemic: a review of stigma associated with sexually transmissible infections. Sex Health. 2011;8(2):159-170. doi:10.1071/SH10070
53. Mapp F, Wellings K, Hickson F, Mercer CH. Understanding sexual healthcare seeking behaviour: why a broader research perspective is needed. BMC Health Serv Res. 2017;17(1):462. Published 2017 Jul 6. doi:10.1186/s12913-017-2420-z
54. HIV and Black African Communities in the UK [Internet]. National AIDS Trust [cited 2023 Nov 17]. Available from: https://www.nat.org.uk/publication/hiv-and-black-african-communities-uk
55. Morris JL, Lippman SA, Philip S, Bernstein K, Neilands TB, Lightfoot M. Sexually transmitted infection related stigma and shame among African American male youth: implications for testing practices, partner notification, and treatment. AIDS Patient Care STDS. 2014;28(9):499-506. doi:10.1089/apc.2013.0316
56. Arrey AE, Bilsen J, Lacor P, Deschepper R. Perceptions of stigma and discrimination in health care settings towards sub-Saharan African migrant women living with

HIV/aids in Belgium: A qualitative study. J Biosoc Sci [Internet]. 2017;49(5):578–96. doi: 10.1017/S0021932016000468

57. Thangaramoorthy T, Jamison A, Dyer T. Intersectional stigma among midlife and older Black women living with HIV. Cult Health Sex. 2017;19(12):1329-43. doi:10.1080/13691058.2017.1317839
58. Istanbul Nufusu [Istanbul Population] [Internet]. [cited 2021 Nov 12]. Available from: https://www.nufusu.com/il/istanbul-nufusu
59. Directorate General of Migration Management. Temporary Protection in Türkiye [Internet]. [cited 2021 Nov 12]. Available from: https://en.goc.gov.tr/temporary-protection-in-Türkiye
60. Wang X, Cheng Z. Cross-Sectional Studies: Strengths, Weaknesses, and Recommendations. Chest. 2020;158(1S):S65-S71. doi:10.1016/j.chest.2020.03.012
61. Jaworski BC, Carey MP. Development and psychometric evaluation of a self-administered questionnaire to measure knowledge of sexually transmitted diseases. AIDS Behav. 2007;11(4):557-74. doi: 10.1007/s10461-006-9168-5
62. Cleland J, Ingham R, Stone N. Asking young people about sexual and reproductive behaviours: Illustrative Core Instruments. World Health Organization; 2001. [cited 2021 Dec 16]. Available from: https://www.who.int/news/item/08-05-2014-asking-young-people-about-sexual-and-reproductive-behaviours
63. Statista. Türkiye: problems with national health care system 2021. Statista; 2022 [cited 2023 Apr 30]. Available from: https://www.statista.com/statistics/1272606/problems-with-national-health-care-system-in-Türkiye/.
64. Candevir A, Kuscu F, Kurtaran B, Kömür S, İnal AS, Ertürk D, et al. Late Diagnosis in HIV with New and Old Definitions; Data from a Regional Hospital in Türkiye. Int J Gen Med. 2023;16:4227–34. doi: 10.2147/IJGM.S424561.
65. Yaylali E, Erdogan ZM, Calisir F, Gokengin D, Korten V, Tabak F, et al. Modeling the future of HIV in Türkiye: Cost-effectiveness analysis of improving testing and diagnosis. PLoS One. 2023;18(6):e0286254. doi: 10.1371/journal.pone.0286254.
66. Nazli A, Garner A, Gokengin D. Awareness of HIV pre-exposure prophylaxis among men who have sex with men using apps for sexual encounters in Turkiye. Int J STD AIDS. 2022;33(13):1124–33. doi: 10.1177/09564624221126867.

67. Assi R, Özger-İlhan S, İlhan MN. Health needs and access to health care: the case of Syrian refugees in Türkiye. Public Health. 2019;172:146–52. doi: 10.1016/j.puhe.2019.05.004.
68. Tumen S. The case of Syrian refugees in Türkiye: Successes, challenges, and lessons learned. Background paper to the World Development Report 2023: Migrants, Refugees, and Societies; 2023 [cited 2023 Aug 22]. Available from: https://thedocs.worldbank.org/en/doc/a007833298df4b9c3735602711dd9289-0050062023/original/WDR2023-Türkiye-case-study-FORMATTED.pdf.
69. Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2021. Atlanta: US Department of Health and Human Services; 2023 [cited 2023 Oct 26]. Available from: https://www.cdc.gov/std/statistics/2021/default.htm.
70. Erdoğan MM. Thinking Outside the Camp: Syrian Refugees in Istanbul. Migration Policy Institute; 2017 [cited 2023 Aug 24]. Available from: https://www.migrationpolicy.org/article/thinking-outside-camp-syrian-refugees-istanbul.
71. Albright AE, Allen RS. HPV Misconceptions Among College Students: The Role of Health Literacy. J Community Health. 2018;43(6):1192–200. doi: 10.1007/s10900-018-0539-4.
72. Dang BN, Westbrook RA, Njue SM, Giordano TP. Building trust and rapport early in the new doctor-patient relationship: a longitudinal qualitative study. BMC Medical Education 2017; 17(1):32. DOI: 10.1186/s12909-017-0868-5.
73. Di Tosto G, Hefner JL, Walker DM, Gregory ME, McAlearney AS, Sieck CJ. Development of a conceptual model of the capacity for patients to engage in their health care: a group concept mapping study. BMC Health Serv Res 2023; 23(1):846. DOI: 10.1186/s12913-023-09785-x.
74. Åkerman E, Östergren P-O, Essén B, Fernbrant C, Westerling R. Knowledge and utilization of sexual and reproductive healthcare services among Thai immigrant women in Sweden. BMC International Health and Human Rights 2016; 16(1):25. DOI: 10.1186/s12914-016-0100-4.

75. 3RP. Türkiye Country Chapter 2023-2025: Regional Refugee & Resilience Plan (3RP) - Syria Crisis 2023 [cited 2023 Apr 28]. Available from: https://www.3rpsyriacrisis.org/wp-content/uploads/2023/03/3RP-2023-2025-Turkiye-Country-Chapter_EN.pdf.
76. Davidson N, Hammarberg K, Romero L, Fisher J. Access to preventive sexual and reproductive health care for women from refugee-like backgrounds: a systematic review. BMC Public Health 2022; 22(1):403. DOI: 10.1186/s12889-022-12576-4.
77. Öztürk G, Timarcioğlu K, Dikeç G, Karali E, Nacaroğlu H, Çakir H et al. Syrian refugees' experiences while receiving mental health services and psychiatric nursing care: A qualitative study. Journal of Advanced Nursing 2023. DOI: 10.1111/jan.15894.
78. Gulacti U, Lok U, Polat H. Emergency department visits of Syrian refugees and the cost of their healthcare. Pathogens and Global Health 2017; 111(5):219–24. DOI: 10.1080/20477724.2017.1349061.
79. Ying Liew Z, Yi Lim S, Hwa Sha K, Thing Sze W. Barriers limiting access to healthcare among refugees or asylum seekers in Asia in the recent years: a scoping review. [Journal Title] 2022; 20(1):218–31. DOI: 10.55131/jphd/2022/200117.
80. Bal-Yılmaz H, Koniak-Griffin D. Knowledge, Behaviors, and Attitudes About Human Papilloma Virus Among Nursing Students in Izmir, Türkiye. Journal of Cancer Education 2018; 33(4):814–20. DOI: 10.1007/s13187-017-1163-1.
81. Diviani N, Obrenovic J, Montoya CL, Karcz K. Disentangling health information appraisal competence: Results from an interdisciplinary scoping review and online consultation among Swiss stakeholders. PloS One 2020; 15(7):e0235474. DOI: 10.1371/journal.pone.0235474.
82. Shimie AW, Gashu KD, Shiferaw AM, Mengiste SA. Information-seeking behavior on sexually transmitted infections and its associated factors among university students in Ethiopia: a cross-sectional study. Reprod Health 2022; 19(1):25. DOI: 10.1186/s12978-022-01340-x.
83. Nigussie T, Yosef T. Knowledge of sexually transmitted infections and its associated factors among polytechnic college students in Southwest Ethiopia. Pan Afr Med J 2020; 37(68):68. DOI: 10.11604/pamj.2020.37.68.22718.

84. Sevinin E. Barriers to and facilitators of migrant communities' access to health care in Istanbul [cited 2023 Oct 26]. Available from: https://www.gocarastirmalaridernegi.org/attachments/article/182/GAR_MSF_health.pdf.
85. Saleem K, Ting EL, Loh AJW, Baggaley R, Mello MB, Jamil MS et al. Missed opportunities for HIV testing among those who accessed sexually transmitted infection (STI) services, tested for STIs and diagnosed with STIs: a systematic review and meta-analysis. Journal of the International AIDS Society 2023; 26(4):e26049. DOI: 10.1002/jia2.26049.
86. Svensson P, Agardh A, Zdravkovic S, Asamoah BO. Investigating pathways for predisposing, enabling and need factors in predicting the use of STI/HIV-testing services among Syrian and Iraqi migrants in Scania, Sweden - a cross-sectional study with directed acyclic graphs for modelling pathways to testing. BMC Public Health 2022; 22(1):2177. DOI: 10.1186/s12889-022-14615-6.
87. Ataman H, Kömürcü N. Effectiveness of the Sexual Health/Reproductive Health Education Given to Türkiye Adolescents Who Use Alcohol or Substance. Journal of Addictions Nursing 2017; 28(2):71–8. DOI: 10.1097/JAN.0000000000000167.
88. Polat S, Atici A, Karakaş D, Çulha GG, Erdoğan S. Peer training increases the level of knowledge on sexual and reproductive health in adolescents. Journal of Tropical Pediatrics 2012; 58(2):96–101. DOI: 10.1093/tropej/fmr041.
89. Fahme SA, Khater B, Dagher M, DeJong J, Abdulrahim S. Developing a sexual and reproductive health educational intervention for adolescent Syrian refugee girls: Challenges and lessons learned. Frontiers in Reproductive Health 2022; 4:780157. DOI: 10.3389/frph.2022.780157.
90. Fahme SA, El Ayoubi LL, DeJong J, Sieverding M. Sexual and reproductive health knowledge among adolescent Syrian refugee girls displaced in Lebanon: The role of schooling and parental communication. PLOS Global Public Health 2023; 3(1):e0001437. DOI: 10.1371/journal.pgph.0001437.
91. [Article Title]. Journal of Pediatric Nursing: Nursing Care of Children and Families. Attitudes of parents in the role of a father in Türkiye toward child sex education and

their sexual communication with their children; 2023 [cited 2023 Nov 3]. Available from: https://www.pediatricnursing.org/article/S0882-5963(22)00329-3/fulltext.

92. Australian Government Department of Health and Aged Care. Men's and boys' barriers to health system access: a literature review [cited 2023 Oct 26]. Available from: https://www.health.gov.au/sites/default/files/2023-07/men-s-and-boys-barriers-to-health-system-access-a-literature-review.pdf.
93. Amede PO, Umeokonkwo CD, Adedire E, Balogun MS, Bashir SS, Abubakar AA. HIV and AIDS-related knowledge, HIV risk perception, uptake of HIV testing and its predictors among prison inmates in Bauchi State, Nigeria: a cross-sectional study. Pan Afr Med J 2023; 46(7). DOI: 10.11604/pamj.2023.46.7.38412.
94. Carey C, O'Donnell K, Davoren M, Quinlan M, Igoe D, Barrett P. Factors associated with lower knowledge of HIV and STI transmission, testing and treatment among MSM in Ireland: findings from the MSM Internet Survey Ireland (MISI) 2015. Sex Transm Infect 2021; 97(5):351–6. DOI: 10.1136/sextrans-2020-054469.
95. Engstrom T, Waller M, Mullens AB, Debattista J, Durham J, Gu Z et al. STI and HIV testing: examining factors that influence uptake among domestic Australian-born, domestic overseas-born and international tertiary students studying in Australia. BMC Public Health 2023; 23(1):505. DOI: 10.1186/s12889-023-15418-z.
96. Martin-Smith HA, Okpo EA, Bull ER. Exploring psychosocial predictors of STI testing in university students. BMC Public Health 2018; 18(1):664. DOI: 10.1186/s12889-018-5587-2.
97. Mohammed H, Dabrera G, Furegato M, Yin Z, Nardone A, Hughes G. Refusal of HIV testing among black Africans attending sexual health clinics in England, 2014: a review of surveillance data. Sexually Transmitted Infections 2017; 93(3):217–20. DOI: 10.1136/sextrans-2016-052737.
98. Hawkins M, Gill SD, Batterham R, Elsworth GR, Osborne RH. The Health Literacy Questionnaire (HLQ) at the patient-clinician interface: a qualitative study of what patients and clinicians mean by their HLQ scores. BMC Health Serv Res 2017; 17(1):309. DOI: 10.1186/s12913-017-2254-8.
99. Australian Bureau of Statistics. National Health Survey: Health literacy [Internet]. Canberra: ABS; 2018 [cited 2023 November 19]. Available from:

https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-health-literacy/latest-release.

100.Camara H, Zhang Y, Lafferty L, Vallely AJ, Guy R, Kelly-Hanku A. Self-collection for HPV-based cervical screening: a qualitative evidence meta-synthesis. BMC Public Health 2021; 21(1):1503. DOI: 10.1186/s12889-021-11554-6.

101.Shim M-S, Kim S, Choi M, Choi JY, Park CG, Kim GS. Developing an app-based self-management program for people living with HIV: a randomized controlled pilot study during the COVID-19 pandemic. Sci Rep 2022; 12. DOI: 10.1038/s41598-022-19238-w.

102.Diviani N. On the Centrality of Information Appraisal in Health Literacy Research. Health Literacy Research and Practice 2019; 3(1):e21-e24. DOI: 10.3928/24748307-20181214-01.

103.Jansen T, Rademakers J, Waverijn G, Verheij R, Osborne R, Heijmans M. The role of health literacy in explaining the association between educational attainment and the use of out-of-hours primary care services in chronically ill people: a survey study. BMC Health Serv Res 2018; 18(1):394. DOI: 10.1186/s12913-018-3197-4.

104.Blignaut RJ, Jacobs J, Vergnani T. Trends in HIV risk behaviour of incoming first-year students at a South African university: 2007-2012. SAHARA J: Journal of Social Aspects of HIV/AIDS Research Alliance 2015; 12:39–50. DOI: 10.1080/17290376.2015.1086275.

105.Davison CM, Ndumbe-Eyoh S, Clement C. Critical examination of knowledge to action models and implications for promoting health equity. Int J Equity Health 2015; 14:49. DOI: 10.1186/s12939-015-0178-7.

106.Griffey RT, Kennedy SK, D'Agostino McGowan L, Goodman M, Kaphingst KA. Is low health literacy associated with increased emergency department utilization and recidivism? Acad Emerg Med. 2014 Oct;21(10):1109-15. doi: 10.1111/acem.12476. Erratum in: Acad Emerg Med. 2015 Apr;22(4):497.

107.Vamos C, Thompson E, Logan RG, Griner S, Perrin K, Merrell L, Daley E. Exploring college students' sexual and reproductive health literacy. Journal of American College Health. 2018; 68:1-10. doi: 10.1080/07448481.2018.1515757.

108. Clifton S, Mercer CH, Sonnenberg P, Tanton C, Field N, Gravningen K, Hughes G, Mapp F, Johnson AM. STI risk perception in the British population and how it relates to sexual behaviour and STI healthcare use: findings from a cross-sectional survey (Natsal-3). EClinicalMedicine. 2018 Aug-Sep;2-3:29-36. doi: 10.1016/j.eclinm.2018.08.001.
109. Brewer NT, Weinstein ND, Cuite CL, Herrington JE. Risk perceptions and their relation to risk behavior. Ann Behav Med. 2004 Apr;27(2):125-30. doi: 10.1207/s15324796abm2702_7.

APPENDIX-A: HLQ Licence Agreement

Swinburne University of Technology

QUESTIONNAIRE LICENCE AGREEMENT

Information Schedule			
Parties			
Swinburne	**SWINBURNE UNIVERSITY OF TECHNOLOGY** (ABN: 13 628 586 699) a body politic and corporate established under the Swinburne University of Technology Act 2010 (Vic) of John Street, Hawthorn in the State of Victoria, Australia		
Licensee	**The Party identified in Item 1 below**		
Background			
A.	Swinburne is the owner of the Intellectual Property Rights in the Licensed Material.		
B.	The Licensee seeks a licence of the Licensed Material.		
C.	Swinburne has agreed to grant the licence sought on the basis set out in this Agreement.		
Date			
Date of Agreement	means the date on which the last of the parties signs this Agreement		
Details			
Item No	**Identifier**	**Detail**	
1	**Licensee**	**Name:**	**University of Oslo, Faculty of Medicine**
		Address:	**Klaus Torgårds vei 3, 0372, Oslo, Norway**
		Authorised Officer	**Tony Sandset**
		Email:	**t.j.sandset@medisin.uio.no**
		Phone:	
2	**Licensed Material**	means any and all statutory and other proprietary rights in respect of the Questionnaire recognised at common law, or laws relating to Intellectual Property Rights.	
3	**Commencement Date**	means 14 days following the Date of Agreement.	
4	**Term**	means the duration identified in **Item 4** of the **Schedule**, which commences on the Commencement Date.	
5	**Licence Fee**	Means, where applicable, the fee identified in **Item 2** of the **Schedule** and payable by the Licensee during the Term.	

Execution

Swinburne	**SIGNED** for and on behalf of **SWINBURNE UNIVERSITY OF TECHNOLOGY** in the presence of: Date signed: 11/09/2020 Signature of witness	Ranjit Gajendra Nadarajah Name of signatory Manager Title of signatory
Licensee	**SIGNED** for and on behalf of **LICENSEE** in the presence of: Date signed: 10/09/2020 Signature of witness	TONY SANDSET Name of signatory PhD. RESEARCH FELLOW Title of signatory

General Terms

This section of the Agreement sets out the General Terms applicable to this Questionnaire Licence Agreement. The signed Information Schedule constitutes an acceptance by the Parties of these General Terms and all other parts of this Agreement.

1. **Grant of Licence**

   Subject to the limitations set forth in this Agreement and in consideration of mutual promises set out herein, Swinburne hereby grants to Licensee a non- exclusive licence (**Licence**), to use the Licensed Materials for the Purpose in the Territory during the Term to the extent permitted by law.

2. **Reserved Rights**

   2.1 Swinburne expressly reserves the right to:

   2.1.1 use Swinburne Intellectual Property Rights and associated technology for educational and research purposes, clinical research, and research sponsored by commercial entities,

   2.1.2 publicly disclose research results; and

   2.1.3 allow other non-profit research institutions to use Regents' Copyright Rights and associated technology for the same purposes as clause 2.1.1 and 2.1.2.

   2.2 Except as set forth in this Agreement, Licensee shall not:

   2.2.1 remove any copyright or other proprietary notices on or in any copies of the Licensed Materials; or

   2.2.2 modify, adapt, or translate the Licensed Materials.

3. **Sub-Licence**

   The Licensee may not sub-license any rights granted under this Agreement without the prior written consent of Swinburne.

4. **Permitted Reproduction and Adaptations**

   4.1 The Licensee is permitted to reproduce, copy, or communicate the Questionnaire online, provided The Licensee ensures that such online access to the Questionnaire is a

password protected online survey instrument. Furthermore, if indicated in **Item 6** of the **Schedule**, Swinburne grants to the Licensee the right to use the Questionnaire to prepare and produce a cultural adaptation and/or translation of the Questionnaire into the language identified in **Item 6** of the **Schedule** (**Translation**) subject to the following conditions:

4.1.1 Licensee must undertake the cultural adaptation and/or translation of the Questionnaire only in accordance with the Translation Integrity Procedure attached as **Annexure A**;

4.1.2 Licensee must provide a copy of the forward and backward translations to Swinburne for approval at least 60 days before Licensee proposes to administer the Questionnaire (**Administration Date**) to allow sufficient time for review of documents by Swinburne, preparation of the final translation and local validation of the Questionnaire, and finalisation as described in **Annexure A.**

4.1.3 Swinburne will own all Intellectual Property rights in the Translation and the Licensee assigns such rights to Swinburne upon their creation.

4.1.4 If with Swinburne's prior written consent, the Licensee engages a third party to prepare the Translation, the Licensee must ensure that such third party assign to Swinburne in writing all Intellectual Property rights in the Translation. Swinburne is entitled to approve the contents of the agreement between the Licensee and third party translator as a condition of providing its consent pursuant to this **clause 4.1.4**.

4.2 The Licensee acknowledges that it may not disclose, use, reproduce, communicate or exploit or permit such disclosure, use, reproduction, communication or exploitation of the Questionnaire in any way other than for the Purpose, or in any jurisdiction other than the Territory, unless otherwise agreed in writing with Swinburne. Notwithstanding the foregoing, the Licensee may publicly disclose research results if the Licensee adopts the Ophelia process in its entirety.

4.3 The Licensee agrees that if any adaptations or modifications are made to the Questionnaire by or on behalf of the Licensee or as a consequence of the Licensee's use of the Questionnaire (including cultural adaptations and/or translations as set out in **clause 4.1)**, all Intellectual Property in such modifications must be assigned to Swinburne, and the Licensee will do all things reasonably necessary (including the execution of documentation) to effect such assignment upon request by Swinburne.

5. Licence Fee

1. The Licensee will pay to Swinburne the Licence Fee at the times and in the manner set out in **Item 2** of the **Schedule** during the Term.
2. Except as set forth in **clause 5.3**, any Licence Fee specified in **Item 2** of the **Schedule** is payable upfront in a single payment, which must be made on or before the Commencement Date.
3. By agreement with Swinburne, the Licensee may pay the Licence Fee payable for each year of the Term annually in advance in each year of the Term. The first payment must be paid on or before the Commencement Date, and thereafter must be paid on or before each anniversary date of the Commencement Date during the Term.
4. The Licence Fee is exclusive of GST. If the Licensee is an Australian entity, then GST is imposed on any supply made under this Agreement, the recipient of the taxable supply must pay to the supplier an additional amount equal to the GST payable on the taxable supply. Subject to the recipient receiving a tax invoice of the supply, payment of the GST must be made at the same time as payment for the taxable supply.
5. Swinburne reserves the right to revise the Licence Fee for:

5.5.1 any use of the Questionnaire in excess of the Number of Authorised Implementations specified under **Item 3** (Approved Purpose) in the **Schedule**; or

5.5.2 any subsequent extension of this Agreement.

6. Obligations of Licensee

6.1 The Licensee undertakes to use the Licensed Materials only in accordance with the License.

6.2 The Licensee must ensure that the Questionnaire is only used for the Purpose, and unless permission is granted in **Item 6** of the **Schedule,** not modify or translate the

Questionnaire, without the express written approval ofSwinburne.

6.3 The Licensee will itself administer the Questionnaire. The Licensee acknowledges and agrees that it must implement the Questionnaire in a manner that ensures Swinburne may readily audit (at Swinburne's sole discretion) the monitoring, calculation and reporting by the Licensee of usage of the Questionnaire.

6.4 Other than as provided in clause 4.1, the Licensee must not, and must not allow or cause any other person to:

6.4.1 reproduce, communicate or copy the Questionnaire by any means or in any form;

6.4.2 give, license, sub-license, lease, assign, transfer, distribute, disseminate, disclose, or publish the Questionnaire in any form to any other person or attempt to do any of these acts without the written authority of Swinburne;

6.4.3 reverse engineer the Questionnaire; or

6.4.4 alter, change, remove or obscure any notices or other indications (including but not limited to copyright notices) as to ownership of the Questionnaire.

5. Upon completion of a backend database, Swinburne may request that the Licensee provides Swinburne with de-identified information (eg age, country and language) about the person to whom the Questionnaire was administered in a locked Excel or other standard database as agreed with Swinburne. The Licensee agrees to provide to Swinburne such de-identified information if so requested by Swinburne.

6. The Questionnaire consists of separate individual scales that measure separate aspects of health literacy. The Licensee may use the individual scales as long as the Licensee ensures that each selected scale contains all the questions within that scale and the questions are in the exact order as in the Questionnaire. The Licensee must ensure the scales are scored as prescribed to ensure interpretations of the data are consistent with the development and psychometric studies. The Licensee undertakes to ensure that it will not reveal or disclose the individual scales in any publications made by the Licensee.

6.7 The Licensee undertakes to keep secret and protect the confidential nature of all information and documentation provided to it, learnt by it or to which it has or has had access, arising out of or in connection with any aspect of the negotiation or performance of this Agreement including, without limitation, the terms of this Agreement, the Licence Fee, and the Questionnaire ("Confidential Information"). To this end the Licensee must not use, disclose or in any way communicate to any other person the details of any Confidential Information without the prior written consent of Swinburne.

7. Warranties and Limitation of Liability

1. The Licensee agrees that, to the extent permitted by Australian law, all warranties (including implied warranties), other than express warranties given in this Agreement, in respect of the subject matter of this Agreement are excluded and of no effect. Where the exclusion of a given implied warranty would be void or unenforceable, the Licensee agrees that Swinburne's liability for a breach of such warranty will be limited, at Swinburne's discretion to the re-supply of the Questionnaire or the payment of the cost of the re-supply of the Questionnaire.

2. For the avoidance of doubt, the Licensee agrees that it uses the Questionnaire entirely at its own risk, and Swinburne does not warrant that the Questionnaire is suitable for any particular purpose, or that the Questionnaire will function or perform in a particular manner, or that the Licensee will derive any particular result or outcome from its use of the Questionnaire.

3. The Licensee agrees that Swinburne's aggregate liability for all causes of action against Swinburne, whether contractual, tortious or otherwise, will not exceed the aggregate of Licence Fees paid by the Licensee as at the date on which the first such cause of action arose. Swinburne will not be liable to the Licensee for any indirect or consequential losses, damages, costs and/or expenses incurred or sustained by the Licensee under, or as a result of exercising rights in, this Agreement (including as a result of any negligence by Swinburne), and in particular will not be liable for any loss of revenue or profits, loss of data, loss of goodwill or failure to realise an anticipated saving or benefit.

7.4 The Licensee agrees to indemnify Swinburne from and against liability and all loss and damage of any kind whatsoever caused directly or indirectly by any claim or action against Swinburne arising directly or indirectly out of the Licensee's use of the Questionnaire or any breach by the Licensee of the terms and conditions of this Agreement.

8. Termination by Swinburne

1. If Licensee violates or fails to perform any material term of this Agreement, then give Swinburne may written notice of the **of** default (**Notice Default**) to Licensee. If Licensee does not remedy the default within thirty (30) days after the effective date of the Notice of Default (**Period to Cure**), then Swinburne may terminate this Agreement and the Licence by a second written notice (**Notice of Termination**) to Licensee.
2. If Swinburne sends a Notice of Termination to Licensee, then this Agreement automatically terminates on the date specified in the Notice of Termination.
3. Termination does not relieve Licensee of its obligation to pay any monies (if any) owed at the time of the date of termination and does not impair any accrued right of Swinburne.
4. Upon termination of this Agreement, all licenses granted under this Agreement will terminate, and the Licensee must immediately cease all use of the Questionnaire.

9. Termination By Licensee

1. Licensee has the right at any time to terminate this Agreement by giving sixty (60) days written notice to Swinburne.
2. Any termination in accordance with clause 9.1 does not:
   1. relieve the Licensee of any obligation or liability accrued prior to termination.
   9.2.2 rescind anything done by Licensee or any payments made to Swinburne prior to the date of termination.
   9.2.3 Termination does not affect in any manner any rights of Swinburne arising under this Agreement prior to termination.

10. General

1. Interpretation

   The following rules apply unless the context requires otherwise:

   1. words denoting the singular include the plural and vice versa;
   2. words denoting natural persons include corporations and vice versa;
   3. words denoting any gender include all genders;
   4. headings are for convenience only and do not affect interpretation;
   5. reference to any Party to this Agreement or any other relevant agreement or document includes that Party's successors and permitted assigns;
   10.1.6 reference to any document or agreement is deemed to include to references such document or as agreement amended, novated, supplemented, varied or replaced from time to time;
   7. references to any legislation or to any provision of any legislation include any modification or re-enactment of such legislation or any legislative provisions substituted for, and all legislation and statutory instruments issued under, such legislation; and
   8. any reference to "GST", "recipient", "supplier", "supply", "tax invoice" and "taxable supply" has the meaning given to those expressions in the A New Tax System (Goods and Services Tax) Act 1999.

2. **No partnerships:** This Agreement does not create a partnership, agency, fiduciary or other relationship, except the relationship of contracting parties. No Party is liable for the acts or omission of any other Party, save as set out in this Agreement.
3. **Assignment:** The Licensee must not assign, sub-contract, or transfer any of its rights or obligations under this Agreement to any person without the prior written consent of Swinburne. Such consent must not be unreasonably withheld.
4. **Severability:** If a clause or part of a clause can be read in a way that makes it illegal, unenforceable or invalid, but can also be read in a way that makes it legal, enforceable and valid, it must be read in the latter way. If any clause or part of a clause is illegal, unenforceable or invalid, that clause or part is to be treated as removed from this Agreement, but the rest of this Agreement is not affected and all other provisions will remain in full force and effect.

Schedule

Licence Number: L20076IA

Item 1 – The Questionnaire	HLQ – the health literacy questionnaire developed by Richard Osborne, Rachelle Buchbinder, Gerald Elsworth and Roy Batterham and more fully described in "The grounded psychometric development and initial validation of the Health Literacy Questionnaire (HLQ)" *BMC Public Health* 2013, 13:658.

Item 2 – Licence Fee	
	$250 (for the duration of the Term)

Item 3 – Approved Purpose	
Purpose	Use of the HLQ Questionnaire in the English, Norwegian, Turkish (Australian) Language for the project "Health Literacy and Access to Sexual Healthcare Services"
Number of Authorised Implementations	355
Project Start Date	1st January 2021
Project End Date	15th July 2020

Item 4 – Duration of Licence	
	7 months, 15 days

Item 5 – Territory	
	Norway - Turkey

Item 6 – Cultural Adaptation and/or Translation Rights	
	[***The Licensee does not have a right to prepare or obtain a cultural adaptation of the Questionnaire***] [***The Licensee does not have a right to obtain a translation of the Questionnaire***]
Language of Translation	[***N/A***]

The following Questions must be completed within 3 months before the end of the Term. The response to the questions should not exceed one side of an A4 page.

1)Please provide information on the particular purposes for which the questionnaires have been administered in the past 12 months?

2)What challenges (if any) have you encountered in the administration and collection of responses to the questionnaires in the last 12 months?

3)What benefits have accrued through the administration of the questionnaires in the past 12 months? (this may include but not limited to new interventions, re-alignment of practices, input to strategic plans and policy, presentation to stakeholders and broader audiences, publications etc)

4)Did the questionnaire serve your specific needs and purpose? Do you have any suggestions on ways in which the questionnaires may better serve your specific requirements?

APPENDIX- B: Answer from REC (REK, Oslo, Norway)

REK

Region:	Saksbehandler:	Telefon:	Vår dato:	Vår referanse:
REK sør-øst B	Marianne Carson	22845521	17.11.2020	184363
			Deres referanse:	

Tony Joakim Sandset

184363 Health Literacy and Access to Sexual Healthcare Services Among Young Adults of Turkish Background in Norway

Forskningsansvarlig: Universitetet i Oslo

Søker: Tony Joakim Sandset

Søkers beskrivelse av formål:

AIM: This study aims to build on the knowledge concerning access to and utilization of sexual health services including STIs testing; and to investigate the association between sexual health literacy and the utilization of these services in minorities of Turkish background in Norway.
Objectives of the study:
1. To measure the rate of STIs testing and the level of utilization of sexual health services
2. To determine the level of sexual health literacy and measure its association with the utilization level and derive the related barriers to access.
3. To measure the associations between sociodemographic factors, self-perceived risk, risky sexual behavior or GP visits with the utilization level.

REKs vurdering

Vi viser til søknad om forhåndsgodkjenning av ovennevnte forskningsprosjekt. Søknaden ble behandlet av Regional komité for medisinsk og helsefaglig forskningsetikk (REK sør-øst B) i møtet 28.10.2020. Vurderingen er gjort med hjemmel i helseforskningsloven § 10, jf. forskningsetikkloven § 10.

Vurdering

Slik komiteen forstår søknaden og forskningsprotokollen er studiens formål å få ny kunnskap om tilgang til og bruk av seksualhelsetjenester blant unge voksne med tyrkisk bakgrunn i Norge. Det skal rekrutteres 350 personer med tyrkisk bakgrunn i alderen 20-29 år som skal fylle ut et spørreskjema som kombinerer validerte og ikke-validerte instrumenter knyttet til sosiodemografiske karakteristikker, helsekunnskap, selvopplevd risiko for seksuelt overførbare sykdommer, seksuell helse og bruk av fastlegetjenesten. Studien er samtykkebasert. Det overordnete målet er å bl.a. styrke tjenester rettet mot etniske minoritetssamfunn, og dermed bidra til økt seksuell helse og velvære i disse gruppene.

Komiteen vurderer at prosjektet, slik det er presentert i søknad og protokoll, ikke vil gi ny kunnskap om helse og sykdom. Prosjektet faller derfor utenfor REKs mandat etter

helseforskningsloven, som forutsetter at formålet med prosjektet er å skaffe til veie "ny kunnskap om helse og sykdom", se lovens § 2 og § 4 bokstav a).

Det kreves ikke godkjenning fra REK for å gjennomføre prosjektet. Det er institusjonens ansvar å sørge for at prosjektet gjennomføres på en forsvarlig måte med hensyn til for eksempel regler for taushetsplikt og personvern samt innhenting av stedlige godkjenninger.

Vedtak

Avvist (utenfor mandat)

Prosjektet faller utenfor helseforskningslovens virkeområde, jf. § 2 og § 4 bokstav a). Det kreves ikke godkjenning fra REK for å gjennomføre prosjektet.

Komiteens avgjørelse var enstemmig.

Med vennlig hilsen

Ragnhild Emblem
Professor, dr. med.
leder REK sør-øst B

Marianne Carson
rådgiver

Kopi sendes forskningsansvarlig institusjon og eventuelle medarbeidere som er gitt tilgang til prosjektet i REK-portalen.

Klageadgang
Du kan klage på komiteens vedtak, jf. forvaltningsloven § 28 flg. Klagen sendes til REK sør-øst B. Klagefristen er tre uker fra du mottar dette brevet. Dersom vedtaket opprettholdes av REK sør-øst B, sendes klagen videre til Den nasjonale forskningsetiske komité for medisin og helsefag (NEM) for endelig vurdering.

APPENDIX-C: Yeditepe University Ethical Clearance by Non-Invasive Clinical Research Ethical Committee**,** Yeditepe University**,** Istanbul

T.C. YEDİTEPE ÜNİVERSİTESİ
GİRİŞİMSEL OLMAYAN KLİNİK ARAŞTIRMALAR ETİK KURULU

Versiyon No 1.0
Sayfa 1 / 2

KARAR FORMU

31.08.2021

ETİK KURUL BİLGİLERİ		
	Etik Kurulun Adı	Yeditepe Üniversitesi Girişimsel Olmayan Klinik Araştırmalar Etik Kurulu
	Açık Adres	Yeditepe Üniversitesi Diş Hekimliği Fakültesi, Bağdat Cad. No. 238 Göztepe 34728 Kadıköy, İstanbul
	İnternet Sayfası	http://goetik.yeditepe.edu.tr/
	Telefon	0216 363 60 44
	E-posta	goetik@yeditepe.edu.tr

DEĞERLENDİRİLEN BELGELER	
Islak imzalı başvuru dosyası, CD'si ve elektronik başvuru	☒
Araştırma başlığı ve araştırmacıların isimleri	☒
Başvuru dilekçesi	☒
Araştırmanın;	☒
• Niteliği	☒
• Önemi ve özgün değeri	☒
• Amaç ve hedefleri	☒
• Yöntemi	☒
• Yönetimi	☒
• Yaygın etkisi	☒
• Araştırma bütçesi (Mevcutsa)	☒
• Süresi ve uygunluğu (Zaman cetveli)	☒
• Kaynakları	☒
Araştırma izin belgesi / belgeleri	☒
Bilgilendirilmiş Gönüllü Olur Formu (yapılan araştırmaya özel olarak hazırlanmış)	☒
Taahhütname-1 Dünya Tıp Birliği Helsinki Bildirgesinin son versiyonunun ve Sağlık Bakanlığı'nın ilgili tüm kılavuzlarının okunmasına dair taahhüt	☒
Taahhütname-2 Daha önce yapılmış etik kurul başvurusu mevcut olup olmadığına dair taahhüt	☒
Taahhütname-3 Araştırma sırasında araştırma bütçesinde yer almayan ve gönüllünün kendisine veya Sosyal Güvenlik Kurumuna ek yük getirecek hiçbir işlem uygulanmayacağına dair taahhüt	☒
Taahhütname-4 COVID-19 hastalarında tedavi yaklaşımları ve bilimsel araştırmalar genelgesi okunmasına dair taahhüt	☒
Araştırmacıların her birisine ait özgeçmiş formu	☒
Ek belgeler (Varsa kullanılan ölçek izinleri vb.)	☒

KARAR BİLGİLERİ		
	Başvuru Numarası	202106067
	Toplantı Tarihi	13.08.2021
	Toplantı Yeri	Çevrim içi (Google Meet)
	Karar No	17

Araştırmanın Başlığı: İstanbul'da Yaşayan Suriyeli Erkek Mültecilerin Sağlık Okuryazarlığı ve Üreme Sağlık Hizmetlerine Erişiminin Değerlendirilmesi ve Türk Erkekleri ile Karşılaştırılması: Kesitsel Bir Çalışma

Araştırmacılar: Hussein M, Tony S, Anne O, Altunok EÇ

BAŞVURU NUMARASI: 202106067

KARAR 31.08.2021

☒ **KABUL***	☐ **RET** ☐ *KAPSAM DIŞI (GİRİŞİMSEL)* ☐ *BİLİMSEL VE/VEYA ETİK KURALLARA AYKIRI* ☐ *BİR SORUMLU ARAŞTIRMACININ (TEZ İSE TEZ DANIŞMANI), BİR TOPLANTIYA **İKİ (2)** **ADETTEN FAZLA ÇALIŞMA BAŞVURUSUNDA** BULUNMASI* ☐ *KURUM İÇİ BAŞVURULARINDA **YEDİTEPE UZANTILI E-POSTA HESABI** İLE GİRİŞ YAPILMAMIŞ OLMASI* ☐ *ŞARTLI KABULDE BELİRTİLEN REVİZYONLARIN ZAMANINDA VE/VEYA İSTENİLDİĞİ ŞEKİLDE YAPILMAMIŞ OLMASI*

*** BGOF gönüllü ve tanık bilgi ve imza bölümleri eklendiği takdirde uygundur. Diğer revizyonlar tamamlanmıştır.**

Prof. Dr. Didem ÖZDEMİR ÖZENEN
Başkan

Katılım		İlişki	
☒ Var	☐ Yok	☐ Var	☒ Yok

Doç. Dr. Gökhan ERTAŞ
Başkan Yardımcısı

Katılım		İlişki	
☒ Var	☐ Yok	☐ Var	☒ Yok

Doç. Dr. Elif SUNGURTEKİN EKÇİ
Raportör

Katılım		İlişki	
☒ Var	☐ Yok	☐ Var	☒ Yok

Prof. Dr. Feryal SUBAŞI
Üye

Katılım		İlişki	
☒ Var	☐ Yok	☐ Var	☒ Yok

Doç. Dr. Mehmet Engin CELEP
Üye

Katılım		İlişki	
☐ Var	☒ Yok	☐ Var	☐ Yok

Dr. Öğr. Üyesi E. Çiğdem KELEŞ
Üye

Katılım		İlişki	
☐ Var	☒ Yok	☒ Var	☐ Yok

Dr. Öğr. Üyesi Binnur OKAN BAKIR
Üye

Katılım		İlişki	
☑ Var	☐ Yok	☐ Var	☑ Yok

Dr. Öğr. Üyesi E. Nur ÖZDAMAR
Üye

Katılım		İlişki	
☑ Var	☐ Yok	☐ Var	☑ Yok

Dr. Öğr. Üyesi SEVİM ŞEN
Üye

Katılım		İlişki	
☑ Var	☐ Yok	☐ Var	☑ Yok

Araştırmanın Başlığı: İstanbul'da Yaşayan Suriyeli Erkek Mültecilerin Sağlık Okuryazarlığı ve Üreme Sağlık Hizmetlerine Erişiminin Değerlendirilmesi ve Türk Erkekleri ile Karşılaştırılması: Kesitsel Bir Çalışma

Araştırmacılar: Hussein M, Tony S, Anne O, Altunok EÇ.

APPENDIX-D: UIO Ethical Clearance

UiO : Faculty of Medicine
University of Oslo

Hussein Miri

Date: 11 September 2020

Statement from the Program Ethical Committee

The Program Ethical Committee have processed your application, number 9053063, about your project "Health Literacy and Access to Sexually Transmitted Infections (STIs) including HIV Testing Services in Young Adults of Turkish Background in Norway".

The committee believe your project fall under the Norwegian Health Research Law (helseforskningsloven and forskningsetikkloven) and should be submitted to Regional Committees for Medical and Health Research Ethic (REC) for approval. In addition, you also have to apply to Norwegian Centre for Research Data (NSD) for approval. This is a new regulation.

If your project is to be conducted outside of Norway, you also need to submit the project to local authorities for approval.

Supervisors for Hussein Miri's master project is:

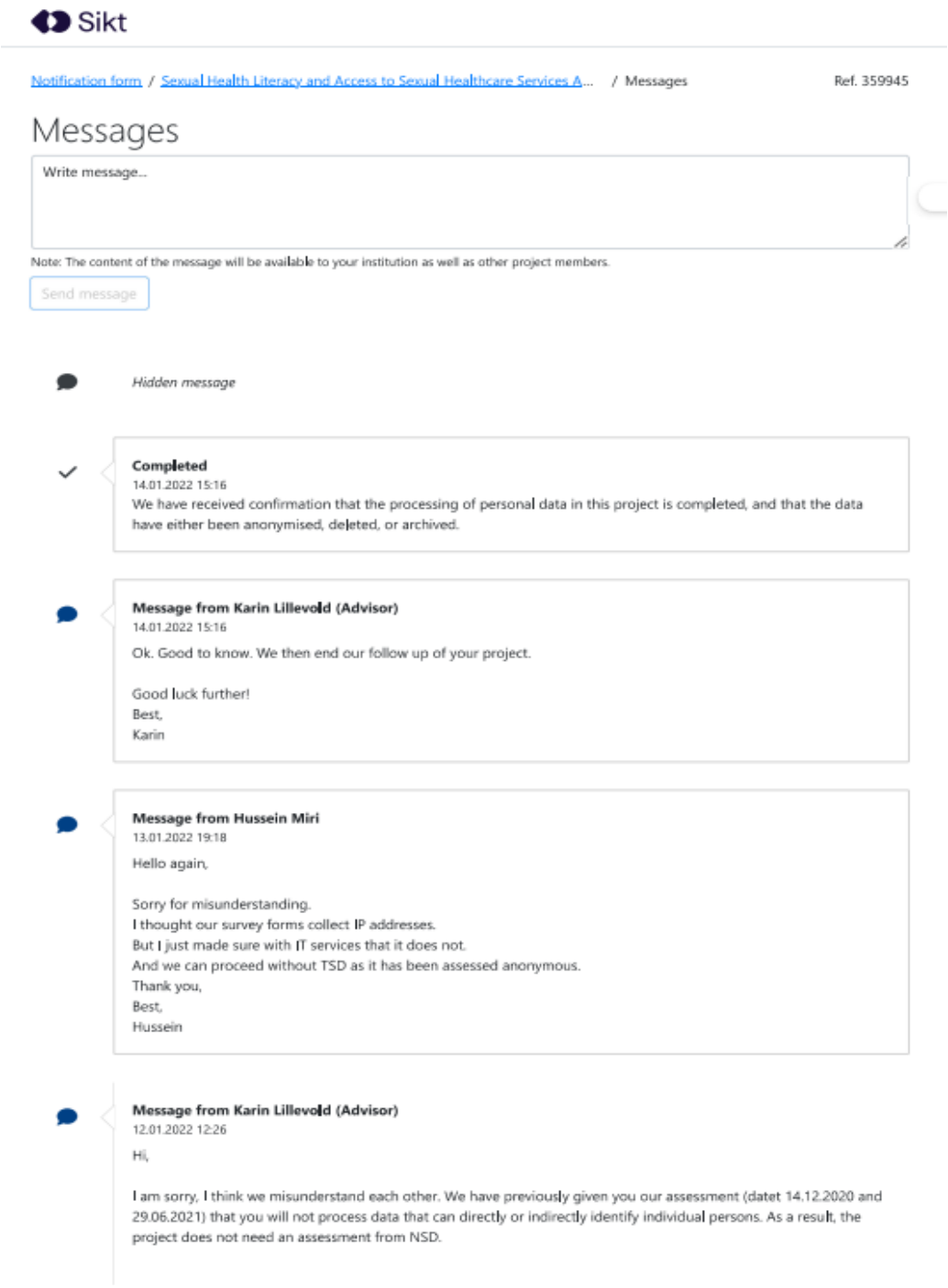
- Anne Olaug Olsen, Associate Professor at Institute of Health and Society at UIO
- Tony J. Sandset, Researcher at Center for Health Science Education, UIO

Sincerely yours

Elia John Mmbaga
Associate Professor, MD, PhD
Program leader
elia.mmbaga@medisin.uio.no

Terese Eriksen
Senior Executive Officer
terese.eriksen@medisin.uio.no
+47 22850526 or +47 22850550

APPENDIX-E: NSD Assessment



Sikt

Notification form / Sexual Health Literacy and Access to Sexual Healthcare Services A... / Messages Ref. 359945

Messages

Write message...

Note: The content of the message will be available to your institution as well as other project members.

Send message

Hidden message

Completed
14.01.2022 15:16
We have received confirmation that the processing of personal data in this project is completed, and that the data have either been anonymised, deleted, or archived.

Message from Karin Lillevold (Advisor)
14.01.2022 15:16
Ok. Good to know. We then end our follow up of your project.

Good luck further!
Best,
Karin

Message from Hussein Miri
13.01.2022 19:18
Hello again,

Sorry for misunderstanding.
I thought our survey forms collect IP addresses.
But I just made sure with IT services that it does not.
And we can proceed without TSD as it has been assessed anonymous.
Thank you,
Best,
Hussein

Message from Karin Lillevold (Advisor)
12.01.2022 12:26
Hi,

I am sorry, I think we misunderstand each other. We have previously given you our assessment (datet 14.12.2020 and 29.06.2021) that you will not process data that can directly or indirectly identify individual persons. As a result, the project does not need an assessment from NSD.

But now you are saying that you will in fact process data that can directly or indirectly identify individual persons and that you need our assessment anyway? What changes have been made?

Message from Hussein Miri
11.01.2022 21:46

Hello,

This was a busy time due to Christmas and holidays. Using Nettskjema to collect data, although it will not collect emails of participants as the survey form is set to not collect emails; IP addresses will be collected. TSD will help hide IP addresses. Thus using TSD shall provide more privacy and anonymity; more protection.
We have decided to use it as the university gives access to it. But still, TSD has gave us a limited time to get NSD's approval.

Message from Karin Lillevold (Advisor)
11.01.2022 16:14

Hi again,

If you are not processing any personal data we will end our follow up of your project.

Message from Karin Lillevold (Advisor)
16.12.2021 17:36

I doubt it, since it is our understanding that your data collection is anonymous.
But please ask your supervisor.

Message from Hussein Miri
16.12.2021 13:06

Yes it is still the same project.
So I do not need to use TSD?

Best,
Hussein

Message from Karin Lillevold (Advisor)
10.12.2021 17:48

Hi,
Our assessment given on 29.06.2021 was that this project will not process data that can directly or indirectly identify individual persons. I do not think you can use TSD for anonymous data, or?

Best,

Karin
NSD

Message from Hussein Miri
09.12.2021 11:47

Hello,
I have sent in the new form to be assessed. It is the same project, but we had some delays.
So the end date of the project has been updated to 30. June. 2022. Besides this, there has been no change.

I would like to receive a confirmation regarding the extension of the project from your side, so that I can use to to extend the use for TSD for data collection and storage.

Thank you,
best,
Hussein Miri

Sent in to be assessed
09.12.2021 11:44

Hidden message

Message from Hussein Miri
29.06.2021 16:21

Hello,

Thank you.
I have updated the form in regards to informal consent where participants will need to tick the box that says they agree on participating without the need for the formal signature or names. On the participant leaflet and on the 1st page of the survey, the general information regarding the study will be provided to participants with contact details of the student and the responsible researcher in Turkey.

best,
Hussein

Message from Karin Lillevold (Advisor)
29.06.2021 15:16

Hi,

We remind you that if you are conducting the survey in an anonymous way (as our previous assessment stated) you also do not need their formal consent. To get their name/signature only for the purpose of getting their consent if no other persnal data is being collected would have worked against its purpose since you would have obtained the personal data name through the written consent. Research ethically, it is still good to give the participants information about your project and how they can contact you, but then remove the section on the participants' rights and consent and the declaration of consent.

Best regards,
Karin
NSD

Message from Hussein Miri
28.06.2021 21:46

Hello,

The population of the project has been changed. In the previous project we were supposed to compare our results between sexual minority men and heterosexuals in İstanbul. In this project we will be comparing our results between 18–29 years old Turkish men vs. Male Syrian refugees in İstanbul.

This has lead us to change some of the questions and variables found in the questionnaire form:
- The first section of the questionnaire which deals with Health Literacy has not been changed.

- The second section of the form dealing with Sexual Health and behaviors; any question that was related to " Homosexuality" has been removed.
(Items like: Have you ever had same-sex sexual encounters?..). In question 15 (Q15) one variable choice was added to question (Place of testing : Refugee Health center). The two questions dealing with " Ever got diagnosed with HIV" and "Risk of contracting HIV" has been removed from the questions list. One question was added (Q21) which asks about preferred communication channel to obtain sexual health information (Radio, TV, SMSi Social media...etc)

- The third section which deals with socio-economic variables, question 29 has been added which asks about average monthly income of participants (choices: 1-2824 Turkish Lira, ---- 8000 Turkish Lira or more). Also Question 30 has been added " On a scale from «poor» to «proficient», how would you rate your Turkish language skills? - 0: Poor - 1: Fair - 2: Good - 3: Proficient".

As for collecting data, in the previous project we were supposed to recruit participants through dating applications. However in the new project, social media pages in addition to snowballing techniques will be used.
The sample size has been changed accordingly to the new population size. A total of 386 participant will be recruited with 193 participant in each group (Syrian refugees Vs. Turkish young adult men).
Beside the above changes, the project remains the same in regards to managing and protecting data.

all the best,
Hussein

Message from Karin Lillevold (Advisor)
25.06.2021 16:31

Hi,

Referring to the change registered on 11.06.2021. Could you please summarize in a message here what the changes are since our last assessment?

Best regards,
Karin
NSD

Sent in to be assessed
11.06.2021 14:49

Hidden message

Sent in to be assessed
14.12.2020 12:12

We kindly ask you to answer if it is necessary for the participants to name their concrete age, or if it will be possible to make boxes as "20–23", "23–26" etc. The same about the question "If Norwegian by naturalization, How long has it been since you were granted the Norwegian citizenship" and " In total, if not born in Norway, how long have you been living in Norway".

Also, we ask you to deliberate if at the question "Parent's country of birth" will have an option to name a different country, or if this is just a box to mark.

3. At the page "project information":
At the page "project information" below "Explain why the processing of personal data is necessary" we kindly ask you to explain why it is necessary to process all data (that you have marked as "yes") at the page "personal data" and "type of data" in the Notification form.

4. Possible third persons:
In the online survey, you will ask some questions about the participants parents (country of birth, language,). If necessary for the purpose of the project, you will need to register this as processing personal data about third persons at the page "third persons" in the Notification form.

The legal ground for such processing will be a task in the public interest, as we assume you will not have direct contact with those persons. Further, it will be possible to make a exception from giving information (if not possible or disproportionate effort – please explain at the page "third persons" if this is the case).

We ask that you update your notification form in accordance with the comments above. We remind that you on the last page of the form below "Send in" must confirm submission. When you have done this, we will continue reviewing your project.

Returned
21.10.2020 12:21

Hidden message

Sent in to be assessed
23.09.2020 18:12

APPENDIX- F: Informed Consent

ENGLSIH

Dear Invitee, **would you like to help with health research?**

My name is Hussein Miri. I am a master's degree student at University of Oslo, International Community Health program. I am kindly requesting your participation in a research study that I am conducting titled:
"Determinants of Access to Sexual Healthcare Services Among
18–29-year-old Turkish and Syrian Young Adult Males Living in Istanbul."

I am interested in assessing your health literacy, accessibility and the challenges you face or might face when trying to use these health services. Because the research is about sexual health, it is important that participants should have some sexual experience (have had sexual relationship at least once before). The study does not involve doing any test for sexually transmitted infections.

The study involves completing a survey with three parts on basic demographic characteristics, health literacy and sexual health. A sample of the questions that will be asked are listed below. Participation is completely voluntary, and you may withdraw from the study at any time. The study is completely anonymous; therefore, it does not require you to provide your name or any other identifying information.

If you would like to participate in the study, please read the ***Information Leaflet*** below.

To begin the study, click the **survey link** at the end.

Your participation in the research will be of great importance to assist in ensuring that sexual minorities are receiving adequate and effective sexual health services and to help improving the available services.

The Survey will take about **10- 15 min** to complete. It is provided in Turkish / Arabic.

Sample questions from the survey:
1- How confident do you feel in your ability to find accurate health information on the internet?
2- Have you ever visited your Primary Care Provider service?.
3- How many of these visits were related to "sexual health" reasons?

Thank you for your time and participation.

TURKISH

Sayın Davetli**,** **Sağlık araştırmalarına yardım etmek ister misiniz?**

Benim adım Hussein Miri. Oslo Üniversitesi, Uluslararası Toplum Sağlığı programında yüksek lisans öğrencisiyim**. İstanbul'da yaşayan 18-29 yaş arası Türk ve Suriyeli genç erkekler arasında Cinsel Sağlık Hizmetlerine Erişimin Belirleyicileri** başlıklı bir araştırma çalışmasında sizin katılımınızı rica ediyorum**.** Sağlık okuryazarlığınızı, erişilebilirliği ve bu sağlık hizmetlerini kullanmaya çalışırken karşılaşabileceğiniz veya karşılaşabileceğiniz zorlukları değerlendirmekle ilgileniyorum.

Araştırmanın cinsel sağlıkla ilgili olması nedeniyle, katılımcıların bir miktar cinsel deneyime sahip olmaları önemlidir (en az bir kez cinsel ilişki yaşamış olmalıdır).Bu çalışma cinsel yolla bulaşan enfeksiyonlar için herhangi bir test yapmayı içermez.

Çalışma, temel demografik özellikler, sağlık okuryazarlığı ve cinsel sağlık hakkında üç bölümlük bir anketi tamamlamayı içerir. Sorulacak soruların bir örneği aşağıda listelenmiştir.

Katılım tamamen gönüllüdür ve istediğiniz zaman çalışmadan çekilebilirsiniz.

Çalışma tamamen anonimdir; bu nedenle adınızı veya diğer herhangi bir tanımlayıcı bilgi vermenizi gerektirmez. Çalışmaya katılmak isterseniz, aşağıdaki Bilgilendirme Broşürünü okuyunuz. Çalışmaya başlamak için sonundaki anket bağlantısını tıklayınız. Araştırmaya katılımınız, cinsel azınlıkların yeterli ve etkili cinsel sağlık hizmetleri aldığından emin olmada ve mevcut hizmetleri iyileştirmede büyük önem taşıyacaktır.

Anketi tamamlamanız yaklaşık **10-15 dakika sürecektir.** Dil: **Türkçe / Arapça**.

Anketten örnek sorular:
1- İnternetten doğru sağlık bilgilerini bulma konusunda ne kadar kendinizi güvenl hissediyorsunuz?
2- Daha önce Birinci Basamak Sağlık Hizmeti sağlayıcınıza başvurdunuz mu?
3- Bu ziyaretlerin kaçı "cinsel sağlık" nedenleriyle ilgiliydi?

Zamanınız ve katılımınız için teşekkür ederiz.

ARABIC

عزيزي المدعو هل ترغب في المساعدة في البحوث الصحية؟

اسمي حسين مرعي .أنا طالب دراسات عليا في جامعة أوسلو، برنامج الصحة الدولية للمجتمع .أطلب منكم بلطف المشاركة في دراسة بحثية أقوم بها بعنوان" :**محددات الوصول إلى خدمات الرعاية الصحية الجنسية بين الذكور الشباب "الأتراك والسوريين البالغين من العمر 18-29 عامًا الذين يعيشون في إسطنبول**

أنا مهتم بتقييم معرفتكم الصحية، وإمكانية الوصول، والتحديات التي تواجهونها أو قد تواجهونها عند محاولة استخدام . هذه الخدمات الصحية.

نظرًا لأن البحث يتعلق بالصحة الجنسية، من المهم أن يكون لدى المشاركين بعض الخبرة الجنسية)أن يكونوا قد أقاموا علاقة جنسية مرة واحدة على الأقل من قبل .(لا تتضمن الدراسة إجراء أي اختبار للأمراض المنقولة جنسياً .تتضمن الدراسة إكمال استبيان مكون من ثلاثة أجزاء حول الخصائص الديموغرافية الأساسية، ومعرفة الصحة، والصحة الجنسية .نموذج من الأسئلة التي سيتم طرحها مدرج أدناه.

المشاركة طوعية تمامًا، ويمكنك الانسحاب من الدراسة في أي وقت .الدراسة مجهولة تمامًا؛

لذلك، لا تتطلب منك تقديم اسمك أو أي معلومات تعريفية أخرى .إذا كنت ترغب في المشاركة في الدراسة، يرجى قراءة النشرة المعلوماتية أدناه .لبدء الدراسة، انقر على رابط الاستبيان في النهاية

مشاركتك في البحث ستكون ذات أهمية كبيرة للمساعدة في ضمان حصول الأقليات الجنسية على خدمات صحية جنسية . كافية وفعالة وللمساعدة في تحسين الخدمات المتاحة.

سيستغرق الاستبيان **حوالي 10-15 دقيقة** لإكماله .يتم **تقديمه باللغة التركية /العربية**.

أسئلة نموذجية من الاستبيان:

- ما مدى ثقتك في قدرتك على العثور على معلومات صحية دقيقة على الإنترنت؟
- هل سبق لك زيارة مزود خدمة الرعاية الصحية الأولية الخاص بك؟
- كم عدد هذه الزيارات التي كانت متعلقة بأسباب "الصحة الجنسية"؟

شكرًا لكم على وقتكم ومشاركتكم

APPENDIX-G: Leaflet, Invitation

Would you like to help with health research?

Study Title:

"Determinants of Access to Sexual Healthcare Services Among 18–29-year-old Turkish and Syrian Young Adult Males Living in Istanbul"

An invitation to participate

You are being invited to take part in this study. Before you decide on whether you would like to participate, it is important for you to understand why this research is being conducted and what it will involve. Please take time to read the below information carefully to decide on your participation and contact the researcher on the details provided, should you have any questions.

What is the purpose of the study?

This study aims to evaluate the use of sexually transmitted infections testing services by young adult Syrian refugees in Istanbul. The purpose of this study is to gain a better understanding of the use of sexual healthcare services.

Why have I been invited to participate?

You have been invited because you are a Syrian refugee / Turkish who is living in Istanbul. Your responses are invaluable as part of this research.

Do I have to take part?

Participation in this research project is entirely voluntary. Please note that you are required to sign a consent to complete and submit the questionnaire. You will be asked to indicate that you have read and understood the information provided here. You can choose to withdraw your consent at any time without giving any reason. All your personal information will then be deleted. It will not have any negative consequences for you if you do not want to participate or late choose to withdraw.

What will happen to me if I take part?

You will be asked to complete an electronic (online) questionnaire. Please ensure you only complete one version of the questionnaire, which will have 3 parts with a total of around 37 questions. The questionnaire should take approximately 10 – 15 minutes to complete. The electronic questionnaire can be accessed on your computer, laptop, iPad, or smartphone with an internet access. After submitting, the questionnaire will be forwarded to the Oslo university's secure encrypted account for analysis. If preferred, the printed questionnaire with envelope can be sent to your mailbox or can be filled and dropped at the organization. Once completed, please return it to return address provided with invitation letter. The questionnaires will then be collected by researcher for analysis. Alternatively, if you agree, the researcher could visit you with his own iPad with internet access for you to fill the questions.

What are the possible disadvantages and risks of taking part?

It is possible that some questions could cause you distress or embarrassment, as they refer to your sexual health. However, it is important, for the purpose of the research, to be informed that your answers are kept confidential and safe for you to be able to feel safe and comfortable to fill your answers.

Will my taking part in this study be kept confidential?

All data is confidential and is treated in accordance with the privacy regulations. Please ensure you do not disclose a third party's personal information anywhere on the questionnaire. Data from electronic questionnaires will be stored on a secured password encrypted database owned by the University of Oslo. Data from printed questionnaires will be stored with researcher in a locked cabinet.

What will happen to the results of the research study?

The results will be used for the purpose of the Master's degree dissertation International Community Health. However, they might additionally be disseminated at conferences or published in peer-reviewed scientific journals. If you are interested in receiving a copy of the final report, please contact the researcher on husseim@uio.no or call 05449610369 and it will be sent to you.

Your rights:

As long as you can be identified in the data material, you have the right to:
- access to which personal information is registered about you, and to receive a copy of the information,
- to have personal information about you corrected or deleted
- to send a complaint to the Data Inspectorate about the processing of your personal data.

What entitles us to process personal information about you?

We process information about you based on your consent. On behalf of University of Oslo, NSD- Norwegian Center for Research Data AS has assessed that the processing of personal data in this project is in accordance with the privacy regulations.

Who is organizing and funding the research?

This study is organized and self-funded by the researcher Hussein Miri, a Master's degree student in International Community Health at the University of Oslo. In case of receiving any funding, the source will be disclosed and announced.

Contact for further information or for clarification about this research:

Researcher / Student: Hussein Miri, MPhil. International Community Health, Department of Health and Society, UiO. Email: husseim@uio.no or call at 0047 96805626.

Project Responsible Researcher in Türkiye: Dr. Cigdem Altunok, Head of Biostatistics department, Yeditepe University ecaltunok@yeditepe.edu.trPhone: 0216 578 0000

TURKISH

Sağlık araştırmalarına yardım etmek ister misiniz??

Araştırma Başlığı:

"İstanbul'da Yaşayan 18-29 Yaş Arası Türk ve Suriyeli Genç Yetişkin Erkeklerde Cinsel Sağlık Hizmetlerine Erişim Belirleyicileri"

Katılım Daveti:
Bu araştırmada yer almanız için davet ediliyorsunuz. Katılım kararınızı vermeden önce, araştırmanın neden yapıldığını ve neyi kapsayacağını anlamanız önemlidir. Lütfen bu bilgileri dikkatlice okuyun ve herhangi bir sorunuz olursa araştırmacı ile iletişime geçin.

Araştırmanın Amacı Nedir?
Bu çalışma, İstanbul'daki genç yetişkin Suriyeli mültecilerin cinsel yolla bulaşan enfeksiyon test hizmetlerini kullanımını değerlendirmeyi amaçlamaktadır.

Neden Davet Edildim?
İstanbul'da yaşayan bir Suriyeli mülteci / Türk olduğunuz için davet edildiniz.

Katılmak Zorunda Mıyım?
Araştırmaya katılım tamamen gönüllüdür. Anketi tamamlamak ve göndermek için bir onay formu imzalamanız gerekmektedir. İstediğiniz zaman herhangi bir neden göstermeden onayınızı geri çekebilirsiniz.

Katılırsam Ne Olacak?
Elektronik (çevrimiçi) bir anket doldurmanız istenecektir. Ankette toplam yaklaşık 37 soru bulunmaktadır ve yaklaşık 10-15 dakika sürmektedir.

Katılmakla İlgili Olası Dezavantajlar ve Riskler Nelerdir?
Bazı sorular, cinsel sağlığınıza atıfta bulunduğu için sizi rahatsız edebilir veya utandırabilir. Ancak, cevaplarınızın gizli tutulacağını bilmeniz önemlidir.

Katılımım Gizli Tutulacak mı?
Tüm veriler gizlidir ve gizlilik yönetmeliklerine uygun olarak işlenir.

Araştırma Sonuçları Ne Olacak?
Sonuçlar, Yüksek Lisans derecesi tezi için kullanılacak ve bilimsel forumlarda paylaşılabilir.

Haklarınız: Verilerde kimliğiniz tanımlanabilir olduğu sürece:

- Kayıtlı kişisel bilgilerinize erişim ve bilgilerin bir kopyasını alma,
- Kişisel bilgilerinizin düzeltilmesi veya silinmesi,
- Kişisel verilerinizin işlenmesine ilişkin Veri Denetleme Kurulu'na şikayette bulunma hakkınız vardır.

Araştırmayı Kim Düzenliyor ve Kim Finanse Ediyor? Bu çalışma, Oslo Üniversitesi'nde Uluslararası Toplum Sağlığı alanında Yüksek Lisans öğrencisi olan araştırmacı Hussein Miri tarafından düzenlenmekte ve kendi kaynaklarıyla finanse edilmektedir.

Daha Fazla Bilgi veya Araştırma Hakkında Açıklama İçin İletişim:
Araştırmacı / Öğrenci: **Hussein Miri,** MPhil. Uluslararası Toplum Sağlığı, Sağlık ve Toplum Bölümü, UiO. E-posta: husseim@uio.no veya 0047 96805626 numaralı telefondan arayabilirsiniz. Türkiye'deki Proje Sorumlu Araştırmacısı: **Dr. Çiğdem Altunok**, Biyoistatistik Bölüm Başkanı, Yeditepe Üniversitesi Telefon: 0216 578 0000

ARABIC

هل تود المساعدة في البحث الصحي

عنوان الدراسة: محددات الوصول إلى خدمات الرعاية الصحية الجنسية بين الذكور

الشباب الأتراك والسوريين البالغين من العمر 18-29 سنة المقيمين في إسطنبول

دعوة للمشاركة

تمت دعوتك للمشاركة في هذه الدراسة. قبل اتخاذ قرارك حول المشاركة، من المهم أن تفهم لماذا يتم إجراء هذا البحث وما سيتضمنه. يرجى أخذ الوقت لقراءة المعلومات أدناه بعناية لتقرير مشاركتك والتواصل مع الباحث على التفاصيل المقدمة، إذا كان لديك أي أسئلة.

ما هو هدف الدراسة؟

تهدف هذه الدراسة إلى تقييم استخدام خدمات فحص الأمراض المنقولة جنسياً من قبل الشباب السوريين اللاجئين في إسطنبول. الغرض من هذه الدراسة هو الحصول على فهم أفضل لاستخدام خدمات الرعاية الصحية الجنسية.

لماذا تمت دعوتي **للمشاركة؟**

لقد تمت دعوتك لأنك لاجئ سوري / تركي مقيم في إسطنبول. إجاباتك ثمينة كجزء من هذا البحث

هل يجب علي المشاركة؟

المشاركة في هذا المشروع البحثي اختيارية تمامًا. يرجى ملاحظة أنه يتعين عليك توقيع موافقة لإكمال وتقديم الاستبيان. سيُطلب منك الإشارة إلى أنك قرأت وفهمت المعلومات المقدمة هنا. يمكنك اختيار سحب موافقتك في أي وقت دون إعطاء أي سبب. سيتم بعد ذلك حذف جميع معلوماتك الشخصية. لن يكون له أي عواقب سلبية عليك إذا لم ترغب في المشاركة أو اخترت الانسحاب لاحقًا.

ماذا سيحدث لي إذا شاركت؟

سيُطلب منك إكمال استبيان إلكتروني (عبر الإنترنت). يرجى التأكد من إكمال نسخة واحدة فقط من الاستبيان، والذي سيحتوي على 3 أجزاء بإجمالي حوالي 37 سؤالاً. يجب أن يستغرق الاستبيان حوالي 10 – 15 دقيقة لإكماله. يمكن الوصول إلى الاستبيان الإلكتروني على جهاز الكمبيوتر، الكمبيوتر المحمول، الآيباد، أو الهاتف الذكي الخاص بك بوجود اتصال بالإنترنت. بعد الإرسال، سيتم إرسال الاستبيان إلى حساب جامعة أوسلو الآمن والمشفر للتحليل. إذا كنت تفضل ذلك، يمكن إرسال الاستبيان المطبوع مع المظروف إلى صندوق البريد الخاص بك أو يمكن ملؤه وإسقاطه في المنظمة. بمجرد الانتهاء منه، يرجى إعادته إلى عنوان الإرجاع المقدم مع خطاب الدعوة. ثم سيتم جمع الاستبيانات من قبل الباحث للتحليل. بدلاً من ذلك، إذا وافقت، يمكن للباحث زيارتك بجهاز الآيباد الخاص به مع الوصول إلى الإنترنت لتعبئة الأسئلة.

ما هي العيوب والمخاطر المحتملة للمشاركة؟

من الممكن أن تسبب بعض الأسئلة لك الإزعاج أو الحرج، حيث تتعلق بالصحة الجنسية. ومع ذلك، من المهم، لأغراض البحث، أن تكون على علم بأن إجاباتك تبقى سرية وآمنة لكي تشعر بالأمان والراحة عند تعبئة إجاباتك. هل سيتم الحفاظ على سرية مشاركتي في هذه الدراسة؟ جميع البيانات سرية ويتم معاملتها وفقًا للوائح الخصوصية. يرجى التأكد من عدم الكشف عن معلومات شخصية لطرف ثالث في أي مكان على الاستبيان. سيتم تخزين بيانات الاستبيانات الإلكترونية على قاعدة بيانات مؤمنة بكلمة مرور ومملوكة لجامعة أوسلو. سيتم تخزين بيانات الاستبيانات المطبوعة مع الباحث في خزانة مقفلة. ماذا سيحدث لنتائج الدراسة البحثية؟ سيتم استخدام النتائج لغرض رسالة الماجستير في الصحة الدولية للمجتمع. ومع ذلك، قد يتم أيضًا نشرها في المؤتمرات أو نشرها في المجلات العلمية المحكمة. إذا كنت مهتمًا بتلقي نسخة من التقرير النهائي، يرجى الاتصال بالباحث على husseim@uio.no وسيتم إرسالها لك. أو الاتصال برقم 05449610369.

حقوقك

طالما يمكن التعرف عليك في مواد البيانات، لديك الحق في

الوصول إلى المعلومات الشخصية المسجلة عنك، وتلقي نسخة من المعلومات

تصحيح أو حذف المعلومات الشخصية عنك

,تقديم شكوى إلى مفتشية البيانات حول معالجة بياناتك الشخصية

ما الذي يخولنا لمعالجة المعلومات الشخصية عنك؟ .

المركز النرويجي لبيانات البحث بتقيي أن معالجة البيانات -NSD نقوم بمعالجة المعلومات عنك بناءً على موافقتك. نيابة عن جامعة أوسلو، قام الشخصية في هذا المشروع تتماشى مع لوائح الخصوصية. من ينظم ويمول البحث؟ تم تنظيم هذه الدراسة وتمويلها ذاتيًا من قبل الباحث حسين .ميري، طالب درجة الماجستير في الصحة الدولية للمجتمع في جامعة أوسلو. في حالة تلقي أي تمويل، سيتم الإفصاح عن المصدر والإعلان عنه

:لمزيد من المعلومات أو للتوضيح حول هذا البحث

أو husseim@uio.no :البريد الإلكتروني .UiO ،الباحث / الطالب: حسين مرعي ، ماجستير الصحة الدولية للمجتمع، قسم الصحة والمجتمع .الاتصال على 0047 96805626
الباحث المسؤول عن المشروع في تركيا: الدكتورة شجدم ألتونوك، رئيسة قسم الإحصاء الحيوي، جامعة يديتبه الهاتف: 0216 578 0000

APPENDIX–H: Measurement Instrument (Survey)

SURVEY ENGLISH

This Survey has 3 Sections.
Please be reminded that all answers are strictly confidential

Section I: Knowledge and Health Literacy

In this questionnaire, the term "healthcare providers" refers to doctors.

Q1. Please indicate how strongly you disagree or agree with each of the following statements. You can check only one box for each statement.

		Strongly disagree	Disagree	Agree	Strongly Agree
1	I feel I have good information about health	☐	☐	☐	☐
2	I have at least one healthcare provider who knows me well	☐	☐	☐	☐
3	I can get access to several people who understand and support me	☐	☐	☐	☐
4	I compare health information from different sources	☐	☐	☐	☐
5	When I feel ill, the people around me really understand what I am going through	☐	☐	☐	☐
6	I spend quite a lot of time actively managing my health	☐	☐	☐	☐
7	When I see new information about health, I check up on whether it is true or not	☐	☐	☐	☐
8	I have at least one healthcare provider I can discuss my health problems with	☐	☐	☐	☐
9	I make plans for what I need to do to be healthy	☐	☐	☐	☐
10	I have enough information to help me deal with my health problems	☐	☐	☐	☐
11	If I need help, I have plenty of people I can rely on	☐	☐	☐	☐
12	I always compare health information from different sources and decide what is best for me	☐	☐	☐	☐
13	Despite other things in my life, I make time to be healthy	☐	☐	☐	☐
14	I am sure I have all the information I need to manage my health effectively	☐	☐	☐	☐
15	I have at least one person who can come to medical appointments with me	☐	☐	☐	☐
16	I know how to find out if the health information I receive is right or not	☐	☐	☐	☐
17	I have the healthcare providers I need to help me work out what I need to do	☐	☐	☐	☐
18	I set my own goals about health and fitness	☐	☐	☐	☐
19	I have strong support from family or friends	☐	☐	☐	☐
20	I ask healthcare providers about the quality of the health information I find	☐	☐	☐	☐
21	There are things that I do regularly to make myself more healthy	☐	☐	☐	☐
22	I can rely on at least one healthcare provider	☐	☐	☐	☐
23	I have all the information I need to look after my health	☐	☐	☐	☐

Q2. Please indicate how difficult or easy the following tasks are for you now. You can check only one box for each statemen

		Cannot do or always difficult	Usually difficult	Sometimes difficult	Usually easy	Always easy
1	Find the right health care	☐	☐	☐	☐	☐
2	Make sure that healthcare providers understand your problems properly	☐	☐	☐	☐	☐
3	Find information about health problems	☐	☐	☐	☐	☐
4	Feel able to discuss your health concerns with a healthcare provider	☐	☐	☐	☐	☐
5	Confidently fill medical forms in the correct way	☐	☐	☐	☐	☐
6	Find health information from several different places	☐	☐	☐	☐	☐
7	Have good discussions about your health with doctors	☐	☐	☐	☐	☐
8	Get to see the healthcare providers you need to	☐	☐	☐	☐	☐
9	Accurately follow instructions from healthcare providers	☐	☐	☐	☐	☐
10	Get information about health so you are up to date with the best information	☐	☐	☐	☐	☐
11	Decide which healthcare provider you need to see	☐	☐	☐	☐	☐
12	Read and understand written health information	☐	☐	☐	☐	☐
13	Make sure you find the right place to get the health care you need	☐	☐	☐	☐	☐
14	Get health information in words you understand	☐	☐	☐	☐	☐
15	Discuss things with healthcare providers until you understand all you need to	☐	☐	☐	☐	☐
16	Find out which healthcare services you are entitled to	☐	☐	☐	☐	☐
17	Read and understand all the information on medication labels	☐	☐	☐	☐	☐
18	Get health information by yourself	☐	☐	☐	☐	☐
19	Work out what the best care is for you	☐	☐	☐	☐	☐
20	Ask healthcare providers questions to get the health information you need	☐	☐	☐	☐	☐
21	Understand what healthcare providers are asking you to do	☐	☐	☐	☐	☐

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Q3. Please indicate if you think the statement **is "true" or "false"**. If you are not sure, please choose "Not Sure".

	True	False	Not Sure
All sexually transmitted infections can be cured.	○	○	○
You can tell from somonse's appearance whether they have HIV or not.	○	○	○
It is easier to contract HIV if a person has another sexually transmitted infection	○	○	○
Hepatitis B is a sexually transmitted infection	○	○	○

Q4-: HIV can be transmitted through: (Please select all relevant options)

☐ Contaminated needles ☐ Mosquito bites ☐ From mother to baby during birth ☐ Hugging ☐ Kissing ☐ Vaginal sex ☐ Anal sex ☐ Shared toothbrush ☐ Shared bathroom

Section II: Sexual Health and Practices

Q5. Have you ever had any kind of sexual intercourse/encounter?

☐ Yes, during last 12 months
☐ Yes >12 months ago
☐ No ☐ I choose not to answer

Q6. How old were you when you had your first sexual encounter?

☐ Below 16 years ☐ 16-18 years ☐ 19-20 years ☐ 21-22 years ☐ 23-24 years ☐ 25 years and above ☐ I prefer not to answer

Q7. During the past 12 months: **With how many partner(s) have you had any kind of sexual practice?**

☐ 0-1 ☐ 2-3 ☐ 4-5 ☐ 6-7 ☐ 8-9 ☐ 10-15 ☐ 16-25 ☐ 26-50 ☐ >50

Q8. Have you ever had "unprotected" sexual intercourse with a non-steady partner?

☐ Yes, during last 12 months ☐ Yes >12 months ago ☐ No ☐ I choose not to answer

Q9. In the last 12 months, how often were condoms used when you had intercourse?

☐ Never ☐ Seldom ☐ Sometimes ☐ Mostly ☐ Always

Q10. In the last 12 months, have you used dating applications or websites to meet people for the purpose of "hookups"?

☐ Yes ☐ No ☐ I choose not to answer

Q11. In the past 12 months, have you or your partner used alcohol before or during sexual intercourse?

☐ Yes ☐ No ☐ I choose not to answer

Q12. In the past 12 months, have you or your partner used drugs before or during sexual intercourse?

☐ Yes ☐ No ☐ I choose not to answer

Q13-. Have you ever tested for HIV ?

☐ Yes, tested in the last 12 months
☐ Yes, tested > 12 months ago
☐ Never tested

Q14-. Have you ever tested for STIs other than HIV ?

☐ Yes, tested in the last 12 months
☐ Yes, tested > 12 months ago
☐ Never tested

Q15. If yes, where did you seek testing?
☐ Primary care provider ☐ Public Hospital ☐ Private hospital/clinic ☐ Refugee Health Center ☐ Healthy Living Centers (Besiktas or Sisli or Positive Living Association) ☐ Other

Q16. Have you ever been diagnosed (tested positive) with any STI?
☐ Yes, once ☐ Yes, more than once ☐ No ☐ Prefer not to answer

Q17. Considering your behaviors and knowledge of STIs, please indicate how you perceive your risk of contracting STIs?
☐ No risk ☐ Low ☐ Moderate ☐ High ☐ Very high risk

Q18. Have you ever visited your Primary Care Provider service?
☐ Yes ☐ No

Q19. Please indicate how many times did you visit your primary care provider in the last 12 months.
☐ None ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ >= 5

Q20. How many of these visits were related to "sexual health" reasons?
☐ None ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ >= 5

Q21. Which of the following communication channels do you prefer to obtain sexual health-related information?

(Select only one)
☐ Radio and Television ☐ Mobile phone (SMS) ☐ Mobile phone (call) ☐ Social Media ☐ Email ☐ Posters ☐ Leaflets ☐ Public announcements ☐ Billboards ☐Community events ☐ From health workers ☐ Family and friends

Sections III: Sociodemographic Information

Q.22- Age: _____
Q23. Gender:
☐ Male ☐ Female ☐ Other _____
Q24. Marital Status:
☐ Single ☐ Partnered or Married ☐ Other

Q25. What is the highest degree or level of school you have completed?
☐ Know how to read/write but did not finish school
☐ Primary Education or less
☐ Secondary Education (High School or Vocational/ technical high school)
☐ Tertiary vocational education
☐ Higher education (Undergraduate)
☐ Higher education (Masters' degree)
☐ Higher Education (PhD.)

Q26. What is your current work status?
☐ Working ☐ Not working ☐ Prefer not to say

Q27. Occupation:
☐ Student ☐ Medicine or health-related fields ☐ Law or Justice ☐ Engineering or Architecture ☐ Tourism, accommodation, food, and drinks services ☐ Agriculture, hunting, fishing ☐ Media production, communication, and publishing ☐ Culture, Art, and design ☐ Trade, Sales, and Marketing ☐ Finance
☐ Other: Please Specify: _____

Q28. Do you have health insurance? (You may choose more than one)
☐ Yes, State health insurance (SGK)
☐Yes, Private health insurance
☐ No, don't have health insuranc

Q29. What is your average monthly income?
☐ No income ☐ (1 – 2824 TL) ☐ (2825-4999 TL) ☐ (5000-7999 TL) ☐ (8000 TL or more)

Q30. On a scale from 'poor' to 'proficient', how would you rate your Turkish language skills?

☐ 0: Poor ☐ 1: Fair ☐ 2: Good ☐ 3: Proficient

Q31. What is your religious affiliation?

☐ Christian ☐ Islam ☐ Hindu / Buddhism ☐ Jewish ☐ Atheist ☐ Other ☐ Prefer not to respond

Q15. If yes, where did you seek testing?
☐ Primary care provider ☐ Public Hospital ☐ Private hospital/clinic ☐ Refugee Health Center ☐ Healthy Living Centers (Besiktas or Sisli or Positive Living Association) ☐ Other

Q16. Have you ever been diagnosed (tested positive) with any STI?
☐ Yes, once ☐ Yes, more than once ☐ No ☐ Prefer not to answer

Q17. Considering your behaviors and knowledge of STIs, please indicate how you perceive your risk of contracting STIs?
☐ No risk ☐ Low ☐ Moderate ☐ High ☐ Very high risk

Q18. Have you ever visited your Primary Care Provider service?
☐ Yes ☐ No

Q19. Please indicate how many times did you visit your primary care provider in the last 12 months.
☐ None ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ >= 5

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Sections III: Sociodemographic Information

Q.22- Age: _____
Q23. Gender:
☐ Male ☐ Female ☐ Other _____
Q24. Marital Status:
☐ Single ☐ Partnered or Married ☐ Other

Q25. What is the highest degree or level of school you have completed?
☐ Know how to read/write but did not finish school
☐ Primary Education or less
☐ Secondary Education (High School or Vocational/ technical high school)
☐ Tertiary vocational education
☐ Higher education (Undergraduate)
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☐ Student ☐ Medicine or health-related fields ☐ Law or Justice ☐ Engineering or Architecture ☐ Tourism, accommodation, food, and drinks services ☐ Agriculture, hunting, fishing ☐ Media production, communication, and publishing ☐ Culture, Art, and design ☐ Trade, Sales, and Marketing ☐ Finance
☐ Other: Please Specify: _____

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☐ Yes, State health insurance (SGK)
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☐ Christian ☐ Islam ☐ Hindu / Buddhism ☐ Jewish ☐ Atheist ☐ Other ☐ Prefer not to respond

Survey: Turkish

Sağlık Okuryazarlığı ve
Cinsel Sağlık Hizmetlerinin Erişimi

BÖLÜM I: Cinsel Yolla Bulaşan Hastalıklar ve HIV Bilgisi / Sağlık Okuryazarlığı

Soru 1:
Lütfen aşağıdaki ifadelerin her birine ne kadar kesinlikle katılıp katılmadığınızı **belirtin. Her ifade için yalnızca** bir **kutuyu işaretleyebirsiniz.**

		Kesinlikle katılmıyorum	Katılmıyorum	Kararsızım	Kesinlikle katılıyorum
1	Sağlık konusunda iyi bilgilere sahip olduğum kanısındayım	☐	☐	☐	☐
2	Beni iyi tanıyan en az bir sağlık bakımı sağlayıcım var	☐	☐	☐	☐
3	Beni anlayan ve destekleyen birçok kişiye erişebilirim	☐	☐	☐	☐
4	Değişik kaynaklardan edindiğim sağlık bilgilerimi karşılaştırırım	☐	☐	☐	☐
5	Hastalandığım zaman çevremdekiler ne çektiğimi gerçekten anlarlar	☐	☐	☐	☐
6	Sağlığıma bakmaya aktif olarak bir hayli zaman harcıyorum	☐	☐	☐	☐
7	Sağlık konusunda yeni bilgiler gördüğüm zaman doğru olup olmadığını kontrol ederim	☐	☐	☐	☐
8	Sağlık sorunlarımı görüşebileceğim en az bir sağlık bakımı sağlayıcım var	☐	☐	☐	☐
9	Sağlıklı olmak için ne yapmam gerektiği konusunda plan yaparım	☐	☐	☐	☐
10	Sağlık sorunlarımı ele almama yardımcı olmak için yeterli bilgim var	☐	☐	☐	☐
11	Yardıma gereksinirsem güvenebileceğim birçok insan var	☐	☐	☐	☐
12	Her zaman değişik kaynaklardan edindiğim sağlık bilgilerimi karşılaştırıp benim için en iyisinin ne olduğuna karar veririm	☐	☐	☐	☐
13	Yaşamımda başka şeyler olsa da sağlıklı olmaya vakit ayırırım	☐	☐	☐	☐
14	Sağlığımı etkili biçimde ele almak için gereken bütün bilgilere sahip olduğumdan eminim	☐	☐	☐	☐
15	Sağlık randevularıma benimle gelebilecek en az bir kişi var	☐	☐	☐	☐
16	Edindiğim sağlık bilgilerinin doğru olup olmadığını nasıl bulacağımı biliyorum	☐	☐	☐	☐
17	Ne yapmam gerektiğine karar vermeme yardımcı olacak gerekli sağlık bakımı sağlayıcılarım var	☐	☐	☐	☐
18	Sağlık için kendi hedeflerimi belirlerim	☐	☐	☐	☐
19	Ailem veya arkadaşlarım bana güçlü destek sağlar	☐	☐	☐	☐
20	Bulduğum sağlık bilgilerinin kalitesi hakkında sağlık bakımı sağlayıcılarına soru sorarım	☐	☐	☐	☐
21	Kendimi daha sağlıklı kılmak için düzenli olarak yaptıklarım var	☐	☐	☐	☐
22	En az bir sağlık bakımı sağlayıcısına güvenebilirim	☐	☐	☐	☐
23	Sağlığıma bakmak için bana gerekli olan bütün bilgilere sahibim	☐	☐	☐	☐

Soru 2:
Lütfen aşağıdaki işlerin sizin için şu anda **ne kadar** zor **veya** kolay **olduğunu belirtin. Her ifade için yalnızca** bir **kutuyu işaretleyebilirsiniz.**

		Her zaman zor	Çoğu zaman zor	Ne zor ne kolay	Çoğu zaman kolay	Her zaman kolay
1	Doğru sağlık bakımını bulmak	☐	☐	☐	☐	☐
2	Sağlık bakımı sağlayıcılarının sorunlarınızı doğru dürüst anladığından emin olmak	☐	☐	☐	☐	☐
3	Sağlık sorunları hakkındaki bilgileri bulmak	☐	☐	☐	☐	☐
4	Sağlık konusundaki endişelerinizi bir sağlık bakımı sağlayıcısı ile tartışabileceğinizi hissetmek	☐	☐	☐	☐	☐
5	Tıbbi formları doğru olarak güvenle doldurmak	☐	☐	☐	☐	☐
6	Birçok değişik yerden sağlık bilgilerini bulmak	☐	☐	☐	☐	☐
7	Sağlığınız hakkında doktorlarla iyi görüşmeler yapmak	☐	☐	☐	☐	☐
8	Gerekli sağlık bakımı sağlayıcılarını görebilmek	☐	☐	☐	☐	☐
9	Sağlık bakımı sağlayıcılarının söylediklerini harfiyen uygulamak	☐	☐	☐	☐	☐
10	En iyi bilgiye sahip olmak için sağlık hakkında güncel bilgileri edinmek	☐	☐	☐	☐	☐
11	Hangi sağlık bakımı sağlayıcısını görmeniz gerektiğine karar vermek	☐	☐	☐	☐	☐
12	Yazılı sağlık bilgilerini okuyup anlamak	☐	☐	☐	☐	☐
13	Sizin için gerekli olan sağlık bakımını edinmek için doğru yere gittiğinizden emin olmak	☐	☐	☐	☐	☐
14	Sağlık bilgilerini anlayacağınız sözcüklerle elde etmek	☐	☐	☐	☐	☐
15	Bütün yapmanız gerekenleri tam anlayıncaya kadar sağlık bakımı sağlayıcıları ile konuşmak	☐	☐	☐	☐	☐
16	Hangi sağlık bakımı hizmetlerine hakkınız olduğunu öğrenmek	☐	☐	☐	☐	☐
17	İlaçların etiketlerindeki bütün bilgileri okuyup anlamak	☐	☐	☐	☐	☐
18	Kendi başınıza sağlık bilgileri edinmek	☐	☐	☐	☐	☐
19	Kendiniz için en iyi sağlık bakımının hangisi olduğunu bulmak	☐	☐	☐	☐	☐
20	Sizin için gerekli olan sağlık bilgilerini edinmek için sağlık bakımı sağlayıcılarına sorular sormak	☐	☐	☐	☐	☐
21	Sağlık bakımı sağlayıcılarının sizin ne yapmanızı istediğini anlamak	☐	☐	☐	☐	☐

Soru 10: Son 12 ay içinde, "eşleşme" amacıyla insanlarla tanışmak için flört uygulamalarını veya web sitelerini kullandınız mı? (Ör. Tinder, Badoo...)

☐ Evet ☐ Hayır

☐ Cevap vermek istemiyorum

Soru 11: Geçtiğimiz 12 ay içinde, siz veya partneriniz cinsel ilişki öncesinde veya sırasında alkol veya uyuşturucu kullandınız mı? (Uyuşturucu olarak amfetaminler, metamfetaminler, kokain, eroin, esrar dahil cannabis veya haşiş, ekstazi veya sıvı G (GHB), poppers, crack veya diğer uyuşturucuları kastediyoruz)

☐ Evet ☐ Hayır

☐ Cevap vermek istemiyorum

Soru 12: Geçtiğimiz 12 ay içinde, para veya uyuşturucu/alkol veya başka bir şey karşılığında cinsel ilişkiye girdiniz mi veya bu amaçla cinsel ilişki sundunuz mu?

☐ Evet, son 12 ay içinde

☑ Evet, 12 aydan uzun süre önce

☐ Hayır ☐ Cevap vermek istemiyorum

Soru 13: Geçtiğimiz 12 ay içinde, seyahat sırasında veya yurtdışına çıkarken cinsel ilişkiye girdiniz mi?

☐ Evet, son 12 ay içinde

☐ Evet, 12 aydan uzun süre önce

☐ Hayır ☐ Cevap vermek istemiyorum

☐ Uygulanamaz

Soru 14: Hiç HIV veya başka bir Cinsel Yolla Bulaşan Enfeksiyon (CYBE) testi yaptırdınız mı?

☐ Evet, son 12 ay içinde test oldum

☐ Evet, 12 aydan uzun süre önce test oldum

☐ Hiç test olmadım

Soru 15: Eğer test yaptırdıysanız, nerede yaptırdınız?

☐ Aile hekiminde ☑ Devlet hastanesinde

☐ Mülteci Sağlık Merkez ☑ Özel hastane

☐ Sağlıklı Yaşam Merkezlerinde (Beşiktaş veya Şişli veya Pozitif Yaşam Derneği)

☐ Diğer (Lütfen belirtiniz):

Soru 16: Hiçbir CYBE (Cinsel Yolla Bulaşan Enfeksiyon) teşhisi aldınız mı?

☐ Evet, bir kez

☐ Evet, birden fazla kez

☐ Hayır ☐ Cevap vermek istemiyorum

Soru 17: Davranışlarınızı ve CYBE'ler hakkındaki bilginizi göz önünde bulundurarak, CYBE kapma riskinizi nasıl değerlendiriyorsunuz?

☐ Risk yok ☐ Düşük ☐ Orta

☐ Yüksek ☐ Çok yüksek

Soru 18: Hiç Aile Hekimi hizmetlerini ziyaret ettiniz mi?

☐ Evet ☐ Hayır

Soru 19: Son 12 ay içinde kaç kez aile hekiminize başvurdunuz?

☐ Hiç ☐ 1 ☐ 2 ☐ 3 ☐ 4

☐ 5 veya daha fazla

Soru 20: Bu ziyaretlerin kaçı "cinsel sağlık" nedeniyleydi?

☐ Hiç ☐ 1 ☐ 2 ☑ 3 ☐ 4

☐ 5 veya daha fazla

Soru 21: Cinsel sağlıkla ilgili bilgileri hangi iletişim kanallarından almayı tercih edersiniz?

- ☐ Radyo ve Televizyon ☐ Mobil telefon (SMS)
- ☐ Mobil telefon (arama) ☐ Sosyal Medya
- ☐ E-posta ☐ Afişler ☐ Broşürler
- ☐ Kamu duyuruları ☐ Billboardlar
- ☐ Topluluk etkinlikleri ☐ Sağlık çalışanları
- ☐ Aile ve arkadaşlar

BOLUM III: Sosyodemografik Bilgiler

Soru 22: Yaşınız: _____

Soru 23: Cinsiyetiniz:

- ☑ Erkek ☐ Kadın ☑ Diğer

Soru 24: Medeni Durumunuz:

- ☐ Bekar ☐ Evli veya birliktelik ☐ Diğer

Soru 25: Tamamladığınız en yüksek eğitim seviyesi nedir? Eğer şu anda öğrenciyseniz, aldığınız en yüksek derece nedir?

- ☐ Okur-yazar ama okulu bitirmedi
- ☐ İlkokul veya daha az
- ☐ Ortaokul (Lise veya Meslek Lisesi)
- ☐ Ortaöğretim mesleki eğitim
- ☐ Yükseköğrenim (Lisans)
- ☐ Yükseköğrenim (Yüksek Lisans)
- ☐ Yükseköğrenim (Doktora)

Soru 26: Mevcut çalışma durumunuz nedir?

- ☐ Çalışıyor ☐ Çalışmıyor
- ☐ Cevap vermek istemiyorum

Soru 27: Mesleğiniz nedir?

- ☐ Öğrenci ☐ Tıp veya sağlık alanları
- ☐ Hukuk / Adalet ☐ Mühendislik/ Mimarlık
- ☐ Turizm, konaklama, yiyecek ve içecek hizmetleri
- ☐ Tarım, avcılık, balıkçılık
- ☐ Medya üretimi, iletişim ve yayıncılık
- ☐ Kültür, Sanat ve tasarım
- ☐ Ticaret, Satış ve Pazarlama ☐ Finans
- ☐ Diğer (Lütfen belirtiniz): _____

Soru 28: Sağlık sigortanız var mı? (Birden fazla seçeneği işaretleyebilirsiniz)

- ☐ Evet, Devlet sağlık sigortası (SGK)
- ☐ Evet, Özel sağlık sigortası ☐ Hayır,

Soru 29: Aylık ortalama geliriniz nedir?

- ☐ Gelir yok ☐ 1 – 2824 TL
- ☐ 2825-4999 TL ☐ 5000-7999 TL
- ☐ 8000 TL veya daha fazla

Soru 30: Türkçe dil becerilerinizi «zayıf» tan «ileri» ye kadar nasıl değerlendirirsiniz?

- ☐ 0: Zayıf ☐ 1: Orta ☐ 2: İyi ☐ 3: İleri

Soru 31: Dini inancınız nedir?

- ☐ Hristiyan ☐ İslam ☐ Hindu / Budizm
- ☐ Yahudi ☐ Ateist ☐ Diğer
- ☐ Cevap vermek istemiyorum

Survey: Arabic

القسم ١: الأمية الصحية

أجب عن الأسئلة لنتعرف على كيفية تعاملك مع المعلومات والرعاية الصحية

١. مدى موافقتك على العبارات التالية: **(أوافق بشدة / أوافق / لا أوافق / لا أوافق بشدة)**

١- اشعر ان لدي معلومات جيدة عن الصحة

٢- لدي على الاقل مقدم رعاية طبية (طبيب) واحدا يعرفني جيدا

٣- يمكنني الوصول إلى عدد من الأشخاص الذين يفهمونني ويدعمونني

٤- أنا أقارن المعلومات الصحية من مصادر مختلفة

٥- عندما اشعر بالمرض، يفهم الناس من حولي حقاً ما أمر به

٦- أقضي الكثير من الوقت في إدارة والاهتمام بصحتي

٧- عندما أرى معلومات جديدة عن الصحة، أتحقق من ما إذا كانت صحيحة أم لا

٨- لدي طبيب واحد على الأقل يمكنني مناقشة مشاكلي الصحية معه

٩- اضع خطط لما يجب أن أفعله لأكون بصحة جيدة

١٠- لدي معلومات كافية لمساعدتي في التعامل مع مشاكلي الصحية

١١- إذا كنتُ بحاجة إلى مساعدة، فلدي الكثير من الأشخاص الذين يمكنني الاعتماد عليهم

١٢- أقارن دائماً المعلومات الصحية من مصادر مختلفة وأقرر ما هو الأفضل بالنسبة لي

١٣- على الرغم من الأشياء الأخرى في حياتي، أخصص وقتاً لأكون بصحة جيدة

١٤- أنا متأكد من أن لدي كل المعلومات التي أحتاجها لإدارة صحتي بشكلٍ فعّال

١٥- لدي شخص واحد على الأقل يمكنه الحضور معي إلى المواعيد الطبية

ما إذا كانت المعلومات الصحية التي تلقيتها صحيحة أم لا اكتشاف ١٦- أعرف كيفية

فعله على ١٧- لدي الأطباء الذين أحتاجهم لمساعدتي لمعرفة ما

١٨- أنا أحدد أهدافي الخاصة بالصحة واللياقة البدنية

١٩- لديّ دعم قوي من العائلة والأصدقاء

٢٠- أنا اسأل الأطباء عن جودة المعلومات الصحية التي أجدها

٢١- هناك أشياء أفعلها بانتظام لأجعل نفسي أكثر صحة

٢٢- يمكنني الاعتماد على طبيب واحد على الاقل

٢٣- انا أملك كل المعلومات التي أحتاجها للإعتناء بصحتي

٢. مدى سهولة أو صعوبة الأمور التالية: **(دائمًا صعب / صعب غالبًا / متوسط / سهل غالبًا / دائمًا سهل)**

١- الحصول على الرعاية الطبية الصحيحة

٢- التأكد من أن مقدمي الرعاية الصحية (كالأطباء) يفهمون مشاكلك بشكل صحيح

٣- العثور على معلومات حول المشاكل الصحية

٤- أن تشعر بالقدرة على مناقشة مخاوفك الصحية مع طبيبك

٥- ملء الاستمارات الطبية بثقه بالطريقة الصحيحة

٦- إيجاد المعلومات الصحية من عدة أماكن / مصادر مختلفة

٧- إجراء مناقشات جيدة حول صحتك مع الأطباء

٨- أن تقوم بمقابلة الأطباء الذين تحتاجهم

٩- إتباع تعليمات الأطباء بدقة

١٠- الحصول على معلومات حول الصحة حتى تكون مُطلعاً على أفضل المعلومات

١١- تحديد الطبيب الذي تريد رؤيته

١٢- قراءة وفهم المعلومات الصحية المكتوبة

١٣- التأكد من أن تجد المكان المناسب للحصول على الرعاية الصحية التي تحتاجها

١٤- الحصول على المعلومات الصحية بكلماتٍ ولغة تفهمها

١٥- مناقشة الأمور مع الطبيب حتى تفهم كل ما تحتاج إليه

١٦- أن تعرف ما هي خدمات الرعاية الصحية التي يحق لك الحصول عليها

١٧- قراءة وفهم جميع المعلومات الموجودة على ملصقات الأدوية

١٨- أن تحصل على المعلومات الصحية بنفسك

١٩- أن تكتشف وتحدد أفضل رعاية صحية لك

٢٠- طرح أسئلة على الأطباء للحصول على المعلومات الصحية التي تحتاجها

٢١- فهم ما يطلبه الأطباء منك فعله

.

القسم ٢: الصحة الجنسية والخدمات الطبية

.أسئلة عن صحتك الجنسية واستخدامك للخدمات الطبية

.هذا القسم يتضمن اسئلة عن صحتك الجنسية وعن استخدامك لخدمات الرعاية الصحية

.جميع أجوبتك هي **سرية ومحمية**. - في هذا الاستطلاع ، مصطلح "العلاقة الجنسية" يعني الجنس المهبلي أو الشرجي أو الفموي

٨- هل سبق لك ان مارست أي نوع من الجماع / العلاقات الجنسية؟

الإجابة نعم، خلال ال ١٢ شهراً الماضية - نعم، قبل ال ١٢ شهرً الماضية - كلا - لا أريد

٩- كم كان عمرك عندما مارست علاقة نسية للمرة الأولى؟
اقل من ١٦ عاماً - ١٦-١٨ عاما - ١٩-٢٠ عاماً - ٢١-٢٢ عاما - ٢٣-٢٤ عاماً - ٢٥ عاما وما فوق - لا أريد الإجابة

١٠- كم عدد الشركاء الذين مارست أي نوع من أنواع الممارسة الجنسية / الجماع معهم خلال ال ١٢ شهراً الماضية؟

صفر - ١ - ٢ - ٤ - ٥ - ٩ - ١٠ - ٢٠ - > ٢٠

١١- هل سبق لك ان اقمت علاقة حميمية / جنسية مع شريك غير ثابت دون استخدام الوقاية تعرفه؟
,نعم، حصل خلال ال ١٢ شهراً الماضية - نعم، حصل قبل ال ١٢ شهرً الماضية - كلا - لا أريد الإجابة

١٢- خلال ال ١٢ شهراً السابقة، ما عدد المرات التي تم استخدام الواقي الذكري خلال العلاقات الجنسية؟

دائما - أبداً - نادرًا - أحياناً - في الغالب
١٣- خلال ال ١٢ شهراً الماضية، هل استخدمت تطبيقات المواعدة أو مواقع الإنترنت المخصصة لمقابلة أشخاص بغرض "التعارف"؟

نعم - لا - لا أريد الإجابة

١٤- خلال ال ١٢ شهراً الماضية، هل تناولت أو تعاطيت أنت أو شريكك الكحول قبل أو اثناء الجماع / العلاقة الحميمية؟

نعم - لا - لا أريد الإجابة

١٥- خلال ال ١٢ شهراً الماضية، هل تناولت أو تعاطيت أنت أو شريكك المخدرات قبل أو اثناء الجماع / العلاقة الحميمية؟

نعم - لا - لا أريد الإجابة (نعني بالمخدرات أياً من هذه: الأمفيتامين أو الميثامفيتامين، الكوكايين، الهيروين، الحشيش أو الماريجوانا، اكستازي

١٦- هل سبق لك أن تحصلت على فحص أو اختبار لفيروس نقص المناعة البشرية

أع نعم، حصل خلال ال ١٢ شهراً الماضية - نعم، حصل قبل ال ١٢ شهرً الماضية - كلا، لم افحص أبدًا - لا أتذكر / أنا لا

١٧- هل سبق لك أن تحصلت على فحص أو اختبار لأي من العدوى أو الأمراض الجنسية الأخرى؟

نعم، حصل خلال ال ١٢ شهراً الماضية نعمحصل قبل ال ١٢ شهرً الماضية - كلا، لم افحص أبدًا - لا أتذكر / أنا لا أعرف

١٨- في حال كانت اجابتك نعم، أين تحصلت على الفحص / الإختبار؟ (يمكنك اختيار أكثر من خيار

/ طبيب العائلة (العمومي) - مستشفى حكومي - مستشفى خاص، أو عيادة خارجية خاصة - وحدات الصحة التابعة لبلدية بشيكتاش أو شيشلي جمعية الحياة الايجابية - مركز صحة اللاجئين - أخرى Pozitif yaşam Derneği

١٩- خلال ال ١٢ شهراً الماضية هل حصلت على تشخيص (إختبار ايجابي) لأي من الأمراض/ العدوى المنقولة جنسياً؟ (مثال: فيروس نقص (المناعة البشرية، فيروس الهربس، الكلاميديا، مرض الزهري أو أي عدوى أخرى

نعم، مرة واحدة فقط - نعم، أكثر من مرة - لا - لا أريد الإجابة

٢٠- في اعتقادك، ما هي نسبة تعرضك لخطر الإصابة بالأمراض / العدوى الجنسية؟

لا يوجد عرضة للخطر - نسبة منخفضة - نسبة معتدلة - نسبة مرتفعة - نسبة مرتفعة جدا

٢١- هل سبق لك أن ذهبت إلى طبيب العائلة (العمومي) للرعاية الصحية لنفسك؟

نعم - لا (Aile Hekimi)

٢٢- إذا كانت اجابتك نعم، كم عدد المرات التي زرت فيها طبيب العائلة لنفسك خلال الأشهر ال ١٢ الماضية؟

لم أذهب - ١ مرة واحدة - ٢ مرتين - ٣ ثلاث مرات - ٤ أربع مرات - ٥ خمس مرات أو أكثر

٢٣- كم من هذه الزيارات كانت لأسباب تتعلق ب "الصحة الجنسية"؟

Top of Formولا مرة / لم أذهب - ١ مرة واحدة - ٢ مرتين - ٣ ثلاث مرات - ٤ أربع مرات - ٥ خمس مرات أو أكث

٢٤- أي من قنوات الاتصال التالية تفضل للحصول على معلومات حول الصحة الإنجابية والجنسية؟

،التلفزيون أو الراديورسائل نصية عبر الهاتفمنصات التواصل الاجتماعيالبريد الإلكترونيالإنترنت وصفحات الويبالصحف، الملصقات... المنشورات والاعلانات الورقية الاخربالطبيبالممرضالصيدلانيعمال الرعاية الصحية الآخرينالفعاليات والتنظيمات الإجتماعيةالعائلة، الأقارب والأصدقاءمصادر أخرى

٢٥- أي من الأسباب التالية يمنعك من الحصول على خدمات الرعاية الصحية الجنسية

الرجاء اختيار **جميع الإجابات ذات الصلة**

لا أعرف من أين أحصل على هذه الخدمات

لا استطيع تحمل تكلفة هذه الخدمات

عدم وجود مركز صحي في مسافة قريبة

عدم وجود أو نقص في السرية أو الخصوصيةالشعور بالخجل أو الحرج

السلوكيات السلبية لأخصائيي الرعاية الصحية

خدمات صحية منخفضة الجودة

أخشى الحصول على نتيجة اختبار إيجابية

ليس لدي وقت للذهاب

لا أعتقد أن خدمات الصحة الجنسية مهمة / لست بحاجة إليها

أسباب أخرى

٢٦- حدد الأسباب الأخرى من فضلك

القسم ٣: المعلومات الديموغرافية

أسئلة حول معلوماتك الشخصية

٢٧. العمر: (يرجى كتابة عمرك)

٢٨. النوع: (ذكر / أنثى / نوع آخر)

٢٩. الحالة الاجتماعية: (أعزب / متزوج / في علاقة / منفصل / آخر)

٣٠. أعلى مستوى تعليمي: (خيارات: لم يكمل المدرسة / إبتدائية / إعدادية / ثانوية / جامعة / ماجستير أو دكتوراه)

٣١. هل تعمل حالياً؟ (نعم / لا / أفضل ألا أقول)

/ ٣٢. المهنة الحالية: (خيارات: طالب / صحة / قانون / سياحة وخدمات / زراعة وصيد / إعلام / ثقافة وفن / تجارة وتسويق / اقتصاد وبنك

(مهندس / آخر

٣٤. هل لديك تأمين صحي؟ (نعم / لا)

٣٥. معدل الدخل الشهري: (خيارات: لا دخل / تحت ٢٨٢٤ ليرة / ٢٨٢٥-٤٩٩٩ ليرة / ٥٠٠٠-٧٩٩٩ ليرة / فوق ٨٠٠٠ ليرة / لا أريد الإجابة)

٣٦. مستوى اللغة التركية: (ضعيف / متوسط / جيد / متقن)

٣٧. الانتماء الديني: (خيارات: ملحد / مسيحي / مسلم / هندوسي / يهودي / بوذي / آخر)