Challenges and opportunities for sexual and reproductive healthcare services for immigrant women in Sweden

EVA ÅKERMAN
Abstract


This thesis aims to obtain an understanding of immigrant women’s access to healthcare services in Sweden in relation to sexual and reproductive health and rights (SRHR). Data were obtained from three different quantitative cross-sectional studies using self-administrated questionnaires and one qualitative study based on in-depth interviews. The sample consists of immigrant women, predominantly refugees from Afghanistan, Iraq, Syria, and Somalia in Study I (n=288) and Thai immigrant women in Studies II–IV: Study II (n=804), Study III (n=19) and Study IV (n=266). The results indicate that social capital factors seem to play an important role in knowledge about sexual and reproductive health (SRH) services. About one-third of immigrant women reported lack of knowledge of where to go for contraceptive counselling. Lack of knowledge was associated with experiencing lack of emotional social support and not having children. An even higher proportion lacked knowledge of where to go for HIV testing, which was associated with not having participated in a health examination. In a sample of Thai immigrant women, lack of knowledge about SRH services was associated with living without a partner, having low trust in others, having predominantly bonding social relationships and belonging to the oldest age groups. In all studies, the majority had not been tested for HIV or participated in contraceptive counselling. Among the Thai women, despite expressing a need for SRH care, most participants had not sought this type of care. Women found it challenging to seek care in Sweden due to lack of knowledge about the healthcare system and language difficulties. The majority of Thai women reported a significant need for information related to SRH services. Women who had never been HIV tested in Thailand had increased odds of not being tested in Sweden.

Lack of knowledge of where to turn for contraceptive counselling and HIV testing among immigrant women is a missed opportunity, as all citizens in Sweden have free access to these services. Providing information on SRH services to all immigrants in their native language, regardless of immigration status, is an important step in achieving equal access to SRH care.

Keywords: Immigrant, Migrant, Access, Healthcare, Equal, Social capital, Contraceptive counselling, HIV testing, HIV, Sexual and reproductive health and rights, Sweden.

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Abbreviations

AIDS Acquired Immunodeficiency Syndrome
BM Behavioural Model of Health Service Use
CI Confidence interval
EEA European Economic Area
EU European Union
HIV Human Immunodeficiency Virus
ICPD International Conference on Population and Development
IMO International Organization for Migration
OR Odds Ratio
RTB Total Population Register RTB
SCB Statistiska Centralbyrån (Statistics Sweden)
SDG Sustainable Development Goal
SEK Swedish Krona, the currency of Sweden
SFI Svenska för invandrare (Swedish course for immigrants)
SPSS Statistical Package for the Social Sciences
SRH Sexual and Reproductive Health
SRHR Sexual and Reproductive Health and Rights
STI Sexually transmitted infections
UN United Nations
UNICEF United Nations Children’s Fund
USD United States dollar, the currency of US
WHO World Health Organisation
After finishing the Master’s programme in Public Health Science, I had the opportunity to work with health promotion interventions among different immigrant groups in Sweden. The major aim of the interventions was to increase access to health information and health promotion services among newly arrived immigrants or immigrants with limited skills in Swedish language. Somali and Thai women were two of the many immigrant groups I met when running a parental education programme in native language for women during pregnancy. Most women who attended the parental education had no knowledge of what the parental education programme was about, or the existence thereof. Women expressed that they refrained from participating because of their lack of knowledge about the programme. For me, this demonstrated the importance of studying immigrants’ knowledge about Swedish healthcare services and health promotion programmes in order to understand their access to health services. Throughout other interventions I worked with, immigrants expressed limited knowledge about the Swedish health and welfare system. My work experiences during this period inspired me to study immigrants’ knowledge of health services. So, several years later, when I had the opportunity to be part of a research project at Uppsala University in collaboration with Lund University and Malmö Högskola, focusing on Thai and Somali women, I did not hesitate to jump on this project. The journey towards this thesis started at this point.
Background

Introduction

Immigrant women’s increased risk of having poor sexual and reproductive health and their limited access to health services are public health concerns, because they can cause death and ill health that could be preventable [1]. Immigrant women are a very diverse group facing different health problems due to a complex interaction between immigration, epidemic, cultural background, socio-economic factors and social context in the new country. Hence, collective and conservative honour cultures, traditional gender norms, where girls and women are denied from choosing their own path in life, are contributing reasons for women to face more barriers than men in getting access to information on sexual health and services [2-5].

Equal access to healthcare is one of the important determinants to close the gaps in sexual and reproductive health [6]. Sweden is recognised as one of the countries with the most generous healthcare systems [7] and one of the most gender-equal countries in the world. The Swedish healthcare system includes universal access to sexual and reproductive healthcare services [8], such as free maternity care services, contraceptive counselling and HIV testing to all citizens in Sweden. Nevertheless, disparities in healthcare use exist [9]. The risk of dying in reproductive age is highest among immigrant women born in low-income countries, due to infectious diseases and diseases related to pregnancy, which are similar causes of mortality as in their countries of birth [10]. This might seem like a paradox in a country with universal access to a sexual and reproductive healthcare system.

The influx of non-western immigrant women to Sweden highlights the issues of equal access to services regarding sexual and reproductive health. With this thesis, I aim to gain an understanding of immigrant women’s access to sexual and reproductive health services, in terms of having knowledge and use of the sexual and reproductive health services. Increased knowledge about this might reveal how access to these services can be improved, in the interest of the goal of “healthcare on equal terms” and achieving women’s right to sexual and reproductive health.
Sexual and reproductive health and rights

The concept of “sexual and reproductive health and rights” (SRHR) was developed through international agreements and is based on the human rights perspective applied to sexuality and reproduction [6]. It was established in 1994 at the Cairo International Conference on Population and Development (ICPD). In 1995, the Fourth World Conference on Women (FWCW) held in Beijing took it further and declared women’s sexual and reproductive health as a human rights concern. Actions that strengthen women’s sexual and reproductive health and rights are crucial for their participation in all areas of society, such as social, economic and political. The concept SRHR contains four components: sexual health, sexual rights, reproductive health and reproductive rights. The contents of the four components are presented in Figure 1. In brief, the concept implies the right of all people to achieve the state of complete health, relating to sexuality and reproduction. To fulfil this goal, a person’s sexual and reproductive rights must be respected. Having access to information about and access to contraceptives, safe abortion and care, prevention and treatment of HIV/STI, and high quality maternal and new-born care are necessary to improve sexual and reproductive health among the world’s population.

Figure 1. Overview of the concept of SRHR comprising four components.
Further, SRHR are essential in fulfilling Agenda 2030, the Sustainable Development Goals (SDGs), because of their links to gender equality, women’s health and survival, their impact on maternal health, new-born, child, adolescent health and economic development [6]. The SDGs comprise 17 goals, with the overarching aim to contribute to sustainable well-being for all people in the world, including in high income countries [11]. Goal number three aims to ensure healthy lives and promote well-being for all at all age; highlighting that all should have access to sexual and reproductive healthcare (goal 3:7), reducing global maternal death rates, and ending the AIDS epidemic by 2030.

Despite an international agreement on SRHR, progress has been hindered by weak political commitment, inadequate resources and continued discrimination against women and girls [6]. Among public health interventions, those related to sexual and reproductive health tend to be influenced by politics, culture and religion rather than scientific evidence [12, 13].

Sweden’s view on SRHR

Sweden takes a clear standpoint on SRHR as a human rights concern, and the country is one of the largest donors of support for SRHR in low- and middle-income countries. The document “Sweden’s international policy on Sexual and Reproductive Health and Rights”, outlines the strategic areas in the field of SRHR and clarifies the Swedish government’s opinion on SRHR at a global scale [14]. Furthermore, it provides the basis for Swedish strategic work in the international context. However, despite the Swedish government’s clear position globally, it should be highlighted that there is no national policy for SRHR strategic work in Sweden.

Definition of immigration and immigrant

There is no universal shared definition of the terms immigration and immigrant. In this thesis, the term immigration refers to movement of non-national persons to a foreign country for the purpose of settlement, whatever the reason [15]. This definition includes immigration of refugees and non-refugees; the latter encompasses family reunification, displaced persons and persons moving for other purposes. Refugees are persons who have been granted asylum. Immigrant refers to a person born outside of the country where the person is settled, regardless of immigration status. In this thesis, the study populations are immigrant women who are born outside of Sweden and have received residence permits in Sweden, with different reasons for moving to Sweden.
Immigrants, who and how many are on the move worldwide?

Since the 2000s, the number of immigrants worldwide has continued to grow rapidly. In 2017, about 258 million people were living outside their country of birth, in contrast to 173 million in 2000 [16]. Nearly one-third of all immigrants live in Europe, the same amount live in Asia, and about one-fifth live in Northern America. Around two-thirds of immigrants worldwide originate from middle-income countries, and most of them live in high-income countries. Nearly half of all immigrants worldwide were born in Asia. The median age of international migrants worldwide was 39 years in 2017.

Women comprise slightly less than half of all immigrants. However, immigrants in Europe, Northern America, Oceania and Latin America and the Caribbean are predominantly women, while in Africa and Asia, particularly Western Asia, most are male.

By the end of 2016, the total number of refugees in the world was 22.5 million. In contrast to the non-refugee immigrants, refugees immigrate to low- or middle-income countries [17]. More than half of all refugees worldwide originated from just three countries; the largest group from Syria, followed by Afghanistan and South Sudan.

An overview of immigration to Sweden

In line with the growing immigration worldwide, the immigration profile in Sweden has changed over the past few decades. During the 1950s and 1960s, labour immigration took place, and most immigrants originated from Nordic countries, Southern Europe and Turkey [18]. Since the 1970s, immigrants have mainly been refugees and asylum-seekers.

From the 1990s to 2000s, immigration from Thailand to Sweden increased gradually. During the period 1998–2013, the most common reason for moving to Sweden for immigrant women was family reunification. The family connection was either Swedish-born or foreign-born [19].

In 2016, Sweden was the most generous country in the EU in granting protection to asylum-seekers in relation to population, with more than 7,000 asylum-seekers per million people living in the country [20]. In 2017, the population of Sweden was estimated at 10.1 million, of which about 18.5% were foreign-born [21]. The largest group of immigrants originated from Asia (37%), predominantly Syria, followed by Iraq and subsequently Iran. Figure 2 presents the 15 top countries of birth among immigrants in Sweden.
Figure 2. Number of immigrants by sex and country of birth as of 2017, Sweden. Source: Statistics Sweden [21].
Sexual and reproductive health among immigrants

Despite the many benefits of immigration, there is evidence that immigrants have poorer sexual and reproductive health than the native population in the recipient countries. Sweden may have one of the healthiest populations in the world, yet inequalities in health still exist. International and Swedish studies reveal that non-European immigrant women living in high-income countries are at higher risk of maternal and perinatal mortality compared with women in the majority population [10, 22-27]. Studies conducted in Sweden found that women originating from low-income countries were at higher risk of complications related to pregnancy and childbirth [10], and at higher risk of perinatal mortality for women from sub-Saharan Africa [22]. Studies in a Nordic setting indicate that immigrant women have a higher risk of induced abortion than native-born women [28-30]. According to Helström et al., the increased risk of induced abortion among immigrants is probably due to the immigrant status being more likely associated with low education, unemployment and limited access to healthcare [31]. Moreover, a Swedish study shows that immigrant women are at increased risk of mortality due to interpersonal violence compared with Swedish-born women [32]. This increased risk was higher among women, particularly from countries with low and very low gender equity levels.

Further, the rapidly growing immigration worldwide has been recognised as one factor that has contributed to difficulties in controlling communicable diseases [33]. Data from the European Surveillance System indicate higher prevalence rates of certain infectious diseases among immigrants in the EU/EEA, such as HIV/AIDS, tuberculosis and hepatitis B [34]. Sweden, along with Finland, has one of the lowest HIV/AIDS prevalence rates in Western Europe [35]. Nevertheless, about 75% of all new HIV/AIDS cases are immigrants in Sweden, which is the highest percentage in Europe [36]. However, immigrants are a very heterogeneous group, and certain groups are considered to be at greater risk than others. A study in Denmark showed that the risk of incidence of HIV/AIDS, and late presentation, remained higher within 10 years of residence among family-reunified immigrants (except those from Western Asia and North Africa) compared with refugees and natives [37]. According to the Public Health Agency of Sweden, data from 2009–2017 showed that the prevalence of HIV/AIDS was over-represented among immigrants from sub-Saharan countries, mainly Eritrea and Ethiopia, and Thailand, with an overrepresentation of women in these groups [38]. Further, a Swedish study found that women with origin from low-income countries were at increased risk of dying in reproductive age (15–49 years), due to infectious diseases, mainly HIV/AIDS [10]. A major reason for HIV-related morbidity and death in Europe is delayed diagnosis [39].
Immigrants’ access to sexual and reproductive healthcare services

Previous research indicates that immigrants’ use of SRH care services differs from the native population [40]. Poor SRH outcomes among immigrants in high-income countries have often been explained by factors related to limited access, or suboptimal use of healthcare. Language barriers [41-43] and difficulties navigating a new healthcare system are among the contributing factors [42, 44]. Maternal and perinatal mortality among immigrant women in Sweden have been explained as being due to delays in seeking care and miscommunication [45, 46]. Furthermore, studies indicate lower attendance at preventive services, such as cervical screening [47-49], visits at antenatal care [50] and parental education during pregnancy [51], among immigrant women than among the native-born.

The higher rates of induced abortions for immigrant women indicate difficulties in accessing contraceptive services [52]. A Swedish study shows that immigrant women requesting induced abortion have less experience of contraceptive use and contraceptive counselling than native-born women [29]. A Spanish study found that immigrant women in general had vast knowledge of contraceptive methods, but their beliefs, attitudes and behaviours related to contraceptive and sexuality were influenced by the social rules of their countries of origin.

Nevertheless, healthcare providers’ knowledge, behaviour and attitudes can also contribute to unequal healthcare access [53-55]. A Swedish study found that midwives found it challenging to counsel immigrants regarding contraception [56]. Their knowledge and understanding of cultures and religions are important factors for providing counselling services to immigrant women. Healthcare providers need to be better equipped when encountering immigrant women in abortion care, especially regarding contraceptive counselling [57]. Hence, the gender equality perspectives in Swedish contraceptive counselling might compromise other principles in healthcare, such as respect and tolerance of people’s culturally diverse preferences and values [58].

The fact that immigrants, to a larger extent, receive a late diagnosis of HIV compared with native-born people suggests that immigrants have less access to healthcare and are not offered the possibility of HIV testing when in contact with healthcare providers [36, 59-61]. Consequently, they are diagnosed at a stage when treatment is normally already being given. Stigma-related perception of HIV/AIDS, the individual’s beliefs and experiences from their previous context and fear of exclusion from society are recognised as barriers to HIV testing [62-64]. Further, the myth of deportation because of HIV/AIDS may explain migrants’ reluctance to seek healthcare [65].
Equity in health and healthcare

This section describes the terms and concepts of equity in health and healthcare as they are underlying concepts for health policies worldwide, which are related to sexual and reproductive health and rights.

**Equity in health**

The word equity, in terms of social justice and fairness, is an ethical concept and has become important in describing the principle of human rights [66]. Whitehead defines *equity in health* as:

> ‘Equity in health implies that ideally everyone should have fair opportunity to attain their full health optional and, more pragmatically, that no one should be disadvantage from achieving this potential, if it can be avoided’ [67].

It should be noted that equity and equality do not have the same meaning. Equity is value-based and grounded in principles of distributive justice [66]. Equality refers to everyone being treated in the same way and being provided the same resources.

**Equity in healthcare**

In striving for equity in health, *equity in healthcare* is important. Whitehead defines equity in healthcare as ‘*equal access to available care for equal need, equal utilization for equal need, and equality of care for all*’ [67].

The concept of equity is deeply rooted in Swedish welfare, particularly the development of the Swedish health system. In line with the development of the universal healthcare system, the terms equity and equal have been useful in the context of Swedish healthcare policies. In 1982, equal care and good health for all citizens were stipulated in the Swedish Health and Medical Service Act [68] and the Patient Act in 2014. Underlying these laws is the UN Declaration of Human Rights, ratified by the Swedish Government, declared in Article 12 of the International Covenant on Economic, Social and Cultural Rights, which mandates that a state must recognise the right of everyone to enjoy the highest attainable standard of physical and mental health.

> The main goal of the Swedish healthcare system is good health and healthcare on equal terms for the entire population (1982:763).

The Swedish Health and Medical Service Act states that care and treatment should be offered equally to all, according to their needs, regardless of personal characteristics, such as education, age, disability, country of birth or social status.
Definition of access

The term access is defined as a way of approaching, reaching or entering a place and the right or opportunity to reach, use or visit [70]. The term “access to healthcare” has been defined and studied in many ways. A common definition of access to healthcare is the opportunity and ease with which clients or communities are able to use appropriate services according to their needs [67, 71]. Levesque et al. conceptualise access as consisting of two major components: “accessibility” and “ability,” each comprising five dimensions interacting and generating access to healthcare [72].

*Accessibility* refers to the supply side, meaning the providers, organisations and systems that provide healthcare, in terms of 1) Approachability, 2) Acceptability, 3) Availability and accommodation, 4) Affordability and 5) Appropriateness.

*Ability* refers to the demand side, i.e., the ability of individuals and populations to access healthcare, in terms of 1) Ability to perceive, 2) Ability to seek, 3) Ability to reach, 4) Ability to pay and 5) Ability to engage. Each dimension is briefly described in Table 1.

In this thesis, the definition of access to healthcare services is based on the conceptualisation of access, as stated by Levesque et al. and described in Table 1. This definition was deemed suitable due to its breadth, comprising a multi-level perspective where factors related to health systems, institutions, organisations and providers are considered together with factors at the individual, household, community and population levels.

Further, it should be noted that in this thesis, access to healthcare has been studied, in terms of having knowledge about different types of health services, as well as the need and use of these services among immigrant women. Having knowledge of where to access contraceptive counselling and HIV testing is explicated as a human rights concern in achieving sexual and reproductive and rights [6].
<table>
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<th>Descriptions</th>
<th>Dimensions of the demand side: Ability</th>
<th>Descriptions</th>
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<tr>
<td>Approachability</td>
<td>People with perceived needs can identify that the services exist, can be reached and have impact on the health. Information and outreach activities might make the services more or less approachable.</td>
<td>To perceive</td>
<td>Ability to identify the need for care determined by health literacy, knowledge and beliefs about health and sickness.</td>
</tr>
<tr>
<td>Acceptability</td>
<td>Cultural and social factors determine the possibility for people to accept a service and the judged appropriateness for the persons to seek care.</td>
<td>To seek</td>
<td>Personal and social value due to culture, gender and socioeconomic factors. Personal autonomy and capacity to seek care, knowledge about healthcare options and individual rights.</td>
</tr>
<tr>
<td>Availability &amp; Accommodation</td>
<td>Health resources and capacity to provide services, in terms of geographic location, hours open.</td>
<td>To reach</td>
<td>Personal mobility and availability of transportation, knowledge about health services enabling a person to physically reach service providers.</td>
</tr>
<tr>
<td>Affordability</td>
<td>Economic capacity for people to spend resources and time to use appropriate services, in terms of costs of services and expenses and loss of income.</td>
<td>To pay</td>
<td>Capacity to have economic resources through income, savings or loans to pay for healthcare services.</td>
</tr>
<tr>
<td>Appropriateness</td>
<td>The fit between services and clients’ needs, quality of health services, effectiveness of treatment.</td>
<td>To engage</td>
<td>Involvement and participation of the client in decision-making and treatment decisions, which is strongly determined by capacity to communicate, health literacy, self-efficacy and self-management.</td>
</tr>
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</table>
The healthcare system in Sweden

A universal healthcare system was established in Sweden after World War II, aiming to provide high-quality care services to the entire population of Sweden [7]. Healthcare in Sweden is financed mainly through taxes levied by county councils and municipalities. The county councils/regions are responsible for the funding and provision of healthcare services to their populations. The county councils own the majority of primary care centres and hospitals.

In Sweden, there are various places people can turn to for SRH care, depending on the need for care and counselling. Table 2 gives a brief overview of where to turn for services and care for SRH.

Primary healthcare

According to Swedish health policy, a primary healthcare centre is the first place people should turn to when they get ill and are in need of medical consultation with a doctor. Additionally, primary care has a role in coordinating the patient's care in the healthcare system [73]. Patients who want to see a specialist are often required to get a referral from a primary care centre. For example, issues regarding difficulties becoming pregnant will be referred to a specialist at a hospital or gynaecological clinic.

Patient fees for a doctor are about 200–400 SEK (approx. 20-40 USD) for all residents of Sweden, regardless of nationality. Some services are free, such as contraceptive counselling and HIV/STI testing. Most counties do not charge children and adolescents below the age of 20 for appointments at health centres or Youth Guidance centres. There are over 1,100 primary public and private healthcare centres in Sweden.

Maternity healthcare in Sweden

Preventive work in maternity and child healthcare has a long history in Sweden [8]. Access to maternity healthcare is a matter of human rights and gender equality, not only a public health concern [74]. To promote gender equality in Sweden, appointments at maternity and child health centres are mostly free of charge throughout Sweden. Maternity healthcare is the place where pregnant women go to for health check-ups during pregnancy [75]. Women or men who want advice on contraceptives are advised to visit maternity healthcare, where counselling is often provided by midwives, and sometimes gynaecologists. Maternity healthcare also offers HIV or other STI tests, free of charge.

Swedish healthcare policy also includes several screening programmes, such as the HIV/Chlamydia trachomatis test for pregnant women and the cervical cancer screening programme for all women aged 23–60. Women are called to an appointment for a cervical cancer screening every third year up to the age
of 50 and every fifth year thereafter. For specific medical treatment regarding conditions related to SRH, the maternity healthcare centre provides referrals to a hospital or gynaecological clinic. There are around 590 maternity healthcare centres in Sweden [76].

Youth Guidance Centres
Sweden has a long tradition of prevention interventions aiming to provide adolescents with information related to SRHR [77]. Since the 1970s, Sweden has had Youth Guidance centres, which are clinics for adolescents and young adults aged 12–25 years. Adolescents can turn to these clinics for various issues concerning SRHR, such as a need for contraceptive methods or contraceptive counselling, HIV/STI testing and pregnancy testing as well as issues related to mental health illness. The visit is free of charge for adolescents under 18 years, and at most clinics it is also free for young adults under 25 years.

Gynaecological clinics
For gynaecological issues, there are both public and private clinics. All gynaecological clinics provide specialist care, which includes examinations, treatments and follow-ups of gynaecological symptoms and diseases [75]. Abortion care is also provided at gynaecological clinics.

Hospitals
For conditions needing hospital treatment, medical services are provided at a hospital [7]. Hospital treatment requires a referral from primary care centre. There are about 70 public hospitals at the county level and 6 private hospitals.
Table 2. *Overview and examples of SRH care services in Sweden*

<table>
<thead>
<tr>
<th>Primary care</th>
<th>Maternity care</th>
<th>Youth Guidance Centre</th>
<th>Hospital</th>
<th>Gynaecological clinic</th>
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<tbody>
<tr>
<td>- Contraceptive counselling&lt;br&gt;- HIV/STI testing&lt;br&gt;- Other issues related to sexual and reproductive health</td>
<td>- Family planning&lt;br&gt;- Contraceptive counselling&lt;br&gt;- HIV/STI testing&lt;br&gt;- Pregnancy test&lt;br&gt;- Questions about the body, relationships and sexuality&lt;br&gt;- Cervical cancer screening&lt;br&gt;- Antenatal care</td>
<td>- Contraceptive counselling&lt;br&gt;- HIV/STI testing&lt;br&gt;- Pregnancy test&lt;br&gt;- Questions about the body, relationships and sexuality</td>
<td>- Abortion&lt;br&gt;- Questions about infertility, help in becoming pregnant&lt;br&gt;- Childbirth&lt;br&gt;- Child care&lt;br&gt;- Prenatal care&lt;br&gt;- Other issues related to sexual and reproductive health</td>
<td>- Abortion&lt;br&gt;- Other issues related to sexual and reproductive health</td>
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**Policies related to immigration and healthcare for immigrants**

According to the Swedish National Strategy to Combat HIV/AIDS and Certain Other Communicable Diseases, HIV infection should be identified within two months among asylum-seekers and their newly arrived family members and within six months for other immigrant groups who have stayed in highly endemic areas (Prop. 2005/06:60) [78]. This goal has not yet been achieved [79], and the only systematic strategy to reach it is through health examinations of asylum-seekers.

Immigrants coming to Sweden as refugees or asylum-seekers are entitled to a health examination, which is offered free of charge, either before or after being granted asylum [80]. The right to this health examination is explicitly stated under Swedish law. The purpose is to identify infectious diseases such as HIV/AIDS and tuberculosis or other health problems. A further intention is to introduce refugees and asylum-seekers to the Swedish healthcare system and inform them about how to contact healthcare and dental care. People who immigrate to Sweden for other reasons, such as partnership and marriage with Swedish citizens, are not covered by this law and therefore not normally offered a free health examination.

According to Swedish law (2013:156) [81], every municipality is obliged to offer a civic orientation course to newly arrived immigrants who are registered as residents in the municipality. The main purpose of the course is to provide new arrivals with central information about Sweden, so they become established on the labour market and take part in Swedish society [82]. The civic orientation course is given in the participants’ native language and encompasses approximately 60 hours, lasting between 2 and 6 weeks. The civic orientation course is often handled by schools called Swedish for immigrants.
(SFI), which also offer a basic Swedish language course free of charge for all immigrants. The course comprises various themes. One important theme for the course concerns the United Nations’ documents about human rights and the development of Sweden as a democracy. Another central theme is the introduction of the Swedish healthcare, medical care and dental care systems to new arrivals. However, there is nothing stated about whether SRHR should be integrated into the civic orientation course and to what extent this should be introduced to new arrivals.

Moreover, according to Swedish law, immigrants that with limited Swedish language skills has the right to use an interpreter when in contact with the Swedish authorities [83].
Theoretical framework

The theories described below are some of the theoretical models and concepts related to access to SRH services. In this doctoral thesis, they will be used as support/tools for discussion of the results and for suggestion of recommendations.

Social determinants of health

Social determinants of health, as described in the literature by Whitehead and Dahlgren [69] and Marmot and Wilkinson [84], have been widely used in the field of immigrants’ health [84, 85] and SRHR [86]. According to Whitehead and Dahlgren, individuals are placed at the centre in a societal context, with different levels of factors surrounding them that influence health, such as individual lifestyle, community influences, social networks, living and working conditions, socio-economic status, and cultural and environmental conditions. The healthcare system is one of the many determinants of health. In this thesis, the role of social determinants of health will be addressed, e.g., education level, age and social capital factors. However, the model that is used is a modified version, adapted by the International Organization for Migration (IMO), because it focuses on processes and policies in relation to immigration [87]. Further, the focus of migration crosses through the social determinants of health as shown in Figure 3.

![Figure 3. Modified version including migration across the social determinants of health. Source: IMO [87].](image-url)
Social capital

In recent years, social capital has become an attractive conceptual perspective for public health studies. The concept has been used to understand the connections between social factors and different types of health outcomes. Studies of social capital implications for knowledge and access to healthcare services are more limited. According to Kawachi and Berkman, it is hypothesised that social capital (in terms of high trust levels between neighbours) develops channels for the distribution of information and knowledge, and may result in higher participation in health-promoting programmes [88]. Participation in networks can also provide access to material resources such as good health services and jobs [89].

Despite the growing body of social capital studies, there are no shared definitions and measures of the concept of social capital. In brief, some of the social capital measurements that have been used are: trust in others, social participation, networks and shared norms and values with racially or ethnically similar and dissimilar people [90-93]. The terms bonding and bridging social capital have been developed to determine different levels of social capital. Bridging social capital refers to relationships between dissimilar persons and groups (ethnically and socio-economically), strengthening ties between heterogeneous groups. According to Putman, bridging social capital is inclusive in its nature and enhances access to external resources [94]. Bonding social capital concerns the opposite of bridging social capital; it refers to exclusive relationships between similar persons and groups and enhances access to internal resources. The role of social capital in the context of immigration is explored in this thesis, focusing on trust, social relationships and social participation. To the best of my knowledge, few studies have explored the association between knowledge of SRH services and social capital.

Andersen’s Behavioural Model of Health Service Use

Andersen’s Behavioural Model of Health Service Use (BM) has been used widely for the past 40 years to predict the use of health services [95, 96]. The model was developed in 1960; since then, it has been revised several times by Andersen and colleagues. According to the model, healthcare utilisation depends on the interaction between individual behaviour, population characteristics and the surrounding environment, including the healthcare system [95]. This is a multilevel model and contains three major components for explaining an individual’s use of healthcare services:
**Predisposing factors** are divided into demographic elements and social structure and consist of: age, gender, residence, ethnicity, education, occupation, marital status, religion and attitudes towards health.

**Enabling factors** contain environmental and individual factors. Environmental factors include community resource elements that influence the availability and accessibility of healthcare, health policies, characteristics of the healthcare delivery system, including distance to and waiting time for healthcare [97]. Individual factors involve income and health insurance, and knowledge of how to take advantage of community resources and opportunities.

**Need factors** include perceived health status, history of illness and expected outcome of treatment.

The model views access to healthcare services as a result of decisions made by an individual constrained by their position in society and the availability of healthcare services. As this thesis focuses on newly arrived immigrants, various factors described by Andersen are suitable for use, in order to gain understanding of immigrants’ use of sexual and reproductive healthcare services in Sweden.
Rationale for the studies

The concept of “sexual and reproductive health and rights,” based on a human rights perspective, is often described as a fundamental value of the Swedish political ideology. The Swedish universal healthcare system also includes generous services relating to sexual and reproductive health, such as free contraceptive counselling and free HIV testing to all citizens in Sweden. Despite the generous health system, immigrant women seem to be more vulnerable to poor sexual and reproductive health than the majority of the population.

To my knowledge, research is limited concerning immigrant women’s access, in terms of use, knowledge and needs of SRH services in Sweden. Further, despite Thai immigrants being the immigrant group most frequently diagnosed with HIV in Sweden [38], their access to SRH services remain under-explored in health and migration research. From a public health perspective, it is important to understand factors that might explain their access to SRH services in Sweden. Thus, the results from this thesis are focused on Thai immigrant women’s experiences of SRH services. However, including one study that focuses on immigrant women from countries other than Thailand gives a broader and more adequate picture of the general access to SRH services.
Aims

Overall aim
The overall aim of this thesis was to obtain an understanding of immigrant women’s access to healthcare services in Sweden in relation to sexual and reproductive health and rights. Further aims were to identify barriers to and factors enabling these services.

Specific aims

• To investigate the knowledge and use of contraceptive counselling and HIV testing among immigrant women, predominantly refugees from Afghanistan, Iraq, Syria, and Somalia.

• To investigate Thai immigrant women’s knowledge and use of SRH services in Sweden.

• To examine the associations between knowledge and use of SRH services, sociodemographic and social capital factors.

• To explore healthcare-seeking behaviour, in relation to sexual and reproductive health among Thai immigrant women.

• To investigate the need for SRH-related services and information among Thai immigrant women.
Specific groups of immigrant women

Two specific groups of immigrant women were chosen for further investigation in this thesis: 1) Thai immigrant women and 2) other immigrant women, mainly refugees from Afghanistan, Iraq, Syria and Somalia. These groups were chosen as they are recognised as being vulnerable in different ways, with an elevated risk of poor health. The two groups of immigrant women differ from each other in several ways. From a system perspective, these two groups are not provided the same interventions in Sweden upon their arrival due to having different reasons for immigration. Further, they also differ with regards to traditions, norms and views on sexual and reproductive health, and earlier experiences of healthcare due to the healthcare system settings in their countries of origin.

Thai immigrant women

Over the past few decades, immigration from Thailand to Sweden has been rapidly growing due to the increasing economic and trade links, and tourism between Sweden and Thailand [98]. In 2017, around 41,240 Thai-born persons lived in Sweden, of which around 78% were women [21]. Thailand is the eighth most common country of birth among immigrant women in Sweden.

Thai women’s immigration to Sweden is mainly due to family reasons, e.g., relationships, mostly with a Swedish partner. The increasing number of women migrating abroad due to marriage is an international phenomenon, with an overrepresentation of south-north migration flows of females from Southeast Asia, Eastern Europe and Russia [99]. Thai women differ from other immigrant groups of women, e.g., women born in Afghanistan, Iraq, Syria and Somalia, who are mostly in relationships with men from the same country of birth [19].

Thai immigrants mostly settled in the major cities: Stockholm, Gothenburg and Malmö. In total, the numbers of women living in Gävleborg, Norrbotten County and Stockholm municipality were similar [100].
Other immigrant groups of women

Syria
Immigrants from Syria are a relatively new group in Sweden. Most have immigrated to Sweden as asylum-seekers in 2012 or later, as the war escalated. In 2017, there were about 73,523 Syrian women, which comprised 43% of all Syrian immigrants, and they are the second largest group among immigrant women after the Finnish [21]. Most Syrian-born immigrants live in Södertälje and Stockholm. Gothenburg is the third most common municipality for Syrian women.

Iraq
The influx of Iraqi-born immigrants to Sweden started in 1980 and has been increasing steadily, due to war and conflicts [100]. Most men have come to Sweden as asylum-seekers, while women have come for a family reunion. Iraqi women, together with Thai women, are the largest group that receive residence permits for family reasons [19]. Among the Iraqi population, slightly less than half are women (46%). Iraqis are the third largest group of immigrant women (65,016 women) [21]. Most Iraqi-born women have settled in major cities: Stockholm, Gothenburg and Malmö [100].

Somalia
Immigration of Somali-born persons to Sweden started in 1990 due to war and crises in the country [100]. Almost all Somali-born individuals immigrated as asylum-seekers or for family reunification with those who had been granted asylum. Today, there are 33,492 Somali-born women in Sweden, comprising half of the Somali population in Sweden [21]. Somali women are the sixth largest group of immigrant women in Sweden. Most of the Somali-born persons are settled in Stockholm and Gothenburg [100]. Common municipalities for Somali women are Borlänge and Malmö.

Afghanistan
The influx of refugees and asylum-seekers from Afghanistan to Sweden started in 1997, due to political crises [100]. The Afghanistan population in Sweden is predominantly male [21]. There are 16,347 Afghani women in Sweden (37% of all Afghani immigrants). In contrast to other groups of immigrants, people from Afghanistan can be found in all over the country and not concentrated in the big cities [100].
Methods

Study design

This thesis includes both quantitative and qualitative research methods. Three of the studies use a cross-sectional design, and one study is based on semi-structured interviews. All data were collected in Sweden. An overview of the sample and analyses of the four studies are presented in Table 3.

Table 3. Overview of the methods used in Studies I-IV

<table>
<thead>
<tr>
<th>Paper</th>
<th>Design</th>
<th>Data collection</th>
<th>Participants</th>
<th>Data analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Quantitative</td>
<td>Questionnaire</td>
<td>Immigrant women speaking Arabic, Dari, English or Somali residing in four counties: Norrbotten, Stockholm, Skåne and Östergötland (n=288)</td>
<td>Chi-square tests, Univariate and multivariate binary logistic regression</td>
</tr>
<tr>
<td>II</td>
<td>Quantitative</td>
<td>Questionnaire</td>
<td>Thai immigrant women residing in Skåne and Sjuhäradsbygden (n=804)</td>
<td>Chi-square tests, Univariate and multivariate binary logistic regression</td>
</tr>
<tr>
<td>III</td>
<td>Qualitative</td>
<td>In-depth interviews</td>
<td>Thai immigrant women residing in Stockholm county (n=19)</td>
<td>Thematic analysis</td>
</tr>
<tr>
<td></td>
<td>semi-structured</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>interviews</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>Quantitative</td>
<td>Questionnaire</td>
<td>Thai immigrant women residing in Stockholm county (n=266)</td>
<td>Chi-square tests, Univariate and multivariate binary logistic regression</td>
</tr>
<tr>
<td></td>
<td>Cross-sectional</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Setting

Study I was conducted in four counties in Sweden: Norrbotten, Stockholm, Östergötland and Skåne, comprising both urban and rural areas.

Study II was conducted in two regions: Skåne and Sjuhäradsbygden, also comprising both urban and rural areas.

Studies III and IV were conducted in Stockholm County, where the capital of Sweden (Stockholm) is situated.

Figure 4. The location of the four studies in Sweden.
Study participants, data collection and procedure

The study group in the thesis are immigrant women, predominantly Thai immigrant women. However, in order to obtain a broader and more adequate picture of the general access to SRH services among immigrant women in Sweden, we included one study that focused on immigrant women from Afghanistan, Iraq, Syria and Somalia, who were mostly refugees.

Study I

Study I was based on paper-and-pencil self-administered questionnaires, performed among immigrants studying at language schools for immigrants in four counties in Sweden: Norrbotten, Stockholm, Skåne and Östergötland. The study was conducted during spring 2013 and was part of a larger project [101, 102], where one of the main aims was to investigate experiences and views on health examination among immigrants. For this reason, the SFI schools were considered to be the most appropriate place to reach the project target group. In Sweden, immigrants that have been granted asylum must attend the SFI schools according to Swedish law, but SFI schools also attract other immigrants besides refugees.

A strategic sample was applied with selected schools, based on the number of immigrants that had been granted asylum in 2012 in the respective counties. Nineteen schools agreed to take part in the study, and a total of 170 classes were visited. In total, 606 participants completed the questionnaire. Due to the aim of this study, only female participants were included, which consisted of 288 immigrant women. The immigrant women included both non-refugees and refugees. Refugee women are those who have been granted asylum. Non-refugee women are those who have been granted residence permit in Sweden due to family reunification or other reason for a residence permit. The average age of the immigrant women was 36 years. Most of them were born in Somalia and Iraq, followed by Syria and Afghanistan. One-fifth were born in other countries; mainly countries in Africa.

The questionnaire was translated into the languages spoken by the largest groups of immigrants that had been granted asylum when data collection was planned: Arabic, Somali, Dari and English. The process of translating the questionnaire was guided by Guilleman et al. [103], including translation, back translation into Swedish and cognitive interview.

A team comprising of researcher and language supporters performed data collection. Language supporters spoke the same language and had the same culture/country of birth as the study population. On the day of data collection, the team informed the participants about the research project and gave instructions
about how to fill in the questionnaire. All students in the classes fulfilling the inclusion criteria were eligible to participate. The inclusion criteria were: participants aged 18 or over who were born outside the EU and Arabic, Dari, English or Somali speakers. Language supporters assisted participants who were illiterate and those who needed help to understand the questionnaire and/or to fill it in. The returned questionnaires were administered by the research team at Uppsala University.

Study II

Study II was based on paper-and-pencil self-administered questionnaires, carried out in 2012. The study population consisted of all Thai women aged 18–64 years who were born in Thailand, immigrated to Sweden between 2006 and 2011, and were registered in Skåne or Sjuhäradsbygden. Data collection was done in collaboration with Statistics Sweden (SCB: Statistiska centralbyrån), which distributed the questionnaires and administered the returned questionnaires.

In total, 1,291 Thai women were listed in the Total Population Register (RTB) and received a public health questionnaire in Thai language by ordinary mail. RTB is a national register of all Swedish citizens, managed by Statistics Sweden. All respondents, except those who had already answered the questionnaire, received three reminders by postal mail. The response rate was 62.3% (n=804). The average age was 37 years, with most women aged 31–45 years. The most common reason for their migration to Sweden was a relationship with a Swedish partner.

The questionnaire was tested in focus group discussions with Thai women in order to ensure its cultural pertinence. The questionnaire was initially written in Swedish, thereafter translated into Thai and then independently back-translated into Swedish. It was pilot-tested and revised before being finalised.

Study III

Study III, a qualitative study with in-depth interviews was performed in 2014 in Stockholm county. Purposive sampling was used to recruit newly arrived Thai-born women with various backgrounds regarding age and education and who lived in different parts of the Stockholm area. The inclusion criteria were: 1) over 18 years of age, 2) not older than 50 years and 3) residence in Sweden for less than five years. The women were recruited at Swedish language schools for immigrants, workplaces and one by a key person (i.e., a Thai woman who had lived in Sweden for over 10 years suggested that the first author to contact a newly arrived Thai woman). The interviews were performed in Thai by the first author. All interviews were held in a place that
ensured privacy and was comfortable for the participants. The interviews lasted between 45 and 60 minutes and were audio-recorded with the participants’ permission.

In order to obtain a better understanding of their responses as well to allow for a more detailed discussion of a number of topics, a second interview was conducted with three participants. Data collection was performed until saturation was reached, meaning that no additional information came out towards the end of the interviews conducted [104].

In total, 19 interviews with women were conducted, of which 17 on an individual basis and two in a paired interview as requested by them. The age span for the 19 women was 24–50 years, the mean age being 34 years. Eighteen out of the women reported a relationship with a Swedish partner as the reason for immigration.

Study IV
Study IV was based on paper-and-pencil self-administered questionnaires, conducted in Stockholm County in 2016. The study population was all Thai-born women, aged 23–60 years and registered in Stockholm since 2014. Distribution of the postal questionnaire (including postal reminders) was done by Statistics Sweden and administrated by Uppsala University. Based on the RTB, 505 Thai women received the questionnaire in Thai language by ordinary mail, and 266 women (52.3%) responded. The average age of the women was 38 years. Most women had been granted a residence permit in Sweden due to family reunification (68% relationship with a Swedish citizen).

The questionnaire was initially written in Swedish, then translated into Thai and then independently back-translated into Swedish. The questionnaire was pilot-tested with Thai women in order to ensure its cultural pertinence.
Measurements

Study I

In Study I, two main outcomes were used to measure the participants’ knowledge of SRH care services. Table 4 presents an overview of outcomes and explanatory variables used in the analyses.

Table 4. List of variables in Study I

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main outcome</strong></td>
<td></td>
</tr>
<tr>
<td>Knowledge, where to go for advice on contraception</td>
<td>yes, no</td>
</tr>
<tr>
<td>Knowledge, where to go for an HIV/AIDS test</td>
<td>yes, no</td>
</tr>
<tr>
<td><strong>Secondary outcome</strong></td>
<td></td>
</tr>
<tr>
<td>Have received advice on contraception</td>
<td>yes, no</td>
</tr>
<tr>
<td>My culture prevents me from using contraceptives</td>
<td>yes, no, don’t know</td>
</tr>
<tr>
<td><strong>Explanatory</strong></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>18-30, 31-45, ≥46 years</td>
</tr>
<tr>
<td>Country of birth</td>
<td>Somalia, Iraq, Syria, Afghanistan, other country</td>
</tr>
<tr>
<td>Education</td>
<td>no, 1-6 years, 7-12 years, +12 years</td>
</tr>
<tr>
<td>Married/Cohabiting</td>
<td>yes, no</td>
</tr>
<tr>
<td>Having children</td>
<td>yes, no</td>
</tr>
<tr>
<td>Religion</td>
<td>Muslim, Christian, other religion, not religious</td>
</tr>
<tr>
<td>Reason for migration</td>
<td>Seeking asylum, marriage to Swedish/Nordic citizen, family lived in Sweden, labour/other reason</td>
</tr>
<tr>
<td>Years of residency in Sweden</td>
<td>≤ 2 years, 3-4 years, ≥5 years</td>
</tr>
<tr>
<td>Participated in health examination</td>
<td>yes, no</td>
</tr>
<tr>
<td>Ever been tested for HIV/AIDS</td>
<td>yes, no</td>
</tr>
<tr>
<td>Report having emotional social support</td>
<td>yes, no</td>
</tr>
<tr>
<td>Report having instrumental social support</td>
<td>yes, no</td>
</tr>
<tr>
<td>Report having trust in healthcare services</td>
<td>yes, no</td>
</tr>
</tbody>
</table>

Classification of variable categories

Social capital was measured in terms of trust and social support. Trust was measured by the question “What confidence do you have, in general, in healthcare services (no confidence, little confidence or a lot of confidence)?”

Social support was measured by the question “What kind of social support did you have when you were waiting for the residence permit?” followed by two questions:
1. “Did you have someone you can share your innermost feelings with and feel confident in (yes, no, or don’t remember)?” – named as emotional social support.

2. “Was there someone nearby that you could easily ask for help with things (for example, help collecting your mail, watering your flowers, or translating Swedish text) (yes, no or don’t remember)?” – named as instrumental social support.

*Participation in health examination* was measured by the question “Have you participated in a free health examination for asylum-seekers (yes, before I got my residence permit; yes, after I got my residence permit; yes, but I don’t remember when; no; don’t know)?”

Health examination was defined in the questionnaire as: a health check-up of asylum-seekers, free of charge and offered to everyone seeking asylum in Sweden, regardless of whether they are healthy or sick. People are usually called to a health examination shortly after seeking asylum. Those that participate in the health examination often have to answer questions regarding their health and take various tests.
Study II

In Study II, four main outcomes were used to measure the participants’ knowledge and utilisation of SRH care services. Table 5 presents an overview of outcomes and explanatory variables used in the analyses. The majority of the items in this study were derived from several other comprehensive public health questionnaires used in Sweden [105].

Table 5. List of variables in Study II

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td></td>
</tr>
<tr>
<td>Knowledge about SRH care services</td>
<td>yes, no</td>
</tr>
<tr>
<td>Utilisation of SRH care services</td>
<td>low, high</td>
</tr>
<tr>
<td><strong>Explanatory</strong></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>18-30, 31-45, ≥46 years</td>
</tr>
<tr>
<td>Married/cohabiting</td>
<td>yes, no</td>
</tr>
<tr>
<td>Education</td>
<td>0-6, 7-9, 10-12, +12 years</td>
</tr>
<tr>
<td>Participation in language school</td>
<td>yes, no</td>
</tr>
<tr>
<td>Lacking cash reserves</td>
<td>yes, no</td>
</tr>
<tr>
<td>Trust in others</td>
<td>low, high</td>
</tr>
<tr>
<td>Bonding vs. bridging trust</td>
<td>dominant bonding trust, dominant bridging trust</td>
</tr>
<tr>
<td>Bonding vs. bridging relationships</td>
<td>dominant bonding relationships, dominant bridging relationships</td>
</tr>
<tr>
<td>Social participation</td>
<td>low, high</td>
</tr>
</tbody>
</table>

Classification of some variable categories

Knowledge about the Swedish reproductive and sexual healthcare services was measured through four questions: “Do you know where to go if you want to take a chlamydia/HIV/hepatitis test (HIV/STI)” [106]. “Do you know where to go if you get pregnant and are considering getting an abortion?”, “Do you know where to go if you want advice on contraception?” and “Do you know where to go if you want to get a gynaecological screening?” The response options for respective questions were “yes (=1)” and “no (=0)”. Participants who reported “yes” at least three times were considered as having good knowledge, and participants who reported yes only once were considered as having poor knowledge.

Utilisation of sexual and reproductive healthcare services was based on three questions [106-109]: “Have you ever been in contact with healthcare services
in Sweden to get a gynaecological screening?”, “Have you ever been in contact with healthcare services in Sweden to get advice on contraception?” and “Have you ever been in contact with healthcare services in Sweden to get tested for chlamydia/HIV/hepatitis (HIV/STI)?” The responses for these three questions were “yes” and “no”. Participants who never used any of these services or used one of them were classified into low utilisation, and participants who used at least two or more were classified into high/average utilisation.

*Social capital* was measured through four types of social capital variables: 1. Trust in others, 2. Bonding vs. bridging trust, 3. Bonding vs. bridging relationships and 4. Social participation.

*Trust in others* was measured through four questions [90, 110, 111]: “Most people would take advantage of you if they had an opportunity”, “Most people try to be fair”, “You can trust most people” and “You cannot be too careful when dealing with other people”. Possible answers were “I do not agree at all”, “I do not agree”, “I agree” and “I agree completely”. The response categories were given the values of 1 to 4, for each question. Based on the median, respondents who scored below the median (<10) were classified as having “low trust” and those above the median (≥10) were considered as having “high trust”.

*Bonding vs. bridging trust* was assessed by the question: “Does a person’s background (e.g., sex, education or country of origin) affect your level of trust in them, for example, the credibility of what they say about different things?” with five response alternatives: “I only trust persons with the same background as my own rather more than others”, “I trust persons with the same background as my own a bit more than others”, “I trust persons with the same background as my own equally as much as others” and “I trust persons with the same background as my own less than others”. The response categories were dichotomised into bonding vs. bridging trust, with the first three categories as “dominant bonding trust” and the last two categories as “dominant bridging trust”.

*Bonding vs. bridging relationships* were measured by one question: “Who do you socialise with most, people of Swedish origin or people with a foreign background?” with four response categories: “mostly with Thai people”, “mostly with Swedish people”, “mostly with people who have another foreign background” and “about the same with all groups”. The response categories were dichotomised into bonding vs. bridging relationships, with the first category as dominant bonding relationships and the three remaining into dominant bridging relationships.
Social participation was based on reported participation in 13 different social activities during the past year, measured by the question “Have you participated in any of the following activities in the last 12 months?” Participants with reported activities under the median number of activities were dichotomised into “low social participation” and with reported activities above the median score into “high social participation”.
Study III

A semi-structured interview guide with open-ended questions was used in Study III. Follow-up questions were asked when needed. The interview guide included the following topics: social relationships/networks, views and perceptions of health and diseases, experiences with healthcare and reproductive healthcare, thoughts on HIV prevention and sources of health information and healthcare. Social relationships/networks were included in order to get a deeper understanding of how this was of importance for access to SRH care, as shown earlier in the results in Study II. Table 6 presents some of the questions from the interview guide.

Table 6. *Examples of questions in the interview guide, Study III*

<table>
<thead>
<tr>
<th>Social relationships and occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• What does your normal day look like?</td>
</tr>
<tr>
<td>• Who do you socialise with? What do you do together? Where do you meet?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Swedish healthcare/maternity healthcare</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Have you ever been in contact with healthcare to receive contraceptive counselling? How did you perceive the consultation? If you need contraceptives, do you know where to go to access contraceptives?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health and HIV/STI testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Are you afraid of getting some sort of disease?</td>
</tr>
<tr>
<td>• Some immigrants are offered a health examination, in which HIV/STI testing is included. What do you think about that?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health information with a focus on SRHR</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Where do you seek health information and information about healthcare?</td>
</tr>
<tr>
<td>• Where do you seek information about HIV/STIs, testing and contraceptives?</td>
</tr>
<tr>
<td>• What information do Thai immigrants in Sweden need?</td>
</tr>
<tr>
<td>• Is there any person that is especially important as an intermediary for information regarding contraceptive methods, HIV/STIs, testing services and where you can receive care?</td>
</tr>
</tbody>
</table>
Study IV

In Study IV, two main outcomes were used to measure each participant’s access to sexual and reproductive healthcare services. Questions regarding in which country Thai women had bought their contraceptives and if they had been tested for HIV in Thailand, were specifically developed for this study. This was done since Study III showed that the women preferred to use health services in Thailand as they encountered difficulties in accessing health services in Sweden. Table 7 presents an overview of outcomes and explanatory variables used in the analyses. Further classification of variable categories is needed for this study.

Table 7. List of variables in Study IV

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td></td>
</tr>
<tr>
<td>Report having bought contraceptives in Thailand</td>
<td>yes, no</td>
</tr>
<tr>
<td>Report not being tested for HIV in Sweden</td>
<td>yes, no</td>
</tr>
<tr>
<td><strong>Explanatory</strong></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>23-30, 31-40, 40+ years</td>
</tr>
<tr>
<td>Immigration year</td>
<td>2014, 2015, 2016</td>
</tr>
<tr>
<td>Married/cohabiting</td>
<td>Yes, no</td>
</tr>
<tr>
<td>Education</td>
<td>0-6, 7-9, 10-12, 12 + years</td>
</tr>
<tr>
<td>Having children</td>
<td>yes, no</td>
</tr>
<tr>
<td>Ever used interpreter when seeking care in Sweden</td>
<td>yes, no, never sought care</td>
</tr>
<tr>
<td>Having participated in cervical screening</td>
<td>yes, no</td>
</tr>
<tr>
<td>Ever been tested for HIV in Sweden</td>
<td>yes, no, no, but want to have an HIV test, don’t know</td>
</tr>
<tr>
<td>Even been tested for HIV in Thailand</td>
<td>yes, no, don’t know</td>
</tr>
<tr>
<td>Ever participated in contraceptive counselling in Sweden</td>
<td>yes, no, no, but in need of counselling</td>
</tr>
<tr>
<td></td>
<td>no, in need of counselling</td>
</tr>
<tr>
<td></td>
<td>no in need – already use</td>
</tr>
<tr>
<td>Report using contraception</td>
<td>yes, no</td>
</tr>
<tr>
<td>Report having knowledge of where to turn for HIV testing</td>
<td>yes, no</td>
</tr>
<tr>
<td>Report having knowledge of where to turn for contraceptive counselling</td>
<td>yes, no</td>
</tr>
<tr>
<td>Need for more information regarding the following topics:</td>
<td></td>
</tr>
<tr>
<td>Where in Sweden can I test myself for HIV/STIs</td>
<td>yes, no</td>
</tr>
<tr>
<td>How the Swedish healthcare system functions</td>
<td>yes, no</td>
</tr>
<tr>
<td>What rights do I have in Sweden</td>
<td>yes, no</td>
</tr>
<tr>
<td>Fertility and pregnancy</td>
<td>yes, no</td>
</tr>
<tr>
<td>To raise my children</td>
<td>yes, no</td>
</tr>
</tbody>
</table>
Data analysis

Quantitative data (Studies I, II and IV)

For all quantitative studies, the data were analysed using the Statistical Package for the Social Sciences (SPSS) version 20.0 and 21.0 (Chicago, IL, USA). Descriptive statistics were used for characteristics and presented as frequencies and percentages. Chi-square tests or Fisher’s exact tests were used to examine differences between variables. A $p$-value of $< 0.05$ was considered statistically significant for all statistical analyses.

Binary logistic regressions were performed to calculate the crude odds ratios (OR), with 95% confidence intervals, for the effect of socio-demographic factors and other explanatory factors on the outcome variables.

Multivariate logistic regression with step-wise models for the potential confounders was used to investigate adjusted associations between the explanatory variables and outcome variables. All three studies were adjusted for socio-demographics, such as age, education, marital status and years of residence in Sweden.

Qualitative data (Study III)

All interviews were transcribed verbatim. The data were analysed using thematic analysis as described by Braun and Clarke [112]. Since the first author speaks Thai, she transcribed all the interviews herself. The first author listened to all recordings repeatedly and read all transcripts several times to obtain an overall picture of the data. Notes were made manually on the transcribed texts for coding ideas. Then, the codes were organised into tables based on the topics from the interview guide. From this stage, codes were reviewed and those with similar meanings were grouped into working themes using mind-maps. The last author independently analysed more than half of the interview transcripts. Thereafter, the authors compared and discussed their analyses several times until consensus was reached. The working themes were also reflected upon and discussed with the other co-authors in order to achieve objectivity.
Ethical considerations

In Study I, ethical approval was sought from the Regional Ethical Committee of Uppsala, Sweden (registration number 2012/506); however, the committee judged that according to Swedish law, approval was not deemed to be applicable or relevant. This was motivated by the Board in that data collection was performed anonymously, leaving no possibility of individual identification. Study II was approved by the Ethical Review Board of Lund, Sweden (registration number 2011/521). Studies III and IV were approved by the Regional Ethical Committee of Uppsala, Sweden; Study III (registration number 2014/077) and Study IV (registration number 2016/177).

In Study I, the participants received verbal and written information about the aim of the study; they were also informed that participation was voluntary and that they could decline participation at any time without negative consequences. Written consent was not required as it might be a sensitive issue for the participants, especially for refugees, to provide their names due to mistrust of authorities. Informed consent was deemed given when the questionnaire was answered and handed in.

In Studies II and IV, each participant received an accompanying letter describing the purpose of the study and that participation was voluntary. They were also informed that their answers would be treated as confidential. Consent was deemed given when the questionnaires were returned. A telephone number for a person working within the healthcare sector was included in the letter as a source of support, in case the questionnaire raised need for counselling regarding health issues.

For Study III, the participants received verbal and written information about the study; they were also informed that participation was voluntary and that they could decline participation at any time without providing any reason. Before participation in the interviews, all of the women gave their informed consent. They were also informed that their responses would remain confidential. All participants gave their consent for the interviews to be audio-recorded after being asked.
Main results

What is the knowledge and use of SRH services (Studies I and II)?

Knowledge and use of SRH services among refugee and non-refugee women (Study I)

Study I investigated the knowledge and use of contraceptive counselling and HIV testing among refugee women and non-refugee women in Sweden. The majority (68%) had never attended contraceptive counselling in Sweden (Study I, Table 2). Chi-square tests indicated that use of contraceptive counselling was more common among women living with a partner and having children than women without (Study I, Supplementary data). Women with five or more years of residence were more likely to have used services than women with less than two years of residence.

About one-third of the women reported lack of knowledge about where to turn for contraceptive counselling. Women living in Sweden for four years or less (OR: 2.23, CI: 95% 1.04–4.8) and women with no children (OR: 3.14, CI: 95% 1.75–5.63) had higher odds of reported lack of knowledge, as compared with women living for more than five years in Sweden and women having children (Study I, Table 3). Further, women who reported having no emotional social support (OR: 3.19, CI: 95% 1.68–6.07) and women who could not state whether their culture prevented them from using contraceptive (OR: 3.54, CI: 95% 1.39–8.98) had higher odds of lacking knowledge. When adjusting for background factors (age, country of birth, years of residence in Sweden, education, marital status), the associations for women with no children and women who reported having no emotional social support and lack of knowledge remained statistically significant.

About 35% of the women had been HIV tested. Concerning knowledge of where to turn for HIV testing, about 56% of the women reported lack of knowledge (Study I, Table 2). Women who had not undergone a health examination (OR: 6.86, CI: 95% 1.98–23.74) had higher odds of reported lack of knowledge, as compared with women who had undergone a health examination (Study I, Table 4). Additionally, country of birth was associated with lack of knowledge. Women born in Afghanistan (OR: 5.87, CI: 95% 1.72–19.99) had the highest odds of reported lack of knowledge, followed by women born
in Syria (OR: 4.37, CI: 95% 1.49–12.83) and women born in Iraq (OR: 2.55, CI: 95% 1.17–5.58), compared with women born in another country. After adjusting for background factors, not having undergone a health examination and country of birth remained statistically significant. No association was found between women born in Somalia and lack of knowledge in the crude analysis, including after adjusting for background factors.

Knowledge and use of SRH services among Thai immigrant women (Study II)

Study II investigated the knowledge and use of SRH services among Thai immigrant women in Sweden. In this study, knowledge about SRH services was based on knowledge of where to go for HIV/STI testing, contraceptive counselling, gynaecological screening and abortion care (Study II, Table 2). Slightly more than half of the Thai women had poor knowledge of where they should turn when they need sexual and reproductive healthcare services.

Results in the fully adjusted model (model 2) showed that several factors remained statistically significant with poor knowledge: oldest age group (OR: 2.65, CI: 1.32–5.29), women without a partner (OR: 2.02, CI: 1.16–3.54), women who reported low trust in others (OR: 1.61, CI: 1.10–2.35) and those who reported dominant bonding relationships (OR: 1.50, CI: 1.02–2.23) (Study II, Table 4). Associations between poor knowledge and low social participation and dominant bonding trust were only found in the crude analysis.

About 57% of the women had never been in contact with healthcare services to get contraceptive counselling, and 75% of the women had never been HIV/STI tested in Sweden (Study II, Table 2). Uptake of cervical cancer screening was 69%. The final model, adjusting for several background and social capital factors, showed that women living without a partner (OR: 2.53, CI: 95% 1.30–4.90) and lack of knowledge about SRH care services (OR: 6.07, CI: 95% 3.94–9.34) had higher odds of not using these services, as compared to women living with a partner and women with reported knowledge (Study II, Table 3).
What is the healthcare-seeking behaviour among Thai immigrant women in relation to SRH (Study III)?

Study III explored Thai women’s healthcare-seeking behaviour in relation to SRH. The names given for each quotation below are fictitious to maintain confidentiality.

When in need of health information or healthcare, most Thai women consulted their partner first. The partner booked an appointment and accompanied the women to the health services. For some women, the partner acted as an interpreter and translated letters that they had received, such as an invitation to cervical cancer screening.

He arranges everything. The first time, it was a call for the gynaecological examination [cervical screening] and the person who examined me asked me if I was using a contraceptive. And we, my partner and I, discussed it, and then he booked a time for me. He drove me there too. My Swedish language is not too good yet. (Mae, 34 years old)

Several women had refrained from or delayed seeking care while waiting for their partner’s assistance. The women explained that because of their limited language in Swedish and lack of knowledge about the healthcare system in Sweden, they did not feel comfortable seeking care on their own. Despite language difficulties, most women had never been offered an interpreter during their meeting with healthcare professionals.

Thai women usually get help from their husbands to find their way around. Women whose partners have retired may perhaps get help a little more often, but it does not need to be so. What if my partner dies one day, what will I do? How would it be for me, since I am not very good at speaking or writing in Swedish? It is a big problem when visiting the healthcare service because you do not get an interpreter. (Noi, 42 years old)

Because of language difficulties, the women did not always understand what happened during the consultation with healthcare professionals. For example, even though the majority had attended their cervical cancer screening, many of the women were only vaguely aware of the existence of Swedish maternity healthcare and its purpose.

As a consequence of not being able to benefit from healthcare services in Sweden, women who visited Thailand took the opportunity to seek care during their visit. Another stated reason for seeing a doctor in Thailand was to get a second opinion, because of not being able to understand the Swedish doctor’s advice.
Since I do not know the language, it is much more difficult for me to make an appointment. It is much easier for me in Thailand. … It is not that I am shy of the doctor, but I know that I do not understand everything they say. But with the doctor in Thailand, I am not limited in any way when expressing myself and I can ask any questions I want. (Wimon, 35 years old)

Furthermore, because women felt that access to contraceptives was more complicated in Sweden than in Thailand, some continued to buy contraceptives from Thailand instead of establishing contact with Swedish healthcare services. Consequently, once they ran out of contraceptives, they did not use any protection, even though they did not want to become pregnant. Some women had also bought contraceptives for Thai-born friends in Sweden while visiting Thailand.

… my friend says that it takes almost an entire day to see a doctor, so she prefers to work instead and earn SEK 700–900. This is a waste of time. When you are in Thailand, you can buy pills lasting for a whole year … (Wimon, 35 years old)

What is the need for information and services related to SRH (Studies III and IV)?

Expressed SRH needs (Study III)
The most common sexual and reproductive health need that the interviewed women expressed was wanting to become pregnant. Despite this need, and even though each of them had tried to become pregnant for over a year, they had not sought care. The stated reason for not seeking care was that they were waiting for their partner to contact the healthcare provider since they lacked knowledge about the Swedish healthcare system.

I am 42 years old and soon turning 43. I would at least like to have one child that I can have as a friend. I have talked about this with my partner and he said to me ‘Let’s get back from Thailand first.’ But I do not know if it’s possible for me to have children. If I do not get pregnant, I want to see a doctor and get counselling. (Vipada, 42 years old)

Reported need for SRH-related information and services (Study IV)
Study IV investigated the need for SRH-related information and services among Thai women. The vast majority of Thai women reported a great need for information related to the healthcare system (Figure 5). The most needed
information was about what rights Thai women had in Sweden (100%), followed by how the Swedish healthcare system functioned (97%) and where to go for HIV testing (82%). Nearly two-thirds wanted to have more information about fertility and pregnancy. Further, among the women who had visited the healthcare in Sweden (73%), about two-third reported that they had not used an interpreter (Study IV, Table 1).

![Bar chart](chart.png)

**Figure 5.** Reported need for more information among Thai women in Study IV.

**Need for contraceptive counselling and use of contraception (Study IV)**

The majority of the Thai women (80%) had not participated in contraceptive counselling in Sweden (Study IV, Table 1). About 54% responded that they did not need any contraception. Another stated reason was that they were already using a contraceptive method (15%). About 11% would like to have contraceptive counselling. Chi-square tests showed that a higher proportion of women aged 23–30 years had participated in contraceptive counselling as well as reported need for counselling, as compared with women older than 31 years (Study IV, Table 2). Participation in contraceptive counselling was also more common among women with reported knowledge of where to turn for counselling, and women with increased years of residency in Sweden. Education level, marital status and having children were not significant predictors for using contraceptive counselling.

Among women using contraceptive methods, about 70% of the women had bought their contraceptives in Thailand (Study IV, Table 1). The odds of having bought contraceptives in Thailand were higher among participants older than 35 years (OR: 3.55, CI: 95% 1.26–10.0) and women with 7–12 years of education (OR: 3.64, CI: 95% 1.23–10.80) compared with participants aged 23–35 and those with more than 12 years of education (Study IV, Table 3). Furthermore, participants who reported lack of knowledge of where to turn
for contraceptive counselling (OR: 3.07, CI: 95% 1.08–8.70) had higher odds of buying contraceptives in Thailand, compared with those who had knowledge of where to turn. After adjustment for background factors (age, education, marital status, having children/not having children and knowledge of where to turn for contraceptive counselling), all these associations remained statistically significant. No association was found between marital status, having children/no children, years of residency in Sweden and having bought contraceptives in Thailand.

Need for HIV testing and reasons for not being tested in Sweden (Studies III and IV)

Views on HIV and HIV testing (Study III)

When discussing general concerns about health, only a few women were concerned about becoming infected with HIV or other infectious diseases. Instead, women pointed out cancer as the disease that worried them the most. The women were knowledgeable about the effective HIV medicines and possibility to live with HIV:

> Nowadays, one is not so concerned about HIV because there are effective medicines that stop the development of the infection. Many people live with HIV today, but the disease is not as scary as cancer. If you get cancer, you cannot expect to live much longer. If you ask me what disease I am most concerned about, HIV or cancer, I am much more worried about getting cancer because there are medicines for HIV. (Malee, 25 years old)

Another reason for not being concerned about HIV was that women did not perceive themselves as being at risk of HIV. According to the women, HIV risk was linked to alcohol consumption and partying. Several women stated that they were in a stable relationship and did not go out partying. Living in Sweden was seen as another reason for not being at risk of HIV, because the women perceived HIV as being uncommon in Sweden. When speaking about HIV testing, the women did not perceive any stigma related to this. Rather, they expressed a positive attitude towards HIV testing, if they were to be offered an HIV test in Sweden.

Factors for not being tested for HIV (Study IV)

Approximately 60% of the women were HIV tested in Study IV, with 40% having been tested in Thailand (Study IV, Table 1). About 15% had been tested again in Sweden. Only 7% would like to have an HIV test.
Results from the crude analysis showed that women with lack of knowledge of where to turn for HIV testing in Sweden (OR: 6.90, CI: 95% 3.03–15.70) had higher odds of not having been HIV tested in Sweden than women with reported knowledge (Study IV, Table 4). Furthermore, women who had never been tested in Thailand (OR: 14.32, CI: 95% 3.36–61.01) had higher odds of not having been tested in Sweden compared with women who had been tested earlier in Thailand. After adjustment for background factors (age, education, marital status and having children/not having children), lack of knowledge and not having been tested in Thailand remained significantly associated with not having been tested in Sweden.

No associations were found between not having been HIV tested in Sweden and socio-demographic factors (age, education, marital status, years of residency and having children/not having children).
Discussion

Summary of findings and general discussion

The overall aim of this thesis was to obtain an understanding of immigrant women’s access to healthcare services in Sweden in relation to sexual and reproductive health and rights. The main findings from the thesis can be summarised as follows:

In all four studies, reported lack of knowledge about SRH services was found among the immigrant women. Social capital factors were found to be associated with lack of knowledge about SRH services, in varying ways in different study groups. Among the Thai women, having predominantly bonding social relationships, low trust, having no partner and belonging to the oldest age group were linked to lack of knowledge about SRH services. Thai women found it challenging to seek healthcare in Sweden due to their lack of knowledge about the healthcare system and language difficulties. For this reason, they sought help from their partner or instead preferred to seek care in Thailand. A higher proportion stated a need for information related to the SRH services, rather than a need for contraceptive counselling and HIV testing. Among the other immigrant women, having no emotional social support and no children were associated with lack of knowledge about where to turn for contraceptive counselling. About one-quarter reported that their own culture prevented them from using contraceptives. Not having participated in a health examination was linked to lack of knowledge about where to go for HIV testing.

Moreover, in all four studies, the majority reported that they had not attended contraceptive counselling and had not been HIV tested in Sweden. What is more, among the sample of Thai women, those who had never been HIV tested in Thailand continued not to be tested in Sweden. Low use of SRH services was associated with poor knowledge about SRH services and living without a partner.

Findings from the thesis show that the social determinants of health appear to play an important role for immigrant women’s access to SRH services in many ways. These were: age, country of origin, language barrier, knowledge of
healthcare system, social capital factors, and cultural and environmental conditions. Education was not associated with knowledge about SRH services.

Lack of knowledge about SRH services in Sweden is a missed opportunity among immigrant women, as services such as HIV testing and contraceptive counselling are free for all citizens in Sweden. Without having knowledge about the existence of these services, women are not able to seek care or ask for these services. Moreover, studies in this thesis showed that the Swedish government’s values around SRHR as a human rights concern do not meet their intended vision of everyone having the right to access knowledge regarding SRH services and information [14]. Thus, there is room for improvement of policy development and implementation of SRHR, in order to better correspond to immigrant women’s need of information and to fulfil their sexual and reproductive health and rights.

Uptake of HIV testing

Very few countries in the EU/EEA have data on HIV testing among immigrants from high-prevalence countries. In comparison with countries with existing data, the rates of HIV testing in this thesis (15-35%) are relatively similar: Austria 4%, Belgium 42.6%, France 35.5%, Greece 62%, Hungary 3%, Portugal 7.5% and Switzerland 50%.

The relatively low uptake of HIV testing can be explained by several factors as described in the BM by Andersen [95]: predisposing, enabling and need factors. In the cases of Thai immigrant women, they did not perceive themselves as being at risk of HIV and in need of HIV testing because they did not think they had high-risk behaviour (III). Perceived low risk of HIV infection has been identified as a barrier to HIV testing [63, 113]. This might partly explain the relatively low uptake of HIV testing among Thai women in Sweden: 25% in Study II and 15% in Study IV. It further illustrates the importance of need factors for a person’s decision to use healthcare, according to Andersen’s BM [95]. Hence, to increase HIV testing, Thai women must first perceive a need to be tested. This relates to the challenge for the Swedish health system to reach them with HIV testing.

However, Study IV reveals that Thai women with lack of knowledge about where to turn for HIV testing have higher odds of not being tested in Sweden. This indicates that enabling factors might be of importance for access to HIV testing services among the Thai women. In contrast to previous studies among other immigrant groups [62, 65, 114-116], the Thai immigrant women did not express any fear or stigma related to HIV or HIV testing. Instead, they would be positive towards HIV testing if they were to be invited to such a test. This
could probably be explained by the successful HIV prevention programmes outreaching the population in Thailand since the beginning of the HIV epidemic in 1984 [117].

The low uptake of HIV testing among Thai immigrant women reveals that the Swedish National Strategy to Combat HIV/AIDS has not achieved its intention, which is to identify HIV infection among immigrants within six months [78]. Further, Study IV showed that Thai immigrant women who had never been HIV tested in Thailand continue not to be tested in Sweden. Reports on new HIV cases in the last few years shows that immigrants from Thailand together with Eritrea are still overrepresented among all immigrants living with HIV in Sweden [38]. From a public health perspective, this stresses the need to integrate Thai immigrant women into the Swedish healthcare system as soon they arrive in Sweden. By excluding Thai immigrant women’s HIV prevention, there is a risk of delayed diagnosis of HIV infection and late access to treatment.

However, the fact that uptake of HIV testing was higher among other immigrant women, predominantly refugees, 35% in Study I, as compared with Thai women could be explained by that refugees are invited to undergo a health examination which includes HIV testing. Hence, enabling factors that include community resources, as described by Andersen’s BM, also seem to play an important role in availability and accessibility of HIV testing. If Thai immigrant women were invited to participate in a health examination, the uptake of HIV testing would probably be higher than 25%.

Nevertheless, even though 89% of the immigrant women had undergone health examinations, only 35% reported that they had undergone HIV testing. This result shows that women who attended health examinations might not be aware that HIV testing was done. This is a missed opportunity, which further reflects failure in communication with this group, a concern raised previously [101, 118, 119]. The finding of an association between having participated in health examination and having knowledge about where to go for HIV testing indicates that the healthcare system’s policy for immigrants might play an important role in knowledge about HIV testing service. It could also be explained by that the health examination, according to the immigrants, primarily focuses on infectious disease control, rather than their own health concerns [118].

**Uptake of contraceptive counselling**

Among the sample of Thai women in Study IV, one-fifth had attended contraceptive counselling. Taking into consideration Andersen’s BM, need factors seem to be the most important and reasonable explanation for the relatively low uptake of contraceptive counselling. The majority of the women reported
that they were not in need of contraceptives or counselling. This was also re-
lected in the results in Study III, where some women expressed a desire to
become pregnant. The low uptake of contraceptive counselling can also be
explained since women arriving in Sweden were already using contraceptives
purchased in Thailand. Hence, the result that women who lacked knowledge
of where to turn for contraceptive counselling were more likely to have bought
contraceptives in Thailand demonstrates the challenge of enabling factors,
contributing to women’s access to contraceptive services in Sweden. Predis-
posing factors, such as age, are significant predictors of Thai women’s use of
Swedish contraceptive service.

The needs of other immigrant women to have contraceptives were not inves-
tigated. Further research is needed to understand their needs and behaviours
on contraceptive use. However, immigrant women who had children were
more likely to attend contraceptive counselling than women without children.
Women who did not have any children had increased odds of lacking
knowledge about where to turn for contraceptive counselling. A possible ex-
planation for this result is that they might have been less familiar with and had
less contact with maternity care than women with children. This is because all
pregnant women are offered free routine health checks during pregnancy and
contraceptive counselling after childbirth, provided by maternity care [8].

The finding that one-quarter of the immigrant women stated that their culture
prevented them from using contraceptives confirmed the role of values and
beliefs in some immigrant groups and communities shaped by culture and re-
ligion [120]. However, no associations were found between the women’s
statements that culture prevented them from using contraceptives and uptake
of contraceptive counselling. Previous studies have shown that the difference
in contraceptive use was also related to educational and socio-economic fac-
tors, as well as earlier experiences and traditions of contraceptives in the coun-
try of origin [120-123].

Lack of knowledge, need for SRH services and
information
Lack of knowledge about SRH services was linked to poor use of SRH ser-
vices among the Thai women (II). The in-depth interviews with Thai women
revealed that despite expressed sexual and reproductive care needs (III),
women did not seek care for this. Immigrant women refrained from seeking
care despite needs, which has been found in previous research [124]; however,
few studies have focused on women refraining from seeking care for SRH
needs. Moreover, the fact that women refrained from seeking care despite
needs illustrates the importance of *predisposing* and *enabling factors* for using healthcare, as described by Andersen’s model. Thai women found it challenging to seek care in Sweden due to language difficulties (*predisposing factor*) and lack of knowledge about the healthcare system (*enabling factor*); hence, they refrained from seeking care. Factors related to needs appeared not to play a major role in this case.

Factors such as lack of information about how to access healthcare services and language difficulties are well-known barriers for immigrants’ access to healthcare [125, 126]. Given that the Thai women had recently arrived in Sweden, their experiences with lacking presence of an interpreter (III, IV) suggest a suboptimal use of interpreter services, a concern also raised in previous studies [41, 127, 128]. Furthermore, the fact that a higher proportion of Thai women were in need of information related to SRH (III, IV), rather than receiving contraceptive counselling or undergoing HIV testing, reflects the lack of information targeting this group.

All these findings regarding the women’s perspectives further illustrate the *demand side* according to Levesque, and are likely to influence women’s ability to seek and reach SRH services [72]. Providing immigrant women with information on SRH care services in their native language and their rights to use an interpreter when meeting healthcare professionals would be important steps to improve women’s ability to seek and reach SRH service. This knowledge can be provided through existing structures, such as language school for immigrants and through cervical cancer screening (provided by maternity care), since this intervention is offered to all immigrant women with a residence permit in Sweden. Hence, for women’s ability to access care, the SRH services need to be viewed as approachable and acceptable, revealing the importance of accessibility of services, i.e. *supply side*. This relates to the challenge of ensuring that healthcare corresponds to the needs of a diverse population with different cultural, socio-economic and vulnerable groups. Importantly, different groups might judge the appropriateness of healthcare services differently [129].

**The role of social capital and support for access to SRH services**

Major findings from this study show that several social capital factors play an important role for immigrant women’s access to SRH services. This is new knowledge.
Lack of knowledge among immigrant women regarding where to turn for contraceptive counselling was associated with lack of emotional social support. No comparable studies have been found regarding the role of emotional social support for knowledge about contraceptive service. However, the finding seems quite reasonable, since in some cultures women prefer to discuss this type of issue with those they have close relationships with, as SRH information is recognised as a sensitive topic that is taboo and stigmatised [130, 131]. More research is needed to understand the linkage between social capital factors, in terms of values and norms, and access to SRH information and service among different immigrant groups, such as women from Afghanistan, Iraq, Syria and Somalia.

Previous research demonstrates that bonding social capital is related to improved overall healthcare access, which relies on the quality of the relationships and the norms or beliefs of the members within the network [132]. Among the Thai immigrant women, having predominantly bonding social relationships and low trust were associated with lack of knowledge regarding several SRH services (II). This implies that bridging capital is important for Thai immigrants, in terms of gaining knowledge about SRH services. According to Putman, heterogeneous relationships, bridging social capital, enhance access to external resources [94], and social relationships develop channels for the distribution of knowledge and information [88].

Among the Thai women, those without a partner were more likely to have poor knowledge about and use of SRH services, compared with women living with a partner (II), revealing the importance of family support, described as an enabling factor by Andersen [95]. The partners’ prominent and supportive role for women’s access to healthcare was demonstrated in many ways by the interviewed women (III). Similar results has been found among immigrant women from the Middle Eastern [133]. It is also important to highlight that several women refrained from or delayed seeking healthcare in Sweden despite needs, while waiting for a partner’s support and assistance. This indicates a power imbalance between the women and their partners. Consequently, it could be problematic for women in destructive relationships, in combination with the fact that newly arrived Thai women receive less support from Swedish society, as described in the background section of this thesis. Moreover, Andersen identifies gender as one of the predisposing characteristics for healthcare use. Considering traditional gender norms as barriers for men’s access to healthcare and health information [134-137], this might mean that Thai women have to wait even longer before they can access healthcare.
Environmental factors and healthcare policies related to immigration

To summarise the discussion of the findings in this thesis, immigrant women’s access to SRH services seems to be influenced by a complex interaction between individual characteristics, social capital and environmental factors. Education was not associated with knowledge about SRH services. Underlying determinants of SRHR, which seem to be relevant for immigrant women, are policies related to immigration and healthcare. According to Phillips et al., the role of environment, such as the characteristics of the healthcare delivery system, is a key policy issue in understanding the influence of health policies or organisations on use of healthcare services [97]. The descriptive findings that most Thai women used contraceptives bought in Thailand (IV) not only confirms the difficulties in accessing contraceptives in Sweden, as stated in the qualitative study (III), but it also reveals the role of environmental factors for accessing contraception, in this case referring to the contraceptive service in Thailand vs. Sweden. This gives them the opportunity to use SRH services in their country of origin, a health system they are familiar with and where they found contraceptives to be readily available. Similar results of seeking care in other countries as a consequence of not being able to benefit from healthcare in the host country were found among Somali immigrants in Sweden [138].

Considering the role of environmental factors for use of health services, policies related to health and healthcare for all immigrants are important in striving for equal access to SRH services. The association between having knowledge about where to turn for HIV testing and participation in a health examination (I) indicates that the health examination policy for refugees and asylum-seekers might have some impact on knowledge about the healthcare system among this group. Also, despite the positive intention of the health examination, previous studies indicate that there is a need for improvement of the process and regulation regarding health examinations in order to guarantee the “right to health” [139] and meeting the health needs of immigrants [101, 140]. Despite moral and ethical arguments in providing health examination for all groups of immigrants regardless of their immigration status, it is also a public health concern. From a public health perspective, providing health examination to all immigrants would probably increase integration of new immigrants in the healthcare system. Furthermore, previous research suggest that the effectiveness of health examinations can be improved by offering all immigrants health examinations [140], and by considering health literacy in the communication process of the health examination [101, 140].
Methodological considerations

Quantitative studies
The most important methodological strengths and limitations of the quantitative studies in this thesis are presented below. Validity, reliability and generalisability [141, 142] are among the concepts, widely used to assess the quality of quantitative research, which I have chosen to relate to the strengths and limitations of this thesis.

Validity and reliability
Validity addresses the question about the extent to which an instrument measures what it is supposed to measure. Reliability refers to how reliable the instrument is, meaning that the result should be roughly the same after repeated data collection. Further, when measuring validity and reliability, it is also important to discuss possible biases, also called “systematic errors,” as these occur in several phases of research [143].

Regarding validity, most of the items used in this thesis were derived from the national public health survey. The survey has been distributed almost every year in Sweden since 2004, and some items are proven to be valid and reliable [144]. The items regarding knowledge of where to turn for HIV/STI for monitoring national HIV/AIDS programme has been repeatedly used worldwide, in different contexts as regards culture and language [145]. Moreover, in addition to the translation and back translation process to ensure cultural appropriateness of terms and words, the questionnaire was tested among the respective language groups.

Further, since the exposures and outcomes are based on self-reported measurements, the data reported are of a subjective nature. When using self-reported knowledge, there is a possible risk of overestimation of knowledge or the opposite, i.e., overconfidence about incorrect knowledge. It has been shown that self-reported data regarding mammogram screenings and Pap tests yield higher figures than medical record audits [146]. Regarding self-reported use of health services, as studied in this thesis, similar measurement instruments have been used in various surveys and have been shown to offer a reasonably valid estimate of differences between socio-economic groups [147].
How well self-reported use of healthcare reflects actual use is linked to the so-called *social desirability bias*, which occurs when questions are perceived as sensitive and stigmatized topics. These questions tend to produce relatively higher non-response rates or misreporting than other questions [148]. Social desirability bias is very relevant for all quantitative studies in this thesis and needs to be taken into account. The non-response rate and internal missing values of some questions about sexual and reproductive issues in all three studies might be explained by social desirability. Furthermore, previous research found that self-reported HIV testing is lower than actual HIV/STI testing [149]. The fact that only 35% of the women in Study I reported having been HIV tested seems relatively low, since 89% of the target group also reported that they had participated in a health examination, which should include HIV testing. Therefore, the reported HIV testing among immigrant women might have been underestimated.

Moreover, the degree of misreporting depends on whether the participants have anything embarrassing to report and also on the design of survey administration [148]. Studies II and IV were based on self-administered questionnaires to be answered at home, which might decrease misreporting, compared with Study I, where the questionnaire was distributed in classes. Further, in Study I, since some participants received help from language supporters with reading and filling the questionnaire, there might be increased risk of misreporting due to social desirability bias. However, the most sensitive questions were placed at the end of the questionnaire, and the participants might have gained some trust and felt more comfortable with the language supporter when responding to these questions.

The internal missing values for several questions in all the studies might be a limitation for the multivariate analysis, because of the reduction of the sample size in the models. Consequently, in Study I, the odds ratio in statistical model has wide confidence intervals. However, for Study II, this does not affect the precision of the estimates since the confidence intervals remained relatively constant in both bivariate and multivariate analysis where associations were found.

One main strength in all the quantitative studies was the possibility to control for important potentially confounding and mediating factors, e.g., age, marital status and level of education.

**Generalisability**

*Generalisability*, also known as external validity, raises the question of how applicable the study findings are to the larger population or other similar situ-
Selection bias is relevant when speaking about generalisability and refers to the process of recruiting participants and study inclusion [143]. In Study I, due to the lack of representativeness, it was not possible to generalise to other immigrant women. Further, because of the inclusion criteria, there might be an overrepresentation of immigrant women with refugee status in Study I. However, it was not possible to apply random sampling, as we were not able to access names of newly arrived immigrants studying at a Swedish school for immigrants. Further, as the sample consisted of participants at Swedish school for immigrants, it was not possible to include immigrant women on maternity or sick leave in the study.

In Studies II and IV, a total sample was used in both studies, meaning that all Thai immigrant women who fulfilled the inclusion criteria regarding age and years of residence permit were invited to participate. The response rates of both studies are in line with other national/regional public health surveys addressing the Swedish population. This can probably be explained by the questionnaire being in their native language, which made it possible for all Thai women who were able to read and write to answer it. Despite this, the representativeness might be limited by participation rates, 62.3% in Study II and 52.3% in Study IV. Regardless of this limitation, the results concerning Thai women’s access to SRH services may be comparable to other newly arrived Thai women living in settings similar to Skåne (a densely populated area), Sjuhäradsbygden (a smaller, average Swedish region) or Stockholm (the most densely populated area).

A major concern regarding limitation was the fact that since the quantitative studies were of a cross-sectional design, the direction of causality cannot be determined. Another limitation is that the studies pertaining to Thai women lacked a comparison group of Swedish as well as other immigrant women, with regard to the role of social capital for knowledge and use of SRH care services. Note also that the results from Study I are not comparable with results from Studies II and IV, as different samples and data collection were used, as well as different social capital questions (I, II).

**Qualitative study**

In Study III, a qualitative method was used since the aim was to explore healthcare-seeking behaviour in relation to SRHR among the participants [150]. Findings from the qualitative study have deepened my understanding of the role of social capital for Thai women’s access to SRH services. Just like quantitative research, several limitations and strengths need to be mentioned. In qualitative research, the concept of trustworthiness is often used to judge the quality of work. Trustworthiness can be measured by using the following
four components: credibility, dependability, confirmability and transferability [151, 152], upon which I have based my discussion on limitations and strengths.

Credibility
Credibility addresses the question of how congruent the findings are with reality [151]. To strive for credibility, purposive sampling was used in order to recruit participants relevant to the research question, such as those newly arrived, having various socio-demographic characteristics regarding age and education. Further, recruitment of participants was performed in different parts of the Stockholm area and different language schools and workplaces. Moreover, in order to achieve credibility, all information regarding the moderator was provided, such as background, in terms of country of birth (i.e., that I was born in Thailand), gender and further experience of qualitative research.

Dependability
Dependability refers to the extent to which similar results would be obtained if the study were to be repeated [153]. Dependability was sought by having all stages of the research process reported in detail, as well as detailed background of the moderator. By having detailed descriptions of all stages, it would make it possible for future researchers to repeat the research work.

Conformability
Conformability refers to the degree to which the results are based on participants’ own experiences and ideas, rather than the preferences of the researchers. Numerous efforts were made to increase conformability. First, all recorded interviews were transcribed by me, also having the role as moderator, which reduced the risk of losing information or misunderstanding the context during the transcription process [154, 155]. This is a major strength since no interpreter or translator was needed, and it has probably resulted in a richer data. However, being the same culture as the participants could also be a limitation as this might influence the first author’s interpretation of the data. Second, analyst triangulation was performed in order to reduce the effect of investigator bias. Moreover, the last author independently analysed more than half of the interviews, and the other co-authors took part in interpreting the presented themes.

Another strength that must be mentioned was that the interviews with women were moderated by a woman. The participants might have been reluctant to discuss subjects related to SRHR if the moderator had been male.
Transferability

Transferability addresses the question of how well the results could be transferred to immigrant women in other settings [151]. Transferability has been taken into account by providing data regarding the participants’ background, such as educational level, age, children and years of residency in Sweden. Further, the fact that the participants were predominantly highly educated, in comparison to the average Thai women in Sweden, has been addressed in the discussion in Study III. Additionally, other background data of the Thai immigrant women in general was provided, in order to establish the context for the study.
Conclusions

This thesis adds new knowledge to the field of sexual and reproductive health and rights, immigration and social capital. Furthermore, in the context of increased immigration, this thesis gives an understanding of what factors challenge and promote access to SRH services among immigrant women living in high-income settings.

Major challenges that were identified for Thai women accessing SRH services in Sweden were language barriers and lack of knowledge about the Swedish healthcare system. A large majority reported a great need for more information related to sexual and reproductive health services. Living with a partner and having social relationships with and trust in heterogeneous people appeared to be important social capital factors for Thai women, promoting access to knowledge regarding services. Women’s partners seemed to play a prominent role in access to SRH services in Sweden. However, while waiting for a partner’s support and assistance, several women refrained from or delayed seeking healthcare in Sweden despite expressed needs. In addition, women who had never been HIV tested in Thailand continued not to be tested in Sweden. This reveals that HIV testing in Sweden tends to reach Thai women who already have undergone HIV testing in Thailand. Altogether, these findings demonstrate that the Swedish health system does not correspond to Thai women’s need for SHR services and information.

Among other immigrant women, mostly refugees from Afghanistan, Somalia, Syria and Iraq, having children and having emotional social support were important factors for having knowledge about where to turn for contraceptive counselling. Moreover, women who had participated in a health examination were more likely to have knowledge about where to turn for HIV testing. The latter finding reveals that healthcare policy for immigrants might have some positive impact on immigrants’ knowledge. The lack of knowledge about SRH services among immigrant women in all studies in this thesis demonstrates a missed opportunity, since contraceptive counselling and HIV testing are free of charge for all citizens in Sweden.
Policy and practical implications

Based on the findings of this thesis, several recommendations for improving access to SRH services have been identified:

- Develop a national policy for SRHR strategic work in Sweden that can be implemented by counties and municipalities. A national policy for SRHR work may in the long term contribute to the achievement of equal access to SRH care.

- Health policy for immigrants in Sweden should not only be based on a person’s immigration status, since immigrants are a very diverse population in terms of cultural background, language, education and health beliefs. To ensure equal access to SRH services for immigrant women, policy development must be based on the diversity of healthcare needs and the existing evidence of specific risk groups of immigrant women.

- Ability to seek care requires having knowledge about the healthcare system in Sweden. Swedish language schools could play an important role in increasing this knowledge, as many new immigrants become students during their first years in Sweden. Information regarding how to use the healthcare system in Sweden benefits everyone (in their native language), regardless of the immigrant’s country of birth or immigration status.

- With increased access, in terms of knowledge about and use of interpreter services, among both immigrant women and healthcare providers, so that language barriers can be overcome. All immigrant women should have knowledge that everyone with limited Swedish language skills has the right to use an interpreter, according Swedish law.
Future studies

The following studies are suggested in order to improve knowledge of immigrant women’s access to SRH services:

- Further studies examining the role of social capital for access to sexual and reproductive health services among other groups of immigrant women (non-Thai).

- Studies exploring the healthcare behaviour and needs among other groups of immigrant women.

- Studies investigating healthcare providers’ use of interpreters in meetings with patients from Thailand and other countries that comprise the most common countries of origin among newly arrived immigrants.

- Studies exploring immigrant men’s beliefs and views on sexual and reproductive health, since refugees coming to Sweden are predominantly male.

Avhandlingen baserades på tre tvärsnittsstudier och en kvalitativ studie av utrikes födda kvinnor bosatta i Sverige. Studierna omfattade en enkät som delades ut till kvinnliga flyktingar vilka deltog på kurser i svenska för invandrare (artikel I) och två olika enkätundersökningar som delades ut till thailändska kvinnor i olika regioner (artiklarna II och IV). Dessutom gjordes djupintervjuer med thailändska kvinnor (artikel III). Resultaten visade att utrikes födda
kvinnor, oavsett migrationsstatus, hade begränsade kunskaper om vart de skulle vända sig för preventivmedelsrådgivning och hivtest (I, II och IV). En betydande andel av de utrikes födda kvinnorna hade inte genomgått hivtest i Sverige. Kvinnor som hade deltagit i hälsoundersökningar för flyktingar hade emellertid mer kunskap om vart de skulle vända sig för att testas. Kvinnor med låg grad av emotionellt stöd hade sämre kunskaper om hur de kunde få tillgång till preventivmedelsrådgivning i Sverige.


Resultaten av denna avhandling visar ett behov av insatser riktade mot utrikes födda kvinnor för att förbättra deras kunskaper om svensk vård inom sexuell och reproduktiv hälsa. En förutsättning för att kunna söka vård utifrån sina behov är kännedom om existensen av olika tjänster (t.ex. preventivmedelsrådgivning och hivtest).
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References


20. **Asylum decisions in the EU**


The Swedish Health and Medical Administration: **Graviditetsregistret 2018.** [Pregnancy registry 2018].


A doctoral dissertation from the Faculty of Medicine, Uppsala University, is usually a summary of a number of papers. A few copies of the complete dissertation are kept at major Swedish research libraries, while the summary alone is distributed internationally through the series Digital Comprehensive Summaries of Uppsala Dissertations from the Faculty of Medicine. (Prior to January, 2005, the series was published under the title “Comprehensive Summaries of Uppsala Dissertations from the Faculty of Medicine”.)