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# **ASPECTS OF FOREIGN-BORN WOMEN'S HEALTH AND CHILDBIRTH-RELATED OUTCOMES**

An epidemiological study of women of  
childbearing age in Sweden

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*To all the women, who have given me their confidence  
and shared their experiences with me.*

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## ABSTRACT

This thesis aims to study the association between aspects of health and childbirth-related outcomes and country of birth. A theoretical model has been developed from a feministic perspective to reflect foreign-born women's risk of poor health and childbirth-related outcomes in a broader context.

**Objectives:** *Study I* analyses the association between self-reported poor health and psychosomatic complaints and country of birth, adjusting for sociodemographic factors. *Study II* analyses the longitudinal influence of migration status (1<sup>st</sup> and 2<sup>nd</sup> generation) and socio-demographic factors on self-reported long-term illness in Swedish and immigrant women. *Study III* examines whether morbidity, defined as the first psychiatric hospital admission and the first somatic hospital admission, differs among foreign-born and second-generation women compared to Swedish-born women even after adjusting for sociodemographic factors. *Study IV* analyses the influence of country of birth of the women on the risk of non-normal childbirth in the first singleton delivery in Sweden during 1996-98, adjusting for the number of antenatal care visits, age, parity and education. *Study V* analyses the association between foreign-born women and the use of non-pharmacological methods for pain relief at childbirth and pain control by epidural analgesia at childbirth in the first singleton delivery of women giving birth during 1996-98.

**Methods:** *Study I:* A cross-sectional study of 10,661 women aged 20-49 in Sweden in 1980-85 and 9,585 women in 1992-97 was carried out. *Study II:* A simple random sample of 5,037 Swedish-born and 629 foreign-born women (aged 20-41 on the first occasion) was interviewed during 1983-1990 and 1991-1998. The risk of Limiting Long-standing Illness (LLSI) was estimated by applying logistic regression for correlated data. *Study III:* In this follow-up study, the population consisted of 1,452,944 women, 369,771 of whom have an immigrant background (including 2<sup>nd</sup> generation immigrants), aged 20-45 years, 1994-98. *Studies IV+V:* The studies included 215, 497 childbirths to women, aged 18-47, and divided into 12 subgroups of countries, with the first singleton delivery in Sweden 1996-98. The risk was analysed by logistic regression.

**Results:** *Study I.* Women from Southern Europe, refugees and Finnish women had a higher risk of poor self-reported health and psychosomatic complaints than Swedish-born women after adjustment for sociodemographic variables. Women from Sweden and Finland and refugees had poorer health in the 1990s than in the 1980s. *Study II.* First-generation labour-migrant, refugee and second-generation women had a higher risk of LLSI than Swedish-born women after adjustment for marital status, socio-economic status, feelings of insecurity and the longitudinal effect of age. However, immigrant women's health did not deteriorate more than that of Swedish-born women. *Study III.* All foreign-born and second-generation women had higher age-adjusted risks of a first psychiatric hospital admission than Swedish-born women. However, only Non-European refugee women had increased first somatic hospital admissions. *Study IV:* Women from Sub-Saharan Africa, Iran, Asia and Latin America had a higher risk of non-normal childbirth than Swedish women. However women from Southern Europe, Turkey and Arab countries a smaller less risk of non-normal childbirth than Swedish women. *Study V:* Women from Bosnia and Turkey and Southern Europe, Arab, Sub-Saharan African, and Asian countries had higher odds for non-pharmacological methods for pain relief and lower odds for pain control by epidural/spinal analgesia at childbirth than Swedish women. However, Iranian and Latin American women had higher odds of pain control by epidural/spinal analgesia at childbirth than Swedish born women.

**Conclusions:** The results reported in this thesis demonstrate associations between country of birth and women's health, in terms of self-reported health and hospital admissions, non-normal childbirth and use of non-pharmacological methods for pain relief and pain control by epidural analgesia at childbirth. The theoretical model suggest that foreign-born women have restricted opportunities to influence and handle decisive life experiences such as poor health and childbirth. But, with awareness, women can find a balance in setting limits for their constant accessibility and sensitivity to the needs of others and manage to acquire or create an intrinsic worth of their own as women.

**Keywords:** woman, country of birth, self-reported health, longitudinal, non-normal childbirth, non-pharmacological pain relief, epidural/spinal analgesia, feminism, ethnicity/antiracism

## LIST OF PUBLICATIONS

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## **LIST OF ABBREVIATIONS**

CI	Confidence Interval
EC	European Community
ICD	International Classification of Diseases
HR	Hazard ratio
N	Sample size
N	Population size
OR	Odds ratio
SALLS	Swedish Annual Level of Living Survey
SAS	Statistic Analysis System
SCB	Statistics Sweden
SES	Socio-economic status
ULF	“Undersökning av Levnadsförhållanden”(Swedish)
UN	United Nations
WHO	World Health Organisation

# 1 INTRODUCTION

This thesis will illuminate aspects of women's health and some birth-related outcomes, with a focus on foreign-born women. The studies included have such outcomes as poor self-reported health, limiting long-standing illness, hospital admission, non-normal birth, non-pharmacological pain relief and epidural/spinal analgesia during childbirth. The results of the studies are then reflected in a theoretical framework with influence from a feministic perspective.

## 1.1 WOMEN'S HEALTH

Much is known about women's health but it still remains gaps in our medical knowledge, especially that of immigrant women of childbearing age. Research on women's health needs to incorporate social, cultural, economic and political factors in order to address gender bias and inequalities in health. Since men's health had been used as the standard for health assessments, the recent advancement of knowledge concerning women's health was essential. Although women have a lower mortality rate than men, they have a higher morbidity incidence rate. For example, they have higher prevalences of short- and long-term disabilities and of non-fatal chronic illness (1).

Women's reproductive health problems include concerns about the ability to achieve conception, the safety of childbearing and the reduction of gynaecological morbidity. As experts in the biomedical and cultural/behavioural sciences have traditionally regarded the reproductive capacity as the most important function of women, most studies of women of childbearing age focus on reproductive health issues.

However, this research is focused on the medico-, physiological event, even though childbirth is an important existential event in all cultures and societies, surrounded with myths' and rituals (2, 3). Pregnancy, birth and the breast-feeding period are mostly regarded as liminal states, in between life and death, without our control, and the myths and rituals canalise the fear and danger (2, 3). In many societies in the world, these concerns still rest with the family, but, in western society, official medicine has taken over and influences and supervises (4). However, the existential dimension has been removed or neglected in the institutionalised and medicalised form of childbirth (2).

Women emphasised psychosocial health problems when they were asked which factors influenced their health in qualitative studies in both low-income and high-income countries (5-7). Many of the constraints on women's lives of childbearing age are rooted in poverty, ignorance or cultural beliefs and traditions and are devoid of sensitivity to women's reproductive concerns as well as to their educational and career aspirations (8).

A large number of researchers emphasise the need, for both more quantitative data on the health status of ethnic minority women and more qualitative information on their health experiences, their own perceptions of their health and their beliefs concerning the most important influences on their well-being and that of their families (5, 9-13).

Furthermore, in the case of poor women in particular, as well as those from ethnic minorities, healthcare continues to be inaccessible and inappropriate and the reasons for

this may be geographical, social, economic, cultural or linguistic (9, 10). Moreover, openly discriminatory practices (both racist and sexist) may be built into the services themselves and their mode of provision by treating women as though they were less rational, less capable of complex decision-making and sometimes as simply less valuable than men (10, 13, 14).

## **1.2 ASPECTS OF WOMEN'S HEALTH**

Gender bias was not recognised until the beginning of the 1990s in health research, and there still remain conceptual, methodological and empirical limitations that influence women's health outcomes in negative ways (15, 16). However, medical science is still strongly influenced by positivism, presuming that all diseases can be shown "to leave tracks" in the body - objective and often measurable signs (17). A feministic perspective in medical science illuminates opportunities to confront structural circumstances and causal connections and find possible alterations (17). Moreover, a feministic perspective in medical science develops knowledge about how gender (female disease/illness) is treated in medical theory and practice and how medical science influences opinions about gender, womanhood and bodily presence in our society (17).

Gender science is not primarily a matter of women and men, but it is about how females and males are constructed and reconstructed like unequal binary opposites in several dimensions and in processes where the allocation of power and resources is in focus. Most societies in the world are patriarchal constructions based on the control of women's work and sexuality as being constitutive for production and reproduction in the society (18).

The situation for the "modern mother" is often described as to be torn between the myth of motherhood and the hard reality of everyday life (3, 19, 20). Moreover, from the perspective of women's personal problems, there is an ambivalence built into the situations that creates a conflict between doing the best for one's children and simultaneously being available to one's employer (20). Even though UN nominated Sweden as the most equal society in the world in 1995, gender segregation in working life is still strong and widespread (21). The main responsibility for the home and children at both the structural and individual level is still on women (19). Only 13% of Swedish couples can be counted as equal dividing the responsibility for children and household (22).

### **1.2.1 Self-Reported Health**

The concept of health is dynamic, complex and multidimensional and difficult to define, as it is not merely an absence of disease or disability (23-25). It has a complex biomedical, social and cultural context when measured objectively in medical terms (diseases) and subjectively when experienced by an individual (illness). The WHO definition consists of two parts, the absence of disease and the presence of well-being, which is the judgement of the person in question. Disease refers to more or less well-defined pathophysiological processes, giving the professional medical view by diagnosing diseases and classifying them. Illness refers to the personal experience, a

feeling of being healthy or not, and the ability to cope with ordinary daily life (26, 27). This means you can have an illness without having a disease and vice versa. Self-reported health (the interviewees own evaluation of his/her own health) has been broadly used in many surveys to obtain information about people's health.

In this thesis the variable self-reported health is used in study I and II.

### 1.2.2 Hospital Admission

In recent years, studies have shown that foreign-born women have different patterns of utilisation and access to health care services from native-born women.(10, 28-30) Some studies show increased admission rates for immigrants, but mostly for inappropriate use of emergency services due to an inappropriate level of medical care and the quality of or access to care.(31, 32)

However, it has been recognised that, in terms of screening, treatment and palliation of cancer, services are not always accessible and sensitive to the needs of minority ethnic people.(33) Epidemiological studies in Britain, Denmark, Sweden and the Netherlands have shown increased incidence rates of schizophrenia and schizophrenia-like psychoses in some ethnic minority groups.(34-37) Other studies in Sweden have demonstrated that foreign-born people have a high risk of attempted suicide,(38, 39) suicide,(40) psychological distress and psychosomatic complaints.(41)

In contrast, several international studies have demonstrated underutilisation of mental health care services by immigrants, (42-44) that the access to more specialised health care is limited for foreign-born groups (45) and that they show more severe symptoms when hospitalised. (44) Moreover, refugees are often repeatedly exposed to traumatic events and are at risk for posttraumatic stress disorder (PTSD) without seeking professional therapy due to cultural, linguistic, financial and historical reasons. (46) Furthermore, studies emphasise the complexity of the barriers resulting in misdiagnosis, (47) recent immigration, (48) lack of cultural understanding, inability to communicate or communication difficulties on the part of care-providers, as well as sociodemographic differences and different attitudes among different ethnic groups to mental illness. (42-44, 49)

In study III hospital somatic and psychiatric admissions are used.

### 1.2.3 Socio-Economic Status

Behavioural, environmental and socio-economic factors, like education level, income, and employment status, are intermediate health-risk factors associated with women's reproductive health and the health of their offspring (50). Worldwide studies indicate that education enhances women's ability to make reproductive choices, even under disadvantageous socio-economic conditions (51, 52).

In Sweden, there is a clear and consistent association between lower socio-economic status (SES) and mortality, which is stronger for women than for men (53). Moreover, data from the Stockholm Female Coronary Risk Study found that women with un/semiskilled occupations had a four-fold increased risk of developing coronary heart disease compared with executives/professionals (54).

Growing evidence have been presented that both ethnicity and low SES are independent risk factors associated with poor health (55). Unemployment is a strong risk factor associated with poor health (56), premature mortality (57, 58), and suicide in women (59-61). In a study from the US, it appears that poor women have smaller social networks and receive less social support than the more economically advantaged (62). Moreover, black employed women are more likely than their white counterparts to be exposed to occupational hazards, even after adjusting for job experience and education (63).

A study in the UK shows that the patterns of limiting long-term illness continued across generations among all groups (black Caribbean, South Asians) except for black Africans, whose health worsened. Low SES accounted for most of their higher risks (64). Studies of Irish people have demonstrated that poor health can persist across several generations in spite of upward intergenerational mobility (64, 65). The fact that second-generation Mexican-American women have much lower birth-weight babies than first-generation women has been well established in previous research (66). In another study from the US, similar patterns of perinatal outcomes have been found for immigrant women (grouped as Hispanics, Asians, blacks and whites) from many different countries (67).

In this thesis different items of SES are used in all studies.

### **1.3 ASPECTS OF CHILDBIRTH**

#### **1.3.1 Normal/Non-Normal Birth**

Childbirth reflects a broad view of health, as the majority of pregnancies and births are a healthy life event and end with a healthy mother and infant. However, the definition of "normal birth" is not standardised or universal (68). WHO defines "normal birth" as: "spontaneous in onset, low risk at the start of labour and remaining so throughout labour and delivery. The infant is born spontaneously in the vertex position between 37 and 42 completed weeks of pregnancy. After birth, mother and child are in good condition"(68) page 4).

WHO calculates that, depending on regional risk assessment and referral rates, 70-80% of all labours in childbirth are considered uncomplicated (68). However, many different systems of risk scoring have resulted in disproportionately many women being categorised as "at risk", with perhaps result in many unnecessary interventions at birth (68). A high-risk pregnant woman can have a normal birth and vice versa. In many countries the risk assessment is made to distinguish between individual risk factors and the level of care (68).

In high-income countries, births are treated as a potential risk and delivery has changed from being a normal physiological event into being a medical procedure (68, 69). High levels of interventions have been used to start, augment, regulate or monitor the process of labour and to improve the outcomes, but also to rationalise the work in institutional childbirth (68). Several studies highlight the fact that overmedicalising on the one hand and undertreatment in pregnancy and childbirth, on the other hand, can lead to iatrogenic complications (68-71).

In the WHO report "Care in Normal Birth", it is concluded: "Normal birth, provided it is low-risk, only needs close observation by a trained birth attendant in order to detect early signs of complications. It needs no other interventions but encouragement, support and a little tender loving care" p. 13 (68). However, childbirth has an existential dimension in all cultures, with several rituals to canalise the fear and dangerous transitional event of birth.

This variable is used in study IV and V.

### 1.3.2 Pain Relief/Control During Birth

Labour pain is a multidimensional and complex physiological process that occurs in a psychosocial and cultural context that surrounds the individual woman in childbirth. In spite of normally negative experiences of pain in the context of pathology, labour pain can be seen as a positive experience, giving meaning and strength in the transition and ability to cope with the new demands of parenthood and can also be expressed as a feeling of achievement (72-75).

In high-income countries, pharmacological pain relief has gained ample application and also as a woman's right. The Netherlands is an exception, where 30% of childbirths still take place at home and pain relief is not required by women as in other high-income countries (68, 76). The Swedish parliament gave women the right to pharmacological pain relief during labour and delivery in 1978 (77).

Several of the pharmacological methods require costly, technically well-equipped hospitals and will transform childbirth from a physiological event into a medical procedure (68). For the majority of women in the world, these technically advanced facilities are not generally available or in demand (68). This transformation is largely influenced by cultural and social factors, expectations and the resources available (68, 70).

In Sweden as in many western or westernised countries there came a demand in the 1980's for more "natural" childbirths with less intervention and more continuity of care (74). However, pain control by epidural analgesia during childbirth in Sweden was twice as high (34%) in 1994 as in 1984 (16%) (78).

In "Principles of Perinatal Care", WHO states that the non-pharmacological methods of pain relief at birth are of the utmost importance. "Personal attention and tender loving caring should never be replaced by pharmacological methods" (p. 6) (68). All cultures have their own way of supporting and attending women in labour with a lot of comfort and intense attention. Depending on the society and culture, some non-pharmacological methods for pain relief are available for all women, e.g. personal support, baths, touch, massage, methods of relaxation, acupuncture, TENS (trans electric nerve stimulation), intradermal water blocks for pain relief during childbirth (68).

Epidural analgesia is the most used regional analgesia in labour, and there is little doubt about its benefits in complicated labour and delivery (68, 76). However, when generally offered to low-risk women, the definition of normality at birth changes (68). Epidural analgesia as pain control is classified by WHO as beneficial but have adverse effects if it is used inappropriately (68, 79). Moreover, systematic reviews show that

there is still disagreement about the risks and benefits of epidural analgesia (80). Furthermore, few studies have investigated the effect of epidural analgesia on the physiology, i.e. the detailed mechanisms, of childbirth, neither on labour nor on the fetus/newborn child (80).

In study IV the variables “non-pharmacological pain relief” and “epidural/spinal analgesia” are used.

### **1.3.3 Antenatal Care Visits**

Swedish antenatal care was built up according to the British antenatal care system from the 1930s and was introduced in 1940. It is free of charge, the caregiver is normally a midwife with an obstetrician as supervisor and, since 1970, attendance is about 99% (81).

In the 1970s antenatal care was expanded and included preparatory courses for childbirth and parenthood. From earlier 13-14 antenatal care visits, after 1996, the national recommendation in Sweden is 8-9 antenatal care visits for primiparas and 7-8 for multiparas (82). These recommendations are based on medical requirements and emphasize extended visits if psychosocial demands or reasons (82).

In one study, women value the following as important aspects of antenatal care: the continuity and competence of caregivers, a sufficient number of check-ups and ultrasound examinations, short waiting time, adequate and clear information and explanations, and a friendly staff (83).

The Swedish model of antenatal care normally provides continuity with the same midwife throughout the pregnancy and at the postnatal check-up; however, it does not give a woman-centred care. The antenatal care is also influenced by the caregiver's approach and attitudes to childbearing and birth, which can shift from a reliable to a risky process (84).

Another matter of worldwide importance in antenatal care is the risk assessment (scoring of high or low-risk pregnancy) where a plan is drawn up to identify where the birth will be attended and at which level of care. Furthermore, the focus of antenatal care has shifted in the 1990s from maternal physical and psychosocial health to a focus on fetal development and well-being (83, 85).

In the 1990s several studies questioned frequency of visits in antenatal care for low-risk women and reduced number of visits was introduced. Most of the studies have not shown any increase of medical complications (86). However, many women were dissatisfied and more anxious with the lower frequency of visits (87). Several studies have shown, however, that young women, women with high parity and foreign-born women have fewer antenatal care visits than the standard number recommended (88, 89).

Antenatal care is included as an explanatory variable in study IV and V.

## **1.4 MIGRATION**

Migration is not just crossing a border, but a life process which affects all aspects of a migrant's existence and also affects the following generations, as well as the lives of non-migrants and communities in both sending and receiving countries (90-92).

Migrants enter into a constant dialogue between past and present, near and far, foreign and familiar, through their actions and decisions (92).

Moreover, migration as a process is not completed by the arrival of an individual in a foreign place, it needs to be seen as an open journey in which both the migrants and their plans are often transformed. For many immigrants, as a result of frequent return visits and economic dependencies, there is a strong interchange and interconnection between the new and the old country. Their cultural identities can also be regarded as being partly formed by and a process in the journey that continues as a result of intercultural and diasporic relations (93, 94). The contradictions and complexities of belonging to multiple and mixed places of origin generate cultural identities-like hybrids seen as cultural brokers and disqualified from the traditional political categories of exclusive membership of a one nation-state (92).

In western societies, the recruitment of both foreign and colonial workers ceased between the mid-70s and the mid-80s, and only some family reunions and permanent settlements continued. These groups tended to constitute ethnic minorities partially excluded from the mainstream society by socio-economic disadvantage, discrimination and racism (95). Acculturation is a concept that refers to the complex process that occurs when an individual or a group from a given culture is required to adapt and adjust to the cultural worldviews, language, customs and traditions of the mainstream group (91, 96, 97).

In early migration research, it was regarded as the first step of the adaptation process towards assimilation, acculturation being the early stage in the process of change when one's native language and traditions are given up, followed by structural adaptation, which means gaining access to economic and social organisation (96, 98, 99).

This can lead to even greater marginalisation for minorities, as their own cultural references are devalued or denied and they are left without the cultural anchors that defined their identity and meaning in an often hostile environment (91, 97). This classic linear model of acculturation fails to capture the complexity of the immigration experience, the enormous variability in speed, pattern, direction and type of change that occurs for individuals and groups as they come into contact with other groups (92, 96, 100).

Everybody has an ethnicity, understood as a sense of belonging to a group, based on history, ideas of common origins, culture, language, experience and values. As a concept, ethnicity is rather new and is usually regarded as an attribute of minority groups (101, 102). Moreover, ethnic minorities and their culture appear to be a threat to the mainstream group, as the influence of multinational cultural industries is growing and the national cultures have lost the power to deal with change and absorb new influences.

The concepts of "culturalisation of race" and the idea of "racism without race" are expressions of these developments. There is considerable evidence of an increasing intensity of an racism of all kinds – institutional practices, belittling, discrimination, harassment and violence – in most western countries since the early 1970s (91, 92).

As Castle points out, "Beliefs about racial hierarchies and ethnic differences are so much part of our culture and traditions that we will continually learn them in all the



different parts of the socialisation process – in family, school, and through media – we tend to act on unconscious racist beliefs, and therefore reproduce racist ideologies and practices as part of social structure and action” p.174 (91). It is important to be aware that racism does not depend on the characteristics of the dominated groups, but rather on the interests and culture of the dominant group.

#### **1.4.1 Women and Migration**

In general, in international studies of migration there is a lack of attention to women. According to the traditional assumptions, women only migrate to join their husbands abroad, treated as dependants rather than autonomous subjects, as if they were insignificant actors. As a result women have been largely invisible in studies of international migration. In that way international migration reinforces the exploitation of women around the world due to their social, economic, political and cultural vulnerability at the hands of various actors and institutions.

Women dominate migration for the purpose of family reunification, which also remains as one possible channel for female migration. Consequently, gender roles shape policies in receiving countries and affect migration choice in countries of origin (10, 90, 92, 103). Moreover, women's part in labour migration has increased and is documented, especially seen in low-wage domestic and industrial work, but there is lack of attention to the importance of migration by professional and high-skilled women (103).

It is documented that women have been under-represented in the numbers of refugees admitted for resettlement and among asylum-seekers in developed countries (104). There is little knowledge about women's part in the undocumented/illegal migration, although figures about 50% are estimated, and there are no studies that have investigated whether the failure of the refugee policies drives women to migrate illegally (103-105).

Although explicit legal discrimination of women had disappeared in most places by the 1970s, the legacy of historical subordination still remains; women have worse jobs, lower incomes, low rates of participation in political decision-making processes and are still seen as primarily responsible for the domestic sphere (9, 106). Still the UN Convention does not include gender persecution as grounds for receiving refugee status (103). Furthermore, an important trend in the 1990s was the feminization of migrant labour, recruitment of women as domestic workers, entertainers and factory employees, although often with a lack of labour contracts, which increased the vulnerability of women to exploitation and sexual abuse, and an even worse situation for undocumented women (9, 10, 91, 92)

#### **1.4.2 Migration Situation in Sweden**

From being an emigration nation in the nineteenth century, Sweden became a country with net immigration from the Second World War onwards. Between 1945 and the end of the 1960s, Sweden received a large influx of labour migrants from Finland and Southern Europe (i.e. the former Yugoslavia, Italy, Greece, Spain and Portugal).

Moreover, in this period, the refugee migration was particularly of Eastern European origin.

Swedish companies also recruited healthy labour migrants, especially from rural areas in Southern Europe. The labour migration ceased after 1967 when the Swedish government enacted a law requiring work and residence permits and an employment contract before arriving in Sweden. In the years 1973–91, the non-European migration increased from Latin America, Asia and Africa. However, one third of the immigrants and refugees coming to Sweden in the 1970s were repatriated to their country of birth or a third country within 3–4 years and about half of them were repatriated within 15 years.

In the 1980s, the war and repression also brought refugees from Eritrea, Somalia, Iraq and Lebanon. During the 1990s Sweden received most refugees per inhabitant in the European Union, particularly from the wars in the Balkans, Iraq, Afghanistan and from countries in the former Soviet Union. Despite the present restrictions in immigration legislation, new refugees continue to seek asylum because of persecution, war or environmental disasters.

Family reunification and joining the EU have increased labour migration through the common labour market. Immigration to Sweden in the 80s and the 90s, grouped by the reasons for permission for resettlement, is shown in figure 1. These proportions are affected by the changes in migratory movements and the changes in Swedish immigration legislation. Moreover, Sweden has more than one million foreign-born inhabitants, and on 31 December, 2002, 11.8% of the population was born abroad. In addition, 9.6% of the population on 31 December, 2002 was second generation i.e. native-born with at least one parent born abroad.

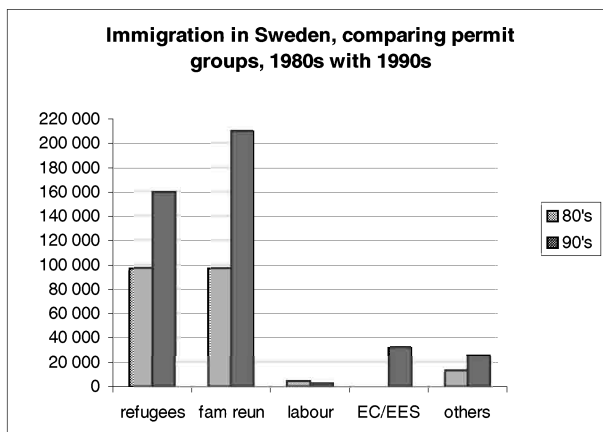


Figure 1. Total number of immigrants 1980–89: 211 472 and 1990–99: 429 887  
(Others consist of students and child adoptions)

In this study the main explanatory variable is migration status as country of birth, foreign born in subgroups depending the study design.

### **1.4.3 Women, Migration and Health**

Studies of immigrant women have identified that stressors – such as finding employment, establishing an income source and a new home, feelings of loss of social status, social isolation – are often affected by language barriers and have potentially negative consequences for the health of an immigrant (107). In addition, a qualitative study of midlife women showed that the experience of immigration becomes an important determinant of health over and above the influences of culture and the economic environment, among other things (108). Moreover, the survival needs and health of the family unit were seen as the primary concern of the women and their own health was viewed as secondary (108, 109).

Even though several studies in Sweden were not specifically investigating women of childbearing age, they have shown that foreign-born persons have an increased risk of poor health status (110), increased health-care utilisation (111) and psychological distress and psychosomatic complaints (41). Other studies in Sweden have demonstrated that foreign ethnicity was an independent risk factor for long-term illness also after taking socio-economic status (SES) into consideration (53, 112, 113). Furthermore, a population-based study of Bosnian refugee women in 1996 demonstrated that they had a poorer health status and, irrespective of health status, these women exhibited a poorer quality of life, more somatic and psychological symptoms and were more worried about their future health, compared with the Swedish women (114).

A thesis demonstrated that foreign-born women (especially of Ethiopian and Somalian origin) in Malmö had a higher risk of perinatal mortality than native-born Swedes which could not be explained by known risk factors (115). Moreover, when these findings were explored, it was concluded that the higher incidence of perinatal mortality appeared to be partly due to an unfortunate interaction between certain cultural and pregnancy-related beliefs of the women and a lack of awareness and stereotyping of the women by the Swedish caregivers (115). This is consistent with studies suggesting that quality of care issues rather than “culture” were at the heart of immigrant women's dissatisfaction with their maternity care (116, 117).

In another thesis on women's perception of antenatal care, foreign-born women and women with a low level of education wanted fewer visits to antenatal care facilities, which could be due to communication difficulties (118). Moreover, women, especially those in minority groups, receive inadequate health care and have poorer health outcomes, which are related to intrinsic and extrinsic factors also created by the women's cultural beliefs and underutilisation of the available preventive health services (119). Furthermore, in a study from New York on marginalized women's conceptualization of their birth experiences, the authors report that the marginalized women were devalued at the childbirth centre because of their race/ethnicity and low socio-economic status (120).

## 2 THEORETICAL MODEL

The theoretical model developed for this study deals with the abilities of women, particularly foreign-born women, to handle and integrate experiences of poor health and childbirth and elucidates some possible alternatives women can choose. This model is influenced by a feminist and ethnicity/anti-racism perspective for the reasons mentioned in the introduction.

*I begin my account of the model by discussing the way that society is structured in terms of 'race', gender and class. Then I consider the connotations of this for immigrants and immigrant women in particular. A discussion of how society conceptualises 'motherhood' follows and the implications of childbirth for women in general. This leads to a discussion of womanhood and motherhood in the light of Grönlién Zetterquist's concepts of 'creating' and 'resisting' and the problems immigrant mothers have in developing sound strategies.*

Ethnicity/racism, gender and class are, from a feministic perspective, social constructions that form a basis for social stratification and influence the structure and organisation of society. Moreover, they structure, although they do not totally determine, who we are and what we are allowed to be. To be able to understand these social constructions and the consequences of them, the historical, societal and cultural contexts are important. These constructions should be studied simultaneously because, firstly, they are interrelated and, secondly, members of subgroups are not interchangeable: for example, a female lower class Swede will differ from a male lower class Swede, a female upper class Swede and a female lower class American etc. (18, 121).

Feminists argue that these conceptual tools in society are impressed by a long tradition of patriarchal thinking, presuming male dominance as the norm. Patriarchal thinking comprises male power, female subordination and a valuation in hierarchal dichotomies, such as female/male, mind/body, man/woman. These dichotomies are intertwined with a subordination of the woman and her body as a consequence (122).

Men and women experience ethnocentrism/racism in different ways due to some common assumptions about gender and developments in modern thinking. The first is that the male is the model (subject) and the female 'the Other'. The second is that development is regarded as a unilinear move from 'tradition' (i.e. developing) towards 'modernity' (i.e. developed) with western society as the yardstick for achievement. The third is that women are perceived as being subordinated, especially the non-western women (they are viewed as being family and domestic-oriented, which equates to traditional and backward) (122, 123).

The view in Sweden on immigrant gender is currently structured so that there is a focus on, on the one hand, the oppressed and subordinated immigrant women and, on the other, on the patriarchal, dangerous and violent immigrant men. This creates a

dilemma for women from ethnic minorities, as, on the one hand, they need to develop strategies to resist the male dominance in their group and, on the other, they want to show solidarity with their men to counter the discrimination and racism they experience as a group (18).

Mulinari observed two strategies among Latin-American female refugees for handling the new living conditions that have emerged (18).

The first is a consequence of women's emancipation, the change in power distribution in the family. One reason is the weakening of immigrant men's position as main breadwinner and head of the household: racism/xenophobia acts as a specific way of constructing subordinated masculinities. Thus some women become single or lone mothers or the parent with the main responsibility for the children. As a result of this, these women become highly dependent on society in the form of the existing social system (supporting the right of women to work and providing benefits for those unable to work or care for their children).

This system itself may oppress women: Mulinari calls it 'Official Patriarchal' (18). The Swedish society aims for equality although it is impregnated with patriarchal thinking when it suits the 'patriarchal' (19, 20, 124).

The second strategy of immigrant women is to strengthen the marriage contract with solidarity and loyalty. This strategy is also a way of diminishing contact with the new society (a form of escapism) and may be chosen as a consequence of women's experiences of surrounding discrimination and racism. Mulinari calls this 'Private Patriarchal', as the women then have a stronger dependence on the husband or family where they may be subordinated (18).

In Mulinari's work, women are regarded as 'the Other' and reacting to the changes in their menfolk, the main subject (18). They are unable to escape patriarchy. They are either dependent on the men in their family or a society driven by patriarchal values.

In recent years, there has been a growing critique of how 'women-as-Other' is embedded, even in feminist analysis of women's conditions and keeps being reconstructed (122, 123, 125). When woman is seen as 'the Other' the model body is male and the female body is a handicap (122). African feminist thinkers provide a critique using the example of motherhood (122, 123). Motherhood is seen as empowering and not disempowering as it tends to be in western societies (122, 123, 126). This innovative perspective on motherhood is useful for thinking about the results of my studies.

The experience of pregnancy, childbirth and breastfeeding is an overwhelming experience for many women touching on deeper dimensions and existential concepts. In many societies, it gives women feelings of exhaustion and frustration over the overwhelming responsibilities and the loss of independence and control of her body. However, at the same time, it gives new forces, abilities, a maturing "self-insight" and a new relation with and acceptance of the female body. For a woman, these changes in

existential meaning need to be confirmed as a whole experience which has an influence on her view of life and health in the future and is much more than just a biological matter (3).

A way for women to handle the ambivalence between the desire to fulfil her womanhood by becoming a mother and the desire to fulfil her potential in other areas through a career, is 'resisting' interrelated with 'creating' (3). A woman 'resists' by not conforming to the Patriarchal view of women and motherhood, resisting different forms of oppression in society or in the family, but with the "male as model", i.e. the Purpose-of perspective. This includes a risk of denying an essential part of her womanhood/motherhood. The woman takes a spectator perspective of her view of herself being a woman and a mother, an object to contemplate and handle, taking over others' decision making, responsibility is left to others, which often results in being victimised.

A woman 'creates' by developing and recognising her womanhood and body, by making use of her own resources (know one's own worth). However resisting is essential to 'create', as, without resistance, creating is destructive because women then create their self-image so that it confirms the stereotypes (internalises devaluing and belittling of the abilities of her self). Therefore, creating is crucial together with resistance, which Grönlien Zetterquist calls a Purpose-in perspective (3). It can be explained as an actor perspective, where a woman independently raises her own view of being a woman and mother and acknowledges herself and her own worth.

It is a dilemma for women to balance in their own life, resistance and creation, between emancipation and womanhood/motherhood (3). Environmental support is crucial, so that a woman's lived experiences are acknowledged and encourage awareness so that a woman can develop tools to handle decisive life experiences.

The thinking of Grönlien Zetterquist mirrors an individualistic view of society, where self-development is a major goal. The feminists from non-western societies criticise the gender fixed view where, instead, power could be distributed through, for example, seniority, to be relational or the sphere of authorities with women as active participants (122, 126, 127).

Foreign-born women have changed the unconscious, unpronounced cultural mirrors and time-honoured codes of womanhood and motherhood. To make matters worse, they often lack environmental support as they give birth in a culturally and socially unknown environment. Often, apart from her husband, a foreign-born woman has a lack of support from family and friends and a lack of knowledge of the medical system and how to find environmental support (108, 128). The lack of environmental support is also an issue when foreign-born women have poor health or are admitted to hospital (129).

Many feministic researchers in western societies regard the stronger nuclear and extended family ties of women from low-income countries as enforcing gender inequality (93). However, they are often one of the women's few sources of support.

Thus, the lack of kin available to immigrant women giving birth may have especially serious consequences. At the same time, without their kin available to them, the traditional role will be less rewarding. Instead, they will feel at a disadvantage with regard to the women in their new surroundings who view the role of a mother from a different perspective.

*This model is influenced by reflections from my personal clinical experiences in maternity care, meeting foreign-born women from more than one hundred nationalities and getting to know their daily realities in striving to balance their life over the years. The model is based on feminist and ethnic/anti-racist perspectives. In the Discussion, the concepts in this model will be applied for the first time to health and childbirth outcomes.*

The method used to integrate the results of my studies with the theoretical model in the Discussion section is abduction (130). Abduction is a method which supports the discovery of patterns that deepen understanding. By alternating between theory and empiricism in abduction, there is a gradual reinterpretation of both (130, 131). It is a process that can be seen as a fusion of the different perspectives. By using existing knowledge and frames of reference to deepen understanding of the existing structures of reality that recreates them in a broader context, a deeper understanding and alternative interpretations can be achieved (130).

## **2.1 MODEL**

*Reading instructions and explanations of all models:*

The white circle represents the woman as a person.

The grey circle inside the white symbolises 'Self', her self-identity. The size symbolises self-esteem, i.e. the larger the size the stronger the self-esteem.

The triangles represent the strategies Private Patriarchal and Official Patriarchal. Their sizes and positions symbolise their influence on the woman and her lived experiences.

The striped ovals, 'C'='creating', and 'R'='resisting', represent the 'tools' the woman has to handle situations in life. They overlap each other the whole time, i.e. they symbolise the perspectives either as Purpose-in= the overlapping area in 'Self' or as Purpose-of = the overlapping area outside 'Self'. The size of the overlapping area shows which perspective is 'in charge', as these choices usually are not conscious ones.

The positions of the circles 'C' and 'R' are influenced by the triangles symbolising the strategies Private Patriarchal and Official Patriarchal. Their sizes show which strategy has the most influence in that particular situation or lived experience of the woman.

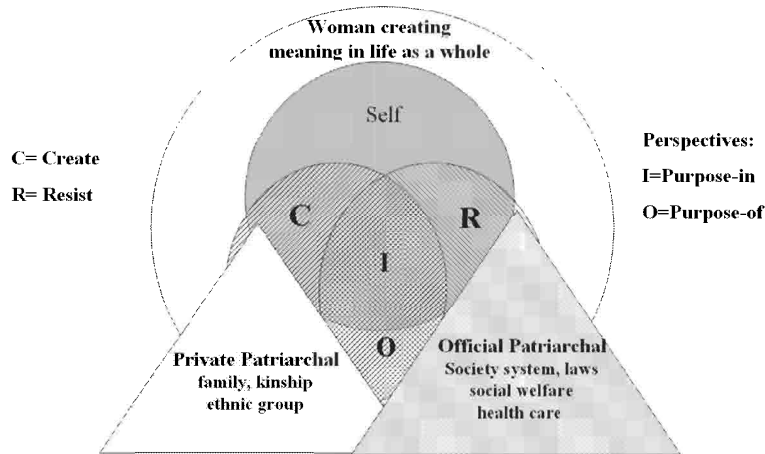


Figure 2.

Figure 2. This represents the 'ideal' situation when a woman has a balance between R='resisting' and C='creating', with a Purpose-in perspective, 'I', meaning that the woman takes an actor perspective, a way of balancing her lived experience, and is able to develop and recognise her womanhood, body, as a whole, own view of being a woman and a mother and to acknowledge herself and her own worth.

Ideal situations are fixed and only exist in models; in real life, they are just momentary and part of a steady movement forwards and backwards, i.e., here, between the Purpose-in, 'I' and the Purpose-of, 'O' perspectives. However, one acts more or less in line with one or the other.

Figure 3. Here the woman has no balance between R='resisting' and C='creating'. The triangles: here the Official Patriarchal is the dominant strategy, symbolised by the size and pushing out 'C' and 'R' from the 'Self'. It could also be the contrary with the Private Patriarchal triangle bigger and inside 'Self'.

The striped R oval nearly totally overlaps the striped C oval, which gives a big 'O' in the overlapping area. The 'O' symbolizes the Purpose-of perspective, which is always outside the 'Self' (grey circle), meaning that the woman takes a spectator perspective



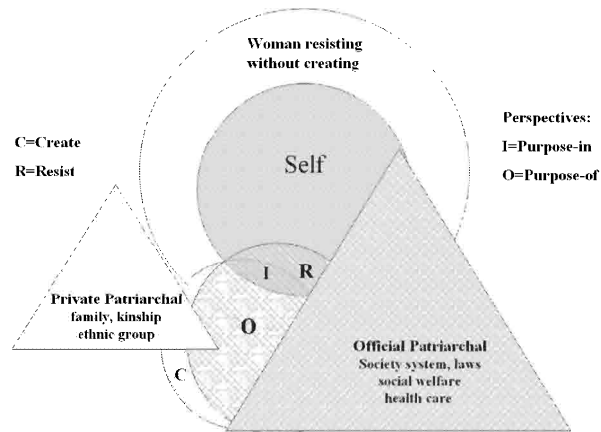


Figure 3.

The woman does not accept the patriarchal way of defining women in order to resist different forms of oppression in society or the family, but with the 'male as model'. She attempts to be 'as much like a man' as possible and tries to manage all by herself without recognising her own needs. She tries to control her body, ignoring signs of weakness and tries to withstand everything and always be strong. However, this means with a risk of denying an essential part of her womanhood/motherhood.

Figure 4. The woman have no balance between C='creating' and R='resisting'. The triangles, here the Official Patriarchal and Private Patriarchal strategies, are nearly the same size, symbolised by the size and pushing out 'C' and 'R' from the 'Self'.

The striped 'C' oval nearly totally overlaps the striped 'R' oval, which gives a big 'O' in the overlapping area. The 'O' symbolizes the Purpose-of perspective, which is always outside the 'Self' (grey circle), meaning that the woman takes a spectator perspective.

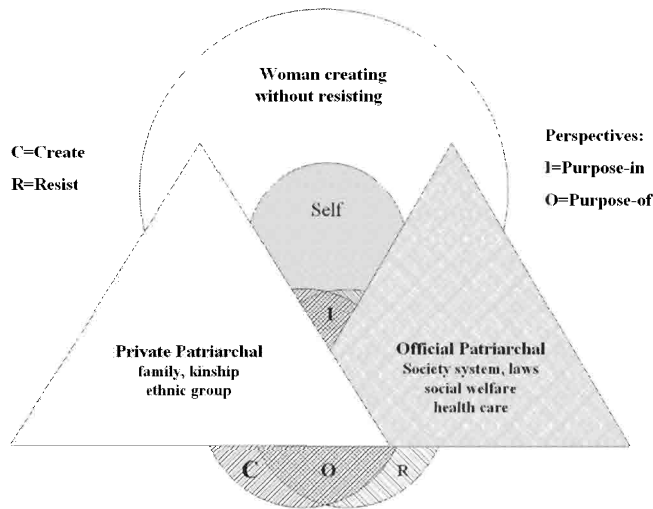


Figure 4.

The woman then creates her self-image so that it confirms the stereotypes (internalising, devaluing and belittling of the abilities of 'Self'). Without resistance to the patriarchal view, there is no possibility of defining/denominating experiences, all blame is on Self, internalised belittling, a destructive action.

## 2.2 SUMMARY

As a consequence of the patriarchal thinking of western societies, motherhood has been naturalised and trivialised. Furthermore, in contemporary feminism, thoughts about motherhood are nearly absent and the male continues to be used as 'the model' (Arnfred, Mohanty).

In this model, there are two strategies for immigrant women to handle the migration situation: to be dependent on the Official Patriarchal and/or to be dependent on the Private Patriarchal. Another aspect in the model is the question of how women in our society can resist this dependence, the patriarchal way of defining them and to create alternatives without denying the womanhood/ motherhood in her life.

### **3 AIMS**

#### **3.1 GENERAL AIM**

To analyse aspects of health and childbirth-related outcomes of foreign-born women of childbearing age living in Sweden.

#### **3.2 SPECIFIC AIMS**

##### **3.2.1 Study I**

To analyse whether foreign-born women of reproductive age have poorer self-reported health and more psychosomatic complaints after adjusting for sociodemographic factors than native-born women.

To analyse whether the gap in poor self-reported health and psychosocial complaints between foreign-born women and native-born Swedish women of reproductive age has widened between the 1980s, a period of high employment, and the 1990s, a period of high unemployment.

##### **3.2.2 Study II**

To analyse whether first- and second-generation immigrants have a higher risk of limiting long-standing illness (LLSI) than Swedish women, after adjusting for sociodemographic factors.

To analyse whether immigrant women's health deteriorated more than that of Swedish women longitudinally over eight years.

##### **3.2.3 Study III**

To analyse whether foreign-born and second-generation women have higher morbidity, defined as the first psychiatric hospital admission and the first somatic hospital admission, than Swedish-born women and whether this morbidity remains after including sociodemographic factors.

##### **3.2.4 Study IV**

To analyse whether foreign-born women in Sweden have more non-normal births (i.e. all births without a normal birth diagnosis, ICD9= 650 or ICD10=O80) in the first singleton delivery than Swedish-born women.

The second aim is to determine whether this association remains after adjusting for the number of antenatal care visits and such sociodemographic factors as age, parity and level of education.

##### **3.2.5 Study V**

To analyse whether foreign-born women in Sweden use more non-pharmacological pain relief, on the one hand, and pain control by epidural/spinal analgesia, on the other, at childbirth than Swedish-born women.

#### Aims

To analyse whether this association remains after adjusting for the number of antenatal care visits, a normal birth diagnosis and sociodemographic factors such as age, parity and the attained level of education.

## **4 MATERIALS**

### **4.1.1 SALLS**

The Swedish Annual Level-of-Living Survey, SALLS (in Swedish: Undersökningar av levnadsförhållanden, "ULF"), started in 1974 and is conducted by Statistics Sweden. SALLS is a series of annual surveys including questions on health, economic resources, employment and working environment, education and housing. The main objectives of SALLS are to contribute a genuine information basis for sociopolitical reforms and public debate and to give information on the living conditions of the Swedish population, and on relationships between problems in different social areas and various social categories.

The data are collected in face-to-face interviews, at home, lasting for an average of 70 minutes, throughout the year, although telephone interviews are conducted if the person specially expresses this preference, or in connection with the follow-up phase. The samples are drawn from the RTP (Register of the Total Population) and the annual sample size after 1979 has varied between 6,100 and 9,000 individuals. From 1980 onwards, the sample has been limited to the selected respondents, and only individuals who were permanent residents in Sweden aged 16–84 years (during 1988–89 there was no upper age-limit) have been interviewed. The annual sample (panel) is supplemented with immigrants and other individuals aged 16–23, which means that new individuals are included in order to mirror the population.

Every SALLS includes a number of primary indicators for four themes: social relations, work, health and physical environment. Certain questions are the same every year in order to provide consistent background variables. Other annual questions provide an information base that makes it possible to continuously follow developments in selected areas.

One main reason for the wide use of SALLS in epidemiological studies is the relative low cost of data collection compared with clinical examination and the large amount of variables. The reliability of the dependent variables and most of the other ones has been analysed by re-interviews (test-retest method, giving kappa coefficients between 0.7 and 0.9 (132). They also show good stability over time. The availability of SALLS for research has also increased during the last few years. Other advantages are the sample size, the periodicity (annual since 1975) and the low non-response rate.

SALLS is used in Studies I and II.

### **4.1.2 The In-Care Register**

The In-Care Register is based on WHO recommendations and contains all hospital admissions with dates of admission data and discharge, according to International Classification of Diseases (ICD). ICD 9 was used 1987-1996 and ICD10 from 1997 onwards. Each individual can be traced.

This Register is included in MigMed and WomMed.

#### 4.1.3 Swedish Medical Birth Register

The Medical Birth Register is conducted by the National Board of Health and Welfare. This register contains data on more than 99% of all births in Sweden from 1973 onwards, with information from all Swedish antenatal care clinics and delivery units (133). From 1982, a standardised medical record system has been used at all units with information from antenatal, obstetric and paediatric records bearing the mother's unique national registration number. The International Classification of Diseases system based on WHO recommendations, ICD8 through 1986, ICD9 from 1987 through 1996 and further on ICD10, is used in a Swedish version for classifying complications during pregnancy and birth.

This Register is included in WomMed.

#### 4.1.4 The Immigration Register

*The Immigration Register* contains data about immigration, emigration, (time in Sweden) and country of birth of all individuals living in Sweden.

The register is included in MigMed and WomMed.

#### 4.1.5 MigMed

The database used is "MigMed", longitudinal research database at MigraMed, Family Medicine, Karolinska Institutet Stockholm. MigMed is built up by linkages of several other databases: *Louise*: A total register of the Swedish population including the entire population of 2 million women born between 1950 and 1986, 0.5 million of whom have an immigrant background (including second-generation immigrants) with information on socio-economic status and residence. Moreover *The Immigration Register* described earlier and *The Total Population Register (RTP)* consists of all individuals who have a residence permit. It includes data about changes and movements such as divorces, marriage, out-migration and eventual return to Sweden. *The In-Care Register* described earlier. *The Cause of Death Register* comprises all causes of death during the particular year irrespective of whether the death occurred in Sweden or abroad for persons who were registered in Sweden at the time of death. The register is based on WHO recommendations, ICD9 and ICD10. The under- and overcoverage is very low.

MigMed is used in study III.

#### 4.1.6 WomMed

WomMed includes data from several other databases, e.g. *Louise*, a complete register of the Swedish population, including the entire population of 1.5 million women born between 1950 and 1986. WomMed is also linked to the *Swedish Medical Birth Register* of the National Board of Health and Welfare. *The In-Care Register* is also linked to

Aspects of foreign-born women's health and childbirth related outcomes

WomMed and finally, *The Immigration Register* described earlier contains data on immigration, year of emigration (time in Sweden) and country of birth.

WomMed is used in Studies IV and V.

## 5 METHODS

Table 1.

Study	Period	Total number of subjects	Number of foreign-born people	Response rate (%)	Age span	Outcome variables	Explanatory Variables
I	1980-85 1992-97	10 661 9 585	1 198 1 231	87.0 83.2	20-49	Self-reported health status	Age, Country of birth, Marital status, Number of children, Education, Employment status, Economic resources, Acculturation
	1979-81 1994-97	6 386 6 280	735 808	87.8 82.6	20-49	Psycho-somatic complaints	Age, Country of birth, Marital status, Number of children, Education, Employment status
II	1983-90	5 666	629	83.9 89.0	20-41 (16-19)	Limiting long-standing illness	Age, Migration status, Marital status, Education, Employment status, Economic resources, Feelings of insecurity, Longitudinal effect of age
	1991-98	5 607	785	82.4 82.3	28-49 (24-27)		
III	1993-98	1,452,944	192,908 Second generation: 176,863	-	20-45 at baseline	First hospital admission (somatic, psychiatric)	Age Country of birth-6 subgroups Marital status Number of children Disposable income
IV	1996-98	215,497	35,162	-	20-47 at baseline	Non-normal birth	Age Country of birth-12 Subgroups Parity Education Antenatal care visits
V	1996-98	215,497	35,162	-	20-47 at baseline	Non-pharmacological pain relief Epidural/spinal analgesia	Age Country of birth-12 Subgroups Parity Education Antenatal care visits Normal birth diagnosis

### 5.1 OUTCOME VARIABLES

#### 5.1.1 Study I

##### 5.1.1.1 Self-reported health status

Health status was based on the question: "How would you describe your general health?" Is it "good", "poor" or "somewhere between good and poor?" Those who answered that their health status was "poor" or "somewhere between good and poor" were reckoned as having a poor health status. However, from 1996-97 the code system was changed into five levels where "very good" and "good" were coded good and the others as poor.



#### 5.1.1.2 *Psychosomatic complaints*

Psychosomatic complaints were defined by four 'Yes' or 'No' questions asking if the respondent had morning fatigue, daytime fatigue, headache/migraine or sleeping difficulties. Each variable was dichotomised and summed up. Those with one or more symptoms were classified as having some psychosomatic complaint. This variable is analysed for the years 1979-81 and 1994-97 because of a lack of information on the other years.

### 5.1.2 Study II

#### 5.1.2.1 *Limiting long-standing illness (LLSI)*

Limiting longstanding illness was based on two questions: "Do you suffer from any long-term illness, the after-effects of an accident, disability or other illness?" and "Is your working capacity reduced as a consequence of your illness(es)?" Respondents who reported an LLSI (with a duration of over three months) that caused impaired working capacity were counted as ill regarding this variable. The variable was dichotomised into two categories: those who had an illness with impaired working capacity and all others.

### 5.1.3 Study III

To avoid a selection bias women hospitalised three years prior to 1994 were excluded. Pregnancy-, birth- and postpartum-related diagnoses as well as injuries, drug and alcohol abuse diagnoses were also excluded due to inconsistent use of injury and abuse diagnostics. The women were followed until a first hospitalisation for psychiatric disease and a first hospitalisation for somatic disease or out-migration from Sweden, death or censure at the end of the study on 31 December 1998.

#### 5.1.3.1 *First psychiatric hospital admission*

First psychiatric hospital admission for women aged 20-45 at the start of the study.

#### 5.1.3.2 *First somatic hospital admission*

First somatic hospital admission for women aged 20-45 at the start of the study.

### 5.1.4 Study IV

*Non-normal birth:* The diagnoses of the first singleton delivery of women giving birth in Sweden during 1996-98 were dichotomised into "normal birth" (ICD9= 650 or ICD10= O80) and "non-normal birth" (=all other birth diagnoses). This division was made on the assumption that a normal birth diagnosis is used in the same way in hospitals all over Sweden. If some special complications or diagnoses are selected, adjustments have to be made for different reasons such as local diagnostic use, ongoing research, staff's competence.

### 5.1.5 Study V

#### 5.1.5.1 *Non-pharmacological pain relief at childbirth*

If no pharmacological pain relief is used during the delivery, it is noted in the medical record of birth and was dichotomised into yes or no.

#### 5.1.5.2 *Epidural or spinal analgesia at childbirth.*

Pain control by epidural or spinal analgesia at delivery is noted in the medical record of birth and was dichotomised into yes or no. As both epidural and spinal analgesia are used during both birth and caesarean section, we decided to make one variable out of them, with epidural analgesia being the most used form.

## 5.2 EXPLANATORY VARIABLES

### Age

**Study I:** Age at the time of the interview was classified in the following groups: 20-29, 30-39 and 40-49 years.

**Study II:** Age (at baseline) was categorised in the following groups at the first interview: 20-24, 25-34 and 35-41 (16-19 was analysed separately).

**Study III:** Age (at baseline) was categorised in the following groups: 20-24, 25-29, 30-34, 35-39 and 40-45.

**Studies IV and V:** Age was categorised into: 18-24, 25-29, 30-34, 35-39 and 40-47 at the start of the follow-up period.

### Country of Birth

**Study I:** *Country of birth* was categorised in the following subgroups: Swedish-born; labour immigrants from Finland; labour immigrants from Western/"westernised" countries (i.e. the USA, Canada, Australia, Japan, New Zealand, the Baltic states and Europe, with the exception of Finland and Southern and Eastern Europe); labour immigrants from Southern Europe (i.e. the former Yugoslavia, Italy, Greece, Spain and Portugal); and Refugees (consisting of refugees from war zones and political and religious oppression, i.e. Eastern Europeans, mostly from Poland, Hungary and the former Czechoslovakia, and refugees from Chile, Uruguay, Argentina, Central America, Asia and Africa). Refugees from the Balkan states, such as Bosnia, Croatia, Serbia and Kosovo coming to Sweden in the 1990s were included in the Refugee group, although they were from Southern Europe. Labour immigrants from Bosnia, Croatia, Serbia and Kosovo who came to Sweden before 1970 (or later as relatives [a few]) were recorded as coming from Yugoslavia and were therefore categorised in this study as labour migrants.

**Study II:** *Migration status* was categorised as native-born women with both parents born in Sweden, second-generation immigrant women, i.e. born in Sweden with at least one foreign-born parent, and first-generation immigrant women. The first-generation immigrants were divided into labour immigrants and refugees. The group of labour immigrants included women from Western/westernised countries (i.e. the USA,

Canada, Australia, Japan, New Zealand, the Baltic states and Northern and Central Europe) and Southern Europe (the former Yugoslavia, Italy, Greece, Spain and Portugal). The refugee group consisted of women fleeing from war and political and religious oppression in Eastern Europe, the Balkans, Latin America, Asia and Africa.

**Study III** *Country of birth* was categorised with references to *Swedish women*, i.e. Swedish-born women with both parents born in Sweden, and *second-generation* women, i.e. women born in Sweden with at least one foreign-born parent. *Foreign-born* is used as a group category for all women born abroad.

We divided the foreign-born women into women from *Western/westernised countries* (i.e. the USA, Canada, Australia, Japan, New Zealand, the Baltic states and Northern and Central Europe) and *women from Finland and Southern Europe* (the former Yugoslavia, Italy, Greece, Spain and Portugal) as two groups of *labour immigrants*. The reason for the grouping is not to create new categories, although it has been shown in earlier studies (53, 112) shown that the health of women from Southern Europe and Finland is similar and differs with respect to the other Western/westernised countries.

The foreign-born women who came as refugees were divided into *European refugees*, i.e. women fleeing from war and political and religious oppression from countries in Eastern Europe and the Balkan countries (in the 1990s), and *Non-European refugees*, women from countries in Latin America, Asia and Africa.

**Studies IV and V** *Country of birth* was categorised in 12 groups of countries reflecting the size of the immigrant population in Sweden with reference to *Swedish women*, i.e. Swedish-born women. *Western/westernised countries* consist of countries in Northern and Central Europe, the USA, Canada, Australia, Japan and New Zealand. Here *Southern Europe* consists of Italy, Greece, Spain, Portugal, Malta, Cyprus, Israel and the former Yugoslavia, from which Sweden recruited healthy workers up to the 1970s. *Eastern Europe* consists of Poland, the Czech Republic, Slovakia, Hungary, Rumania, Bulgaria, Albania, Croatia, Slovenia, Macedonia, the Baltic States and the former Soviet States. Moreover, *Finland* and *Turkey* are countries that each forms a separate group due to earlier labour immigration.

Sweden has received many refugees from *Bosnia* and *Iran*, and earlier studies have shown differences in the health of women from countries in their region (114, 134).

*Arab countries* consist of Muslim, mainly Arabic speaking countries in Northern Africa involving the Northern Sahara, the countries on the Arabian peninsula, Middle Eastern countries (except Israel) and Afghanistan. *Sub-Saharan Africa* consists of all countries in Africa south of the Sahara. *Asia* consists of all Asian countries with the exception of Japan, Afghanistan and the former Soviet States. The *Latin American* countries consist of the Central American countries and Mexico, and all countries in South America.

**Study I** *Marital status* comprised two groups: married/cohabiting and single.

**Study II** *Marital status* comprised three groups: married/cohabiting and single without children and single with children.

**Studies III-V** *Marital status* comprised two groups: married/cohabiting and single. However, cohabiting women without children are categorised as single due to the registration system in Sweden

**Study I** *Number of children* includes a category of childless women, women with 1 or 2 children and women with 3 children or more.

**Study III** *Number of children* was categorised into four groups: 0 child, 1 child, 2 children and more than 2 children.

**Studies IV and V** *Parity* was categorised into three groups: 1 child, 2 children and more than 2 children.

**Studies IV and V** *Number of antenatal care visits* was categorised as  $\leq 5$ , 6-7, 8-9, 10-12, 13-15 and  $\geq 16$ . The recommended number of visits in Sweden for a normal pregnancy is 8 for multiparas and 9 for nulliparas.

**Study V** *Normal birth diagnoses* The diagnoses of the first singleton delivery of women giving birth in Sweden during 1996-98 were dichotomised into “normal birth” (ICD 9= 650 or ICD 10= O80) and “non-normal birth” (=all other birth diagnoses) and was categorised as yes or no.

Socio-economic status (SES) was defined as educational status, employment, disposable income and economic resources.

**Studies I, II, IV and V** *Educational status*. The respondents were classified into three groups according to their *attained level of education*: (1) comprehensive school level,  $\leq 9$  years of education; (2) at least two years of secondary school, 10-11 years of education; and (3) three years of secondary school or university studies,  $>11$  years of education.

**Studies I and II** *Employment* was defined as employed women, unemployed women (including early retirement), students and housewives. Those who had retired early were included in the group of unemployed women because their number was too small to form a group on its own, and it is not unusual for long-term unemployed persons with chronic diseases also to be retired at an early age.

**Studies I and II** *Economic resources*. To measure women’s economic resources, each respondent was asked, “If you were in economic difficulties, could you raise 14 000 SEK (1750 US dollars) within a week?” Answers were dichotomised as “Yes” or “No”.

**Study III** *Disposable income* was used to give a proportional estimate of the economic resources of the woman. It was categorised/divided into quartiles: high (reference group), middle-high, middle-low, and low income, and was calculated from the sum of the whole family’s income multiplied by an individual consumer weight for each person in the family divided by the family’s total consumer weight and then multiplied

by the basic yearly amount (geared to the price index, stipulated annually by the Swedish government) used here from 31 December 1993.(135)

**Study I** *Poor social network* was defined in terms of: contacting and exchanging services with neighbours, contact with neighbours, contact with siblings, contact with other friends, not having a really close friend and seldom meeting a close friend. Each category had a score and the score was also dichotomised, and approximately the third with the poorest conditions were classified as having a poor social network (110).

**Study I** *Acculturation* was based on the question "What language do you speak at home?" Those who spoke Swedish at home were reckoned as being acculturated into Swedish society. This variable was not used in the logistic regression because it did not apply to the Swedish women.

**Study II** *Feelings of insecurity* was classified as insecurity in their daily lives because of not leaving the house due to fear of robbery or other fears, and all other were classified as feeling secure in their daily lives.

**Study II** *Longitudinal effect of age*, expressed in years: the age at the second interview minus the age at the first interview.

### 5.3 STATISTICAL ANALYSIS

Table 2.

Study	Study design	Data source	Statistical methods	Measure of risk
I	Cross-sectional	SALLS	Logistic regression	Odds ratio with 95% Confidence interval
II	Longitudinal	SALLS	Marginal model (General estimated equations)	Odds ratio with 95% Confidence interval
III	Follow-up	MigMed	Cox regression	Hazard ratio with 95% Confidence interval
IV	Follow-up	WomMed	Logistic regression	Odds ratio with 95% Confidence interval
V	Follow-up	WomMed	Logistic regression	Odds ratio with 95% Confidence interval

#### 5.3.1 Logistic Regression (Studies I, IV and V)

The data were analysed by by logistic regression (136). The results were shown as odds ratios (OR) with a 95% confidence interval (CI). The fit of a model was assessed from the deviation, i.e., the likelihood ratio/degree of freedom, and it should be approximately 1. The Hosmer and Lemeshow goodness-of-fit test was also used. The residual analysis was also used as an assessment of the fit of the model. Interaction

effects were also taken into consideration when the fit was poor. The prevalences were age-adjusted by the method of indirect standardisation (137).

The full model was tested for interactions. An interaction was included if the P-value was less/equal 0.05. Moreover the interaction should have a meaningful interpretation.

### 5.3.2 Marginal Model (Study II)

A marginal model was used to estimate the cross-sectional odds ratios for LLSI for Swedish women and immigrant women of the first and second generations. A separate age-adjusted analysis of all women aged 16-41 was performed to avoid including the youngest women aged 16-19 in the statistical modelling because of a parent-child socio-economic bias. The regression coefficients were estimated by generalised estimating equations (GEE).(138) The marginal model answers whether or not the risk of LLSI is higher among immigrant women than among Swedish women.

It is also of interest whether the risk of LLSI has increased more among immigrant women than among Swedish women. Using marginal models, both the above questions can be addressed using longitudinal data. The regression and within-subject correlation are modelled separately. This method is more efficient than a cross-sectional analysis with the same number of subjects. The efficiency depends on the magnitude of the correlation between the measurements.

Another advantage is that the number of repeated observations may vary among subjects without changing the interpretation of the coefficients. The working correlation matrix was exchangeable (compound symmetry), which is always applicable when there are two measurements. The results are shown as odds ratios (ORs) with the 95% confidence interval (CI). The exponential regression coefficients are interpreted in the same way as ORs from a cross-sectional analysis, which is sometimes called a “population-averaged” interpretation. They compare the odds for disease in the populations with and without a risk factor.

### 5.3.3 Cox Regression (Study III)

The data were analysed using a proportional hazard model, Cox regression (139) by first psychiatric hospital admissions and first somatic hospital admissions to estimate the hazard ratio (HR) for the morbidity of women of childbearing age. The HR can be expressed as the ratio of the hazard functions between two groups and is calculated by exponentiation of the regression coefficient. The results are presented as HR with 95% confidence intervals (CI). The change in  $-2 \log$  likelihood was used as a measure of improvement in model fit, when including a covariate. The proportional hazards assumption was analysed by inspecting log (-log) survival curves for parallelism and by including the interaction between time and each of the independent variables.

The full model was tested for interactions. An interaction was included if the P-value was less/equal 0.05. Moreover the interaction should have a meaningful interpretation.

We used SAS version 8.2 for the statistical analyses in all studies (140).

### 5.3.4 Non-Response Rate

The non-response rate for SALLS was approximately 15% before 1986 and it has been between 20 and 24% since then. In SALLS, data on non-response consist of three groups: refusals, not found and ill. Generally non-response rates are higher among ages over 54 (not valid in our studies), people living in big cities, among men more than women and foreign-born more than native-born. Foreign-born have a generally higher non-response rate, although it fluctuates a lot, with variation in significance, due to the small sample sizes. Simple refusal is less common among foreign-born, and the rate has been rather constant from 1986 to 1999. However, as in Study II, when the second interview was conducted, 8.5% of the foreign-born women were not found, compared with about 4% of the Swedish women. This may have been due to some respondents leaving Sweden without reporting it to the Swedish authorities. In that case, they should be regarded as constituting overcoverage.

Non-response rates are demonstrated in table 1. Refusal was the predominant reason for not responding. Among the non-respondents in 1980–85, 79% refused, 14% could not be found and 7% were ill. In 1992–97, 69% refused, 22% could not be found and 9% were ill. In a previous study of non-responders using mortality as the outcome measure, it was found that those who refused had a similar mortality risk to that of the respondents, while those who could not be found or were ill had an increased mortality risk (141). Furthermore, mortality as a measure of ill health among both respondents and non-respondents, based on the 1988–93 net sample, has been analysed in a proportional hazard model adjusted for sex, age, marital status and region. It was found that those who refused exhibited the same mortality as the respondents, but the other two groups had significantly increased mortality.

The relative risks of mortality obtained in a model based on respondents only were compared with the relative risks obtained in a model based on the whole net sample. They agreed to a large extent. As mortality and morbidity are associated, it is concluded that the relative risks are accurate estimates of morbidity as well, but the prevalences are to some extent underestimated. The relative risks of morbidity obtained in a model based on respondents only were compared with the relative risks obtained in a model based on the whole net sample. They agreed to a large extent. This means that the relative risks are accurate estimates of morbidity but the prevalences are to some extent underestimated. The number of observations shows variations because of missing values in the variables. However, undercoverage is probably a small problem, in both absolute and proportional terms, and can therefore be dismissed as negligible. Estimates were also corrected for overcoverage (142, 143).

## 5.4 ETHICAL ASPECTS

Approval for this study has been secured by The Ethics Committee at Huddinge University Hospital, Karolinska Institutet, Stockholm. Registration number 113/00 and 355/02. The databases are unidentified, i.e. all personal registration numbers have been replaced by serial numbers. The use of the databases is restricted. Statistics Sweden,

## Methods

National Board of Health and Welfare and Family Medicine Stockholm have with defined information how data should be used.



## 6 RESULTS

### 6.1 STUDY I

The main finding of Study I was that all the women's health (poor self-reported health and psychosomatic complaints) deteriorated between 1980–85 and 1992–97.

The foreign-born women group were different in the 1990s compared with the 1980s. The refugee women sample size increased substantially in the 1990s, unlike all other groups, which decreased over time. New groups of refugees from the Balkans, particularly Bosnian women and Kosovo women, and Kurds from Iraq and Turkey, were given refugee status in Sweden and they were included in the refugee group, 1992–1997. Southern European labour migrants had the highest frequencies of persons with a low educational status, although those with a low attained level of education decreased from 51% to 38% over a decade. In spite of their high level of educational (the highest educational level of all groups in the 1990s), refugee women had the highest percentage of unemployed persons.

Women from Southern Europe, refugee women and Finnish women exhibited substantially higher risks of self-reported poor health status and psychosomatic complaints than Swedish women. Moreover, being a woman with poor economic resources, unemployed, "non-employed" or a woman with low educational status was closely associated with an increased risk of poor health (not shown). But also having a poor social network or being single implied an increased risk of poor health. Moreover, the increased risks decreased but remained high when sociodemographic and socio-economic factors were added to the logistic model in both periods (Figure 5 and 6).

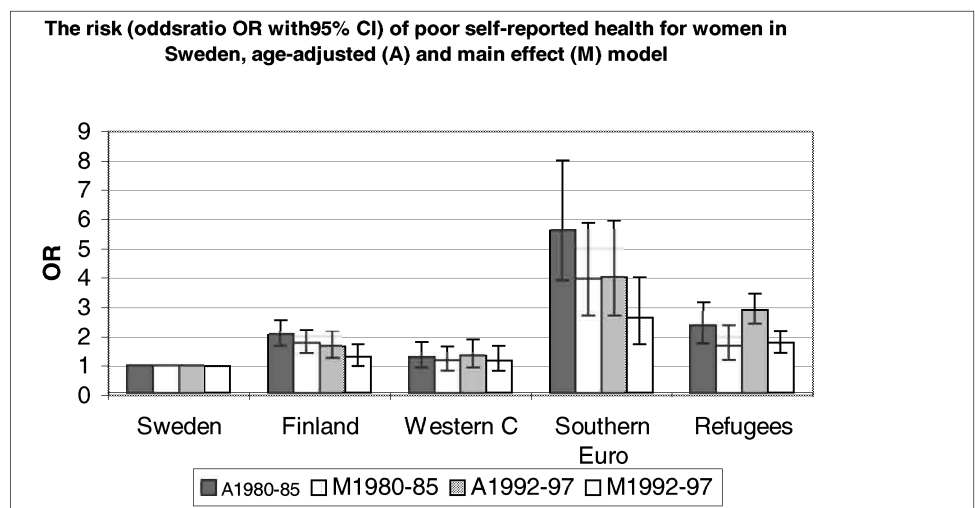


Figure 5.

However, the gap in self-reported health and psychosomatic complaints between the Swedish-born and the foreign-born women did not widen between the 1980s and the 1990s. In addition, the risk of poor health status increased between 1980–85 and 1992–97 among Swedish-born women and refugee women (OR= 1.25; CI=1.15–1.36 and OR=1.60; CI= 1.15–2.23), respectively. After adjustment for marital status, number of children, educational status, employment, social network and economic resources, the risks remained approximately the same.

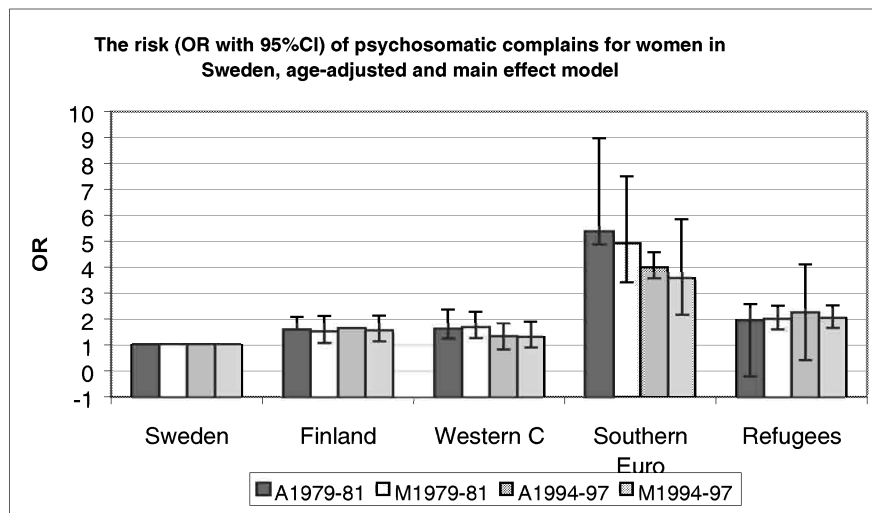


Figure 6.

The risk of psychosomatic complaints in Swedish-born women, Finnish-born women and women born in refugee countries increased in the 1990s compared with the risks in 1979–81 in the age-adjusted model (OR=1.47; CI=1.34–1.61, OR=1.50; CI=1.01–2.24 and OR=1.71; CI=1.22–2.38, respectively). After adjustments for marital status and employment status, these risks decreased slightly.

Figure X. OR (odds ratio) in logarithmic scale of psychosomatic complaints for women aged 20–41, main effect model.

## 6.2 STUDY II

In a longitudinal study, we analysed the relationship between migration status and self-reported limiting long-standing illness (LLSI) in women of childbearing age as compared with native-born women (with both parents born in Sweden).

Labour immigrants and refugees had substantially higher prevalences of LLSI than Swedes in both 1983–90 and 1991–98. Swedish women and all foreign-born women had higher prevalences of LLSI in the 1990s compared with the 1980s. Single women with children had a high prevalence of LLSI in both interviews. Unemployed women had the highest prevalence of LLSI in both decades, slightly more than one third reporting LLSI.

Labour immigrants and refugee women had higher age-adjusted risk of LLSI (OR=1.86; CI=1.52–2.29 and OR=1.75; CI=1.38–2.22 respectively) than Swedish women. The risk decreased only marginally when marital status, SES, feelings of insecurity and the age effect were taken into consideration. Second-generation immigrants showed no such increased risk. However, in a separate analysis of 16–41-year-old women, second-generation immigrants had a higher age-adjusted risk (OR=1.34; CI=1.07–1.68) than the Swedish women. Labour immigrants and refugees had approximately the same risk as in the previous analysis.

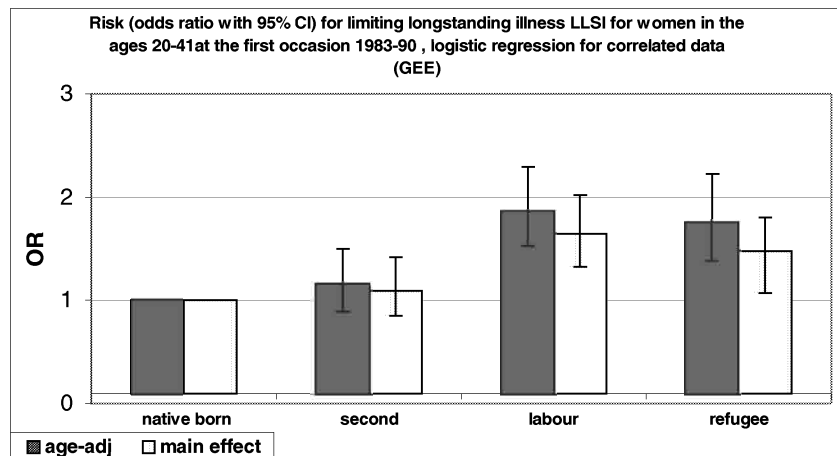


Figure 7.

Single women without children, women with low level education, unemployed women and housewives showed an increased risk of LLSI, which remained in the main model.

As expected, the risk of LLSI increased considerably for all women over the eight-year period (OR =1.50; CI=1.35–1.67). However, contrary to our expectations, the health of immigrant women did not deteriorate more than that of the Swedish-born women between 1990 and 1998 after taking the age-effect into consideration. Thus, there was no interaction effect between migration status and the longitudinal effect of age, i.e. the deterioration in poor health, measured as LLSI, in foreign-born women and Swedish women was the same in all groups over eight years.

In addition, the prevalence of LLSI in second-generation immigrants at the ages 16–19 increased by 16 percentage points (P=0.030) over eight years. The prevalence of LLSI among women with a low educational status increased 10 percentage points (p=0.047) over eight years. Housewives in the 1990s had a substantially higher deterioration of LLSI than employed women, unemployed women and students (P=0.002).

### 6.3 STUDY III

In this follow-up study we examined whether the first psychiatric hospital admission and the first somatic hospital admission, differ among subgroups of foreign-born and

second generation's women compared to Swedish-born women after adjusting for sociodemographic factors. There were 1,452,944 women in the age range 20-45. The smallest immigrant group (1.1% of the total population in that age span) was the European refugees mainly coming from the Balkan states and the largest group (5.9%) was the Non-European refugees.

Labour immigrants from Finland and Southern Europe and Non-European refugees had the highest incidence rate of first psychiatric hospital admissions. Single women had a twice as high age-adjusted incidence rate of first psychiatric hospital admissions as married/cohabiting women. Women with high income had an approximately 30% lower incidence rate of first psychiatric hospital admissions than the other income groups, after adjusting for age.

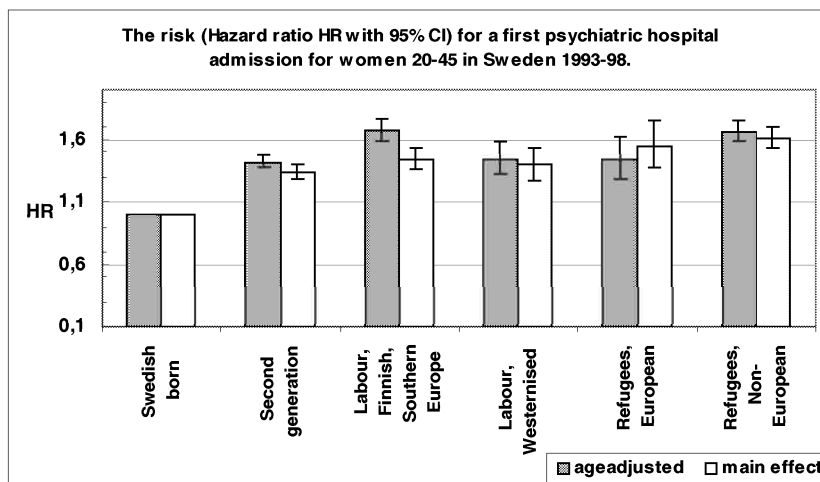


Figure 8

Women labour immigrants born in Finland and Southern Europe and Non-European refugees had about 70% higher risks of a first psychiatric hospital admission than Swedish-born women. Women born in Western/westernised countries and second generation women had nearly as high age-adjusted risk (HR=1.44; CI=1.32-1.58 and HR=1.42; CI=1.37-1.48) of a first psychiatric hospital admission. The risk decreased only slightly when marital status, number of children and disposable income were included in the model. European refugees also showed a similar high risk (HR=1.44; CI=1.28-1.62), but their risk increased slightly in the main effect model (HR=1.55; CI=1.37-1.75).

There was an interaction between country of birth and disposable income that was not included in the main effect model (shown in Figure 8). For labour immigrant women, there was a higher incidence rate of first psychiatric hospital admissions for women with the lowest income than for those with the highest income. However, the incidence rate for refugees was higher for high income than for low income. The middle-high /middle-low income groups were inconsistent in the pattern for European

refugees, partly due to small groups. For Swedish-born women, the incidence rate was significantly inverse to the disposable income.

Only Non-European refugee women had a higher age-adjusted risk (HR=1.26; CI=1.24-1.29) of first somatic hospital admission than Swedish-born women. This risk remained when marital status, number of children and disposable income were included in the model. Labour immigrants from Southern Europe, European refugees and second-generation women showed marginally higher age-adjusted risks for first somatic hospital admissions than Swedish-born women.

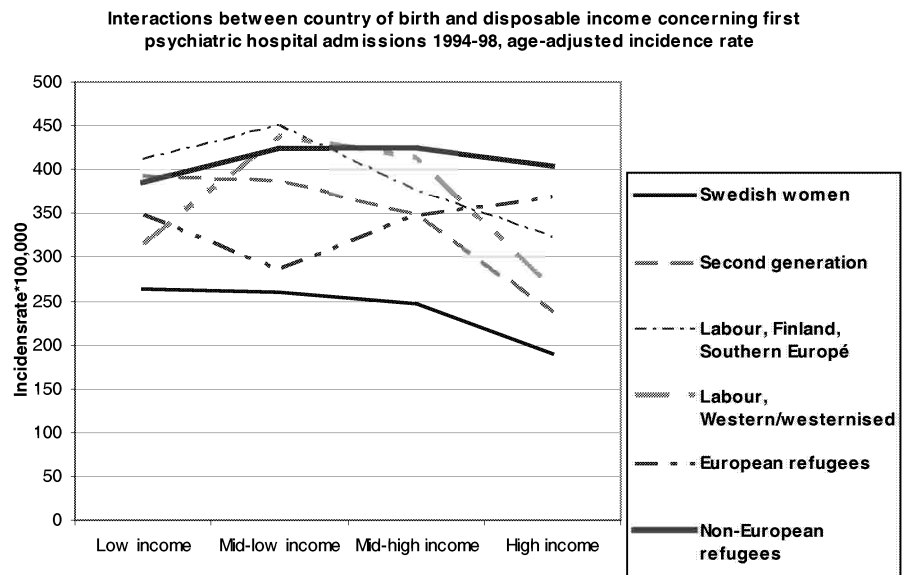


Figure 9.

Women with children had an increased risk of a first somatic hospital admission compared to women without children. This risk remained in the main effect model. The risk for a first somatic hospital admission for women with low income was slightly increased but disappeared after adjusting for sociodemographic factors.

#### 6.4 STUDY IV

Western/westernised countries, Finland and Iran had fewer young mothers than the other countries and, together with Eastern Europe and Latin America more older mothers. In terms of parity the percentage of women having three children or more was 50% higher for Finland, Turkey and Arab countries and 100% higher for Southern Europe and Sub-Saharan Africa than the general average, including Swedish women. Foreign-born women had a smaller number of antenatal care visits than the average. Women from Iran were the only immigrant group, which, along with Swedish women, had the lowest percentage of recommended visits according to standard schedules.

Except for the women from Eastern Europe and Latin America there was a gradient in all groups concerning parity and non-normal births with higher parity accompanied by a decreasing number of non-normal births. There was also a gradient with education and non-normal births in all groups, except women from Sweden, Western/westernised, Sub-Saharan Africa and Latin America, with higher education decreasing number of non-normal births. All immigrant groups except Bosnian women had a lower prevalence of non-normal births among those with fewer visits ( $\leq 5$  and 6-7) than Swedish women. Among those with 16 visits or more, women from Turkey, Southern Europe and Arab countries had the lowest prevalence and women from Iran, Asia and Latin America had the highest.

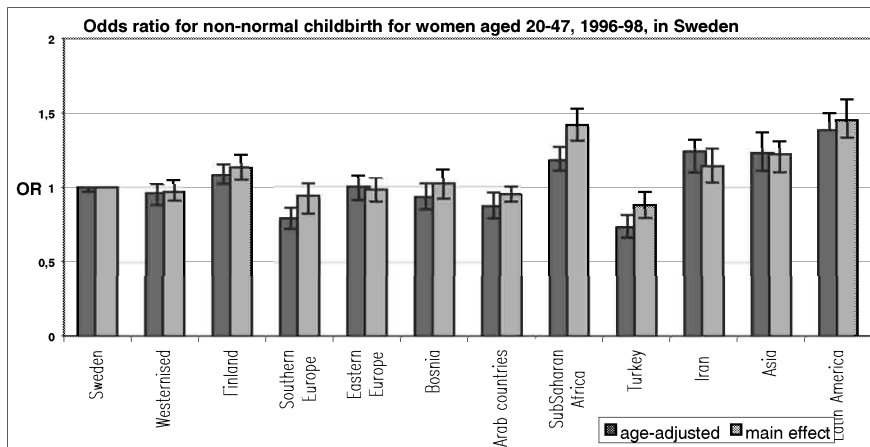


Figure 10. The risk (odds ratio OR with 95 % CI) for non-normal childbirth for an age-adjusted model and a main effect model, for women aged 18-47, in Sweden.

Women from Sub-Saharan Africa, Iran, Asia and Latin America had a higher age-adjusted risk of non-normal birth than Swedish women. In the main effect model, the risk decreased for women from Iran, remained unchanged for the Asian women but increased for Latin American women and the increase was the highest for the Sub-Saharan African women. However, women from Southern Europe, Arab countries and Turkey had a lower risk of non-normal birth than Swedish women. The risk increased slightly in the main model, i.e. the risk could not be explained by the explanatory variables.

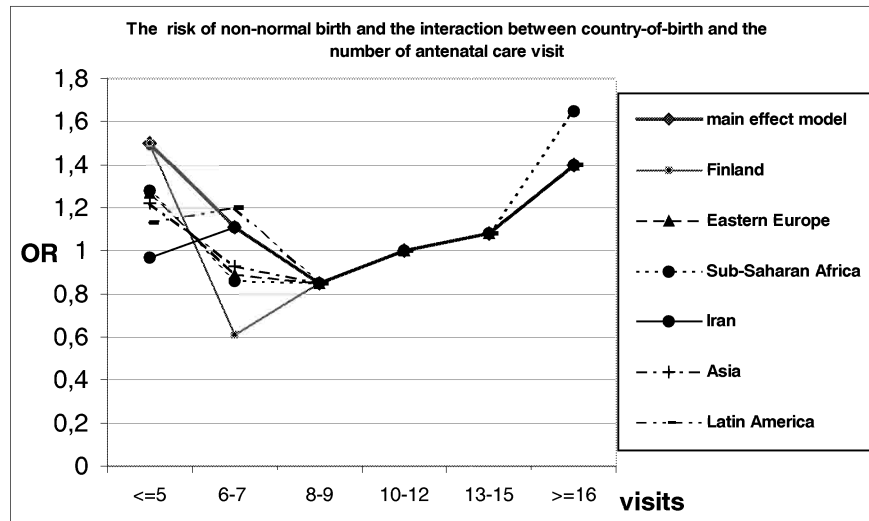


Figure 11. . Risks (odds ratios) for non-normal childbirth in a model including the interaction between the country-of-birth of women, and the number of antenatal care visits, compared with a main-effect model ( $P < 0.05$ ), 1996-98 in Sweden. Logistic regression.

Generally speaking, the number of antenatal care visits showed a U-shaped curve, with a higher risk for women making fewer visits than recommended and also for those with more visits (13-15 and 16 or more). On analysing an interaction model, we found significant interactions ( $P < 0.05$ ) for women from Finland, Eastern Europe, Africa, Iran, Asia and Latin America with a lower risk for fewer visits than with women from all other immigrant countries and Sweden (Figure 11).

## 6.5 STUDY V

Young women (18-24) from Turkey, Southern European, Arab and Asian countries had a 40% higher prevalence of non-pharmacological pain relief than young Swedish-born women. In the age group 40-47, women from Southern Europe had a 50% lower prevalence and those from Sub-Saharan Africa had a 70% higher prevalence than the Swedish-born women. Women from Southern European and Arab countries showed a clear gradient with twice as many women among those with a low attained level of education than among those with the highest level. In the variable number of antenatal care visits, women from Bosnia and Sub-Saharan Africa showed a clear gradient with a two to three times higher prevalence among those having few visits.

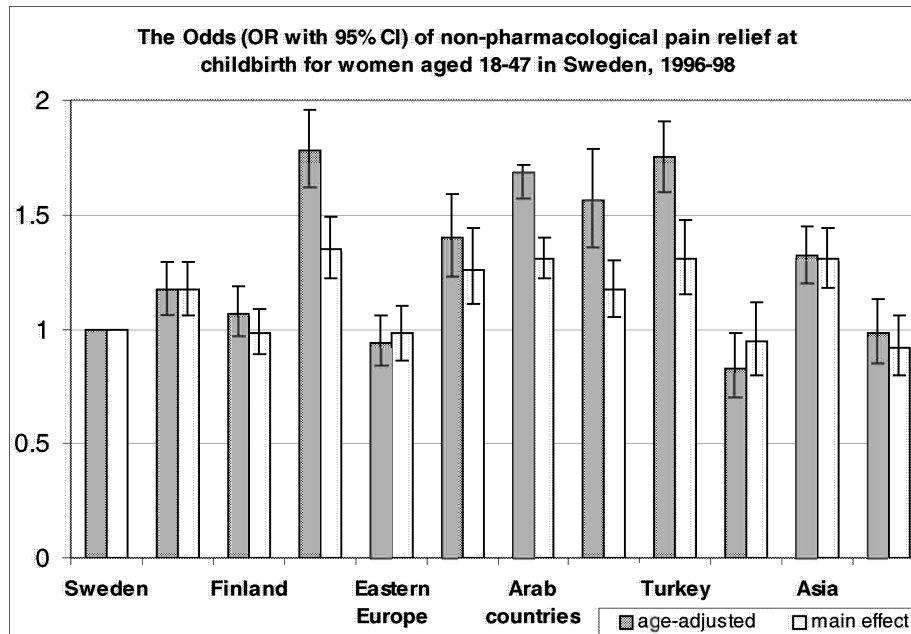


Figure 12.

With the exception of women from Finland, Iran and Latin America, all foreign-born women aged 18-29 had a lower prevalence of epidural/spinal analgesia at birth than Swedish-born women. Women from Bosnia, Turkey and Sub-Saharan Africa aged 40-47 had the lowest prevalence, 50% lower than women from Western/westernised countries, Finland, Iran and Sweden. Parity showed a clearly decreasing gradient with an increasing number of children.

In terms of the level of education, all groups except women from Sweden, Western/westernised countries, Eastern Europe and Turkey showed an increasing gradient of epidural/spinal analgesia with increasing education. The prevalence of epidural/spinal pain relief was highest for the women with 16 or more antenatal care visits, except for Iranian women, who had as high a prevalence for 13-15 visits.

Figure 12. shows the estimated OR for non-pharmacological pain relief at childbirth (with 95% CI) for the 12 subgroups of countries for an age-adjusted model and a main effect model. Women from Southern Europe, Bosnia, Turkey, Arab countries, Sub-Saharan Africa and Asian countries had significantly higher odds for non-pharmacological pain relief than Swedish women. The odds decreased but remained significant after adjusting for parity, education, number of antenatal care visits and a normal childbirth diagnosis.

The parity variable showed a clear gradient: with a higher parity there was less pharmacological pain relief at childbirth. The odds for non-pharmacological pain relief in the main effect models decreased but remained significant compared with the age-adjusted model. However, an interaction between being foreign-born and parity showed



that women from Southern Europe and Bosnia with high parity, had almost two times higher odds ratios (OR=7.03/ 7.69) for non-pharmacological pain relief than in the main effect model (OR=4.27).

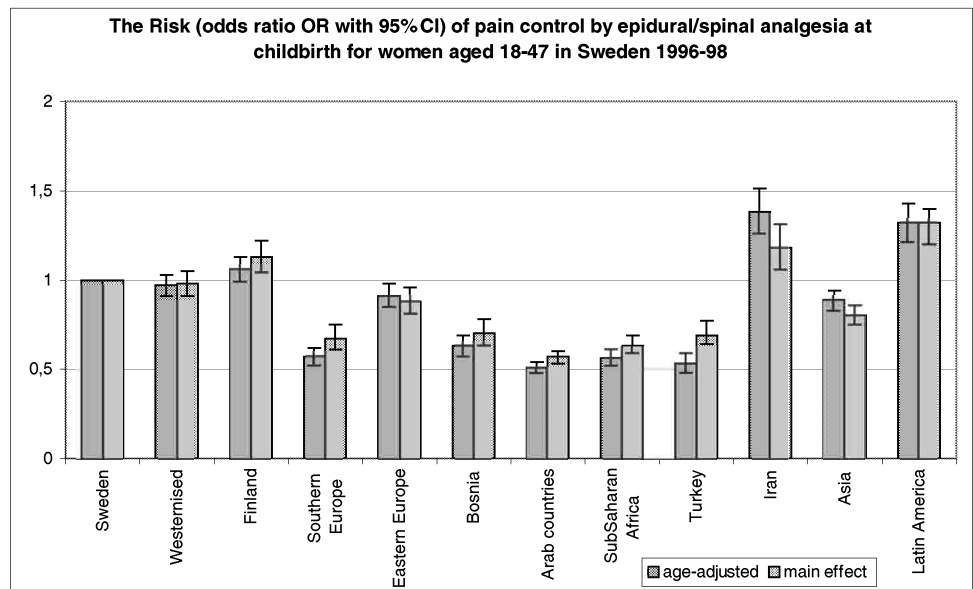


Figure 13.

The estimated risk of epidural/spinal analgesia pain relief at childbirth for the 12 subgroups of countries and women are presented as OR's with 95% CI's in Figure 13. Women from Bosnia, Turkey, Southern Europe, Eastern Europe, Arab countries, Sub-Saharan Africa, and Asia had lower risks of pain control by epidural/spinal analgesia at childbirth than Swedish-born women. The risks increased but remained significantly low after adjusting for parity, level of education, number of antenatal care visits and a non-normal birth diagnosis. Conversely, women from Iran and Latin America had a considerably higher age-adjusted risk of using epidural/spinal analgesia at childbirth. The risk remained unchanged and high for Latin American women in the main effect model.

In a model including the interaction between being foreign-born and parity, women from Southern Europe, Bosnia and Arab countries with three children or more, the risk was less than the half (OR=0.08-0.09) of that of the main effect model (OR=0.23). An interaction between foreign-born and a low level of education showed that women from Southern Europe, Bosnia, Arab countries, Sub-Saharan Africa, Iran and Asia had a 50% lower risk than shown in the main effect model for a low level of education.

The age-adjusted risk of pain control by epidural/spinal analgesia was considerably increased with a non-normal childbirth diagnosis and the risk decreased, but remained high, in the main effect model. On including the interactions between country of birth

## Results

and a non-normal birth diagnosis, women from Bosnia and Turkey had a significantly lower risk and women from Finland and Asia had a significantly higher risk of pain control by epidural/spinal analgesia at childbirth than the main effect model.

## 7 DISCUSSION

The main results of this thesis showed that women from Finland, Southern Europe and refugee women exhibited substantially higher age-adjusted risks of poor self-reported health status and psychosomatic complaints than Swedish women. The risk decreased but remained high when socio-demographic and socio-economic factors were added to the logistic model in both periods (Study I). Swedish-born women, Finnish women and refugees women reported poorer health and had more psychosomatic complaints (although not Finnish women) in the 1990s than in the 1980s.

This was also confirmed in the longitudinal study (Study II), where, consistently with our expectations, first- and second-generation labour-migrant and refugee women had higher age-adjusted risks of limiting longstanding illness than Swedish women. Moreover, the risk decreased only marginally when marital status, SES, feelings of insecurity and the longitudinal effect of age were taken into consideration. However, immigrant women's health did not deteriorate more than that of Swedish-born women over the eight-year period.

In study III the main finding was that labour and refugee immigrant women and second-generation women had higher age-adjusted risks of a first psychiatric hospital admission than Swedish-born women. Furthermore, Non-European refugee women had a higher age-adjusted risk of a first somatic hospital admission than Swedish-born women.

Study IV showed that women from Sub-Saharan Africa, Iran, Asia and Latin America had a significantly higher age-adjusted risk of non-normal birth than Swedish-born women. The increased risk remained in the main effect model after adjusting for parity, level of education and antenatal care visits. The risk even increased for the Sub-Saharan African and Latin American women. However, women from Southern Europe, Turkey and Arab countries had a lower age-adjusted risk of non-normal birth than Swedish women.

Finally study V showed that women from Bosnia, Turkey and Southern Europe and from Arab, Sub-Saharan African and Asian countries had a significantly higher odds for non-pharmacological pain relief and a significantly lower odds of pain control by epidural/spinal analgesia at birth than Swedish-born women. The odds decreased but remained significant after adjusting for parity, education, the number of antenatal care visits and non-normal birth diagnoses.

*These main results are going to be applied in the theoretical model. First, I will interpret the explanatory variables with using the strategies included in the model. Secondly I will introduce and discuss the main results of the outcomes in terms of the model, which is finally followed by summary.*

It is first important, however to state that a model is always a simplification of reality. The model concentrates on concepts drawn from feminist and ethnicity/anti-racist thinking. It is important to stress that there are many other factors that influence

women, and their choices vary with time and context. Furthermore, women as a group are heterogeneous as are members of different ethnic groups. Thus the normal action of a group member will not be guaranteed to be the action of each group member.

Secondly it is important, to stress that neither the strategies nor particularly the perspectives are a fixed and 'once-and-for-ever' choice. Depending on life situations, expectations and experiences, there are a continuous reevaluation and shifting between the perspectives.

*The explanatory variables of the studies are reflected by the strategies included in the model as a background to the discussion of the main results.*

### **7.1.1 Strategies**

#### *7.1.1.1 The Private Patriarchal*

Many women come from societies with a cultural context in which a strong patriarchal structure is the only option, the natural way of life. This means that family and kin, i.e. the group, is the superior identity rather than the individual. It also implies less individual expectations of marriage, the relation between husband and wife, as they are included in a broader context. The woman's role of wife and mother can then be seen as a destiny; to 'sacrifice' her individual needs for the family that gives an established relationship without being equal (144, 145). The life circumstances in the country of birth of the women have an influence, such as the level of education and the family economy, essentially all aspects of SES.

Some of these women may have a background or be an example of African feminists' thinking mentioned in the theoretical model: seniority or a different power distribution, as competence areas, may be a positive experience for foreign-born women (122, 123, 127). However, from a western viewpoint, these women may be staying in dissatisfied relationships due to economic dependence on the men or because they have little opportunity to support themselves (145).

A woman may be more likely to follow this strategy if she is already married before coming to Sweden, particularly if she is older, has been married a long time or already has children and especially if she comes in an "import marriage". Darvishpour found that such women were less likely to divorce than other women, as they have a stronger dependence on the man and his family (145).

As Mulinari concludes, another reason for choosing the Private Patriarchal strategy might be that the women's experiences of surrounding discrimination and racism may result in strengthening the Private Patriarchal, as a solution for diminishing contact with the surrounding society (18). In addition, many labour immigrants regard themselves as 'sojourners' with economic motives, planning to return home when they have sufficient capital. This diminishes the motivation to integrate with the new society and ties to the family remain strong.

### 7.1.1.2 *The Official Patriarchal*

The strategy of the Official Patriarchal is a consequence of change in power distribution in the family. It may result in women gaining a more equal relation or being single or, a single mother and creating a new life more integrated in society. This is often a strategy of highly educated women who were also living an urban western lifestyle in their country of birth (145). However, before emigrating to Sweden, women have been forced to live 'in between' traditional and modern society as the organisation of many societies presuppose a functioning Private Patriarchal for the care of children and elderly and disabled people.

Even in Sweden, the strategy more or less requires social economic independence through work or a grant to study for a decent standard of living. It is more common that women then leave an unsatisfactory relationship when they have both economic and normative power despite difficulties after immigration (145). On the other hand, it is more common with more stable and equal relationships/marriage if the woman is economic independent (145). But, poor financial situation and unemployment are risk factors that increase the divorce rate for immigrants(145, 146).

*The main results of the outcomes are introduced and discussed in the model from the alternative perspectives:*

## 7.1.2 Health-related Outcomes

### 7.1.2.1 *Poor Self-Reported Health/ Limiting Long-Standing Illness*

Labour migrant and refugee women have higher risk for poor health and limiting long-standing illness than the Swedish-born women. However, Swedish-born women also reported poorer health and had more psychosomatic complaints in the 1990s than in the 1980s.

*Seen through the model, six alternative interpretations arise which may also be combined in different situations, to handle a situation of poor health. The alternative interpretations are also affected by personal characteristics such as personality and self-esteem but this is beyond the scope of this thesis.*

The first three alternatives apply to all women and the latter three apply to immigrant women. The first is that women often ignore signs of poor health; secondly, the patriarchy defines women as being at risk of poor health so women may suffer poor health because they believe this and, thirdly, the Private Patriarchal strategy may be related to poor health.

Fourthly, cultural conflicts may cause stress especially for second-generation immigrants, fifthly immigrant women may be engaged in work that does not provide a positive boost to their psychological conditions and, finally, as a combination of alternatives three, four and five, immigrant woman may regard themselves as sojourners.

Generally, few women act on poor self-reported health so their health may deteriorate. Their reason for ignoring symptoms may depend on whether they are resisting or not resisting patriarchy. Firstly, women who are not resisting and instead are accepting a patriarchy are socialised to care for and respond to the needs of others, barely acknowledging their own needs and health (7, 147). The Patriarchal defines a real woman as one that manages, 'control by ignorance', without recognising the signals of her body (108, 147). If a woman is resisting the patriarchy, she may ignore symptoms because she is modelling herself on a man, who is typically is regarded as being strong and ignoring symptoms. A woman ignoring signs of ill health and trying to manage all by herself, without recognising her own needs, can be viewed through the model as taking a Purpose-of perspective. This means that she is trying to live up to what she feels others are expecting of her, to reach a certain standard in others' eyes.

Secondly, the female body is regarded by the patriarchy as a fixed biological structure, a measurable object and with a focus on the negative aspects (17, 148, 149). In their contact with authorities (i.e. Official Patriarchal), such as health care system in situations of poor health, women often feel humiliated and misunderstood (150). Moreover, a study showed that both female and male caregiver's, with some differences between professions, described female patients as more demanding than men (151). In this context, women are subordinated in the Official Patriarchal with a risk of internalising the objective, medical view of her body and poor health. Either by 'resisting', i.e. ignoring health problems and/or being seen as demanding or by 'creating', i.e. acting according to others' decisions and belittling her own experiences. Thus a woman's health may deteriorate because her needs are not addressed by the system.

Thirdly, there is much evidence that housewives, who are likely to be following the Private Patriarchal strategy, suffer poorer health. In Study II, housewives had an increased risk of LLSI, and together with being foreign-born the risk is even higher. They are particularly prone to anxiety symptoms and depression. They also have a low social status (7, 152). It can be women who use the strategy of the Private Patriarchal with a Purpose-of perspective, creating without resistance, with an internalised traditional family-centred view and diminishing contact with the surrounding society and little environmental support and isolation.

*Here follows the explanations derived from the model as to why immigrant women in particular are prone to poor health.*

In Study II, second-generation immigrants had a higher risk of LLSI than Swedish women. This may be due to cultural conflicts as such women belong neither to their parents' culture or their new culture. Studies have shown a higher level of parent-child conflict, lower self-esteem and much higher levels of depressive symptoms among second-generation adolescent girls than boys (153, 154). The demands on the adolescent girls are high, including bodily image, and behavioural pressure on to be acceptable in both the Official and Private Patriarchal. This results in a difficult

situation to balance and gives a purpose-of perspective as constantly being measured as an object.

For foreign-born women with own economic resources based on being employed facilitates empowerment and independence (155). It may be possible to handle decisive experiences and develop a Purpose-in perspective if the woman recognises herself as a whole person, with her own needs. It is also easier for women to maintain and develop an equal relationship with her husband if economic independent (Darvishpour). However, most foreign-born women are employed in working class, female-dominated occupations, and often accept unqualified work. In addition, migrant deskilling (devaluation or barriers of levels of educational attainment and professional background) is an example of institutional discrimination (156-158). Furthermore, women are exposed to increasing levels of stress in poorly paid, low-status work with high demand and little control (9, 159). In these situations of being dependent on the social welfare system for maintenance with little own influence may result in being victimised or medicalised, i.e. with decisive life experiences being handled with a Purpose-of perspective.

Finally, poor health and LLSI among labour immigrants can be explained by the fact that they may view themselves as sojourners. They have intended to return to their country of birth when they have achieved their aims for their sojourn in Sweden. Thus they avoid integrating with the new society. Poor health and limiting long-standing illness among labour immigrants can be viewed in the model as a Purpose-of perspective with a Private Patriarchal strategy because although they may have outside work, they remain in the subordinate role in the home.

Regarding themselves as sojourners, with little or no involvement in Swedish society, is in and of itself negative for their well-being. The women may also be torn between the responsibilities for the family, both those left in the country of birth (parents) and the children socialised and integrated in Sweden. Moreover, with years of extended care and hard work lead to poor health (7, 9).

#### *7.1.2.2 First psychiatric/somatic hospital admission*

Non-European and European refugees had higher risks of a first psychiatric hospital admission than Swedish-born women. Moreover, there was an interaction between country of birth and disposable income in which the incidence rate for refugees was higher for high income earner than for low income earner; the contrary was observed in Swedish-born women. Applied to the model, this may indicate, as other studies have shown, that refugees enter a deep existential life crisis due to the fact that they escape from oppression and do not come as volunteer immigrants (40, 157, 160).

Furthermore, refugees are often repeatedly exposed to traumatic events and are at risk for posttraumatic stress disorder (PTSD) without seeking professional therapy for cultural, linguistic, financial and historical reasons.(46). The power to denominate/define an experience is crucial to being able to treat it. Many acts of

cruelty, such as sexual violence and humiliation, have not been allowed to be expressed or pronounced even to be thought due to the historical, cultural or social context (124). These women belittle and 'control' themselves, as the experiences are deep wounds in their self-image, which are difficult to cure and few resources are provided in medical care for their treatment (161, 162).

It can be seen in the model how the women create without resisting by belittling, objectifying and repeatedly punishing themselves with a Purpose-of perspective until they have an opportunity for treatment, when a purpose-in perspective can be feasible.

### 7.1.3 Childbirth-related Outcomes

#### 7.1.3.1 *Non-normal-birth and pain control at childbirth.*

*I first discuss the immigrant women who had what would normally be conceived as better childbirth-related outcomes than Swedish women (although I argue that this might not be the case) and then discuss the immigrant women who had worse outcomes.*

Women from Southern Europe, Arab countries and Turkey had a lower risk of non-normal childbirth, higher odds for non-pharmacological pain relief and less risk of pain control by epidural analgesia at childbirth. Among these groups, there were more women with a low level of education odds for non-pharmacological pain relief and less risk pain control by epidural and higher parity than among those in the other groups and who often had fewer antenatal care visits than recommended.

According to the model, this could indicate a positive or negative birth experience, i.e., women with less education resist and create with either a Purpose-in or a Purpose-of perspective depending on their awareness and view of the childbirth experience. With a Purpose-in perspective, they are able to use their awareness from their previous culture to provide a positive birth experience and with a Purpose-of perspective, they may have a negative experience due to a cultural clash.

Some of these women pass through pregnancy and childbirth with little interference from the medical view of birth (in cases of low-risk pregnancies), i.e. a Purpose-in perspective, with awareness, co-operating with their body signals. This is crucial for finding a meaning in the lived experience of motherhood.

They may also be susceptible to medicalisation and, following culturally and socially learned patterns from their country of birth with an acceptance of pain and the birth experience being more integrated in their bodies and minds, with no need for intellectual control during childbirth and no demand for technical facilities that are not generally available in their country of birth (68, 163, 164). In this way, such women can have a Purpose-in perspective of childbirth.

The health and maternity care system in Sweden is part of the Official Patriarchal. Women with low-risk pregnancies are expected to follow the offered programme without questioning it too much. The message given by the maternity care includes



contradictions. Childbirth is dominated by the medical view seen as a risky process, but at the same time seen as a natural and normal process (84). Women coming from societies where childbirth still is a concern of family with its existential, cultural and social context can get confused of the general, medical aimed program. As there is often little awareness of this dynamic and complex social and cultural construction of childbirth in the medicalised surrounding of birth, these aspects will be more marked in confrontation with other cultures (164).

Childbirth includes also fear and danger, a known and sometimes experienced reality for women. This may partly be the situation for Sub-Saharan African women. They had higher risk for non-normal birth, but they also had higher odds of non-pharmacological pain relief and a lower risk of pain control by epidural/spinal analgesia during childbirth. A report showed that, all refugees and women from Sub-Saharan Africa had more complications at childbirth and women from Sub-Saharan Africa also had higher perinatal mortality during 1987-1993 (165). Moreover, other studies have also shown higher rates of complications at delivery and perinatal mortality among women from Sub-Saharan Africa (115, 166, 167). Studies have shown that both overtreatment and over-medicalising pregnancy and childbirth can lead to iatrogenic complications and waste resources, as well as undertreatment and also neglect of the cultural and emotionally sensitive aspects of childbirth (68-71). Several studies indicate the importance of listening to and creating a trusting relationship with the participation and responsibility of the woman and going beyond stereotyped assumptions based on the woman's religion and social, cultural and ethnic affiliation (78, 128, 129, 168, 169).

Many women get the impression is that the medicalised care (i.e. Official Patriarchal) expects that they should leave the course of childbirth in its charge (i.e. a Purpose-of perspective). Moreover, with a cultural and educational gap between the caregiver and the woman, the less accurate is the caregiver's evaluation and response to the woman's expression of fear and pain (128, 129, 169-171). Although studies have demonstrated no difference in self-reported pain intensity ratings and affective dimensions of pain between women from different cultures women's expression of pain and behaviour varies in different cultures (128, 169, 172-174).

The findings of less use of official pain relief may have occurred because caregivers were unable to interpret the woman's signals that they needed it. In the model this is an experience of create without resistance, a Purpose-of perspective, where all blame is placed on the self with no or few possibilities of defining and treating the lived experiences. Studies have shown that high prenatal anxiety is associated with a higher pain expectation at delivery (80, 168, 175).

The Purpose-of perspective can be applied actively as an acceptance of the medical authority itself (164) or passively if the caregivers do not give the women an opportunity to take an active part in childbirth (168).

Moreover, in society, i.e. the Official Patriarchal, it is a general attitude of not to question and to trust experts more than your own ability or opinion. In one study, it was discussed how this negatively influences the woman's ability to use her own capacity,

rely on her self-esteem and co-operate with her body's signals (74). Most women want to be responsible if they have an opportunity.

The balancing between creating and resisting in childbirth is an awareness, of accepting the intellectual loss of control and co-operating with one's body. Studies have shown that a negative childbirth experience can be described as physical and mental abuse (176) affecting the woman's future health (7). Furthermore, childbirth can raise and reiterate post-traumatic experiences, such as sexual violence, and also be a reason behind postpartum depression, mental disorder and drug addiction (162, 177). This could be a particular problem for refugee women before coming to Sweden.

Women from Iran and Latin America have a higher risk of non-normal childbirth, lower odds of non-pharmacological pain relief, and a higher risk of epidural/spinal analgesia at childbirth. The Iranian women with a high level of education also have a high use of medical care in Iran (145). However, in the model this illuminates a resistance without creating a Purpose-of perspective as it can be a sign of not accepting the changes in their body or difficulties in co-operating with their body. It leads to losing intellectual control during pregnancy and childbirth and to an acceptance of a medicalised view of body, mind and childbirth.

Contrary to the Iranian women, the Latin American women's higher risk of non-normal birth, lower odds of non-pharmacological pain relief, and higher risk of epidural analgesia at childbirth did not decrease in the main effect model, i.e., the risk could not be explained by the explanatory variables. In many countries in Latin America care in childbirth is highly hospitalised and medicalised. In the model, this can be expressed as a Purpose-of perspective, where the woman resists and at the same time accepts the medicalised view of childbirth. In Chile and Brazil women with private maternity care insurance had a twofold higher risk of caesarean section at childbirth and it was often chosen to avoid the low quality of maternity care (178, 179).

## 7.2 SUMMARY

This discussion, is based on a theoretical model, derived from the results of the studies and clinical experiences, and interpreted in a feministic and ethnic/antiracist perspective to reflect foreign-born women's risk of poor health and childbirth-related outcomes in Sweden.

On evaluating the results of the studies, the ways of handling the birth experiences and poor health constitute a contradiction. Women from Southern Europe, Arab countries and Turkey who give birth more easily, with fewer complications and less pain relief (although nothing is known about the expectations, experiences or satisfaction), have worse self-reported poor health. Seen in the light of the model, alternative explanations could be: the difficulties in 'resisting' and 'creating', developing a Purpose-in perspective i.e. sustaining the lived existential experience of being whole in a culturally and societally different environment in the sensitive period of childbearing.

The stereotyping of women according to their ethnic origin limits the possibility of the individual to act and continues to influence the maternity care that immigrants receive (169, 180, 181) and they do not always receive equity in care (128, 129, 169, 182). The acceptance of authorities in society and medical encounters can be both active and passive, however, with a Purpose-of perspective. With a low level of education, being foreign-born and without proper language skills, it is nearly impossible to question any authority, even less when in poor health or in connection with a hospital admission.

The Purpose-in perspective requires a strong self-image, self-esteem and ability to communicate. Some women actively choose to accept the patriarchal picture of woman's value, often supported by the extended family or coming from a society where thinking about gender is different, or included in a group of women creating some control and meaning of their own female concerns. This is more difficult to sustain with living in a society like Sweden, where the Official Patriarchal also have power and control, especially economic, over the Private Patriarchal. This may lead to a psychological crisis which eventually threatens health.

Women from Iran and Latin-America had a higher risk of non-normal birth and also more pain control by epidural/spinal analgesia during childbirth than native-born women and those from Southern Europe, Arab countries and Turkey. These two groups of women in the studies I-III, all belonged to the same refugee or Non-European refugee group.

Here different alternative explanations are also suggested. As earlier was discussed with a social and cultural acceptance of medicalised childbirth, women can feel satisfied with their experience and accept the patriarchal way of defining women. However, this can also strengthen the idea of medicalisation and passivity in situations of normal life crises and with poor health, regarded in this model as a Purpose-of perspective.

In studies on encounters with caregivers, it has been shown that women are often met with disrespect and experience feelings of humiliation (7, 17, 148). However, when met with respect and given responsibility, women are strengthened (17) and even a gynaecological examination can make them "empowered" (161). In the model, this can be an example of the Purpose-in perspective, i.e. to be seen, as a whole person by others can be crucial for re-discovering oneself and a revaluation of life experiences.

Due to the severity of past times, in a life crisis, women may need several of these genuine encounters in order to develop strength and manage to revalue the chosen perspective which also depends on life circumstances, individual ability and self-image.

The physical and mental constraints of pregnancy, childbirth and childrearing, simultaneously with the daily burden of other work, signify an overload and years of extensive responsibility that lead to poor health (7). This is a dilemma for women, expressed by Arnfred as follows: *"To be a mother is to live in a perpetual dilemma*

*between your own emotional priorities and the economic and work-related priorities of the society of which you are a part*"p.75 (122).

Moreover, the economic disadvantage giving rise to health problems as well as increasing the effects of poor health by creating conditions for women's sense of unpredictability and powerlessness can be expressed as a way in which the SES differences are "internalised" by the body (147, 183). This elucidates the difficulties for women to 'create' and 'resist' in order to keep a Purpose-in perspective in concurrent situation of dependence.

In this summary some patterns appear. The Health care system is, as shown in the model, a hierarchal structure and a part of the Official Patriarchal. As mentioned in the theoretical model, the system itself may oppress the women and in this context the caregiver can be regarded as representing the Official Patriarchal strategy. It means when women are met with disrespect and experience feelings of humiliation, the individual caregivers unconsciously reproduces the Official Patriarchal strategy. The situations might be such as; stereotyping in different ways, seeing women as demanding, meeting the woman with ignorance and disrespect and not allowing her to give her opinion or questioning the chosen treatments or programmes.

Moreover, as there is often little awareness of the dynamic and complex social and cultural construction of childbirth in the medicalised surrounding of birth. These aspects will be more marked in confrontation with other cultures. This means that caregivers need awareness and knowledge to handle these aspects, not to reproduce the Patriarchal oppression. However, when meeting women with respect and giving them influence and responsibility, women are strengthened, "empowered" which may be crucial for their awareness and opportunity to revalue their life experiences.

This means that in order to be able to balance between different life situations, women must (a) resist the demands to satisfy society's ideal of a woman, by setting limits to their constant accessibility and sensitivity to the needs of others and (b) manage to acquire or create an intrinsic worth of their own as women.

### **7.3 LIMITATIONS AND STRENGTHS**

#### **7.3.1 Studies I-V**

There is potential self-report bias in the SALLS, particularly on marital status, social network, education and economic resources. We used existing survey data as part of the proposed analyses. These data were not collected specifically to test the proposed study aims, or with a feminist perspective. Although the outcome variables could not be misclassified, one concern is the significance and interpretation of the outcome variable in Study I (self-reported health status). As an indicator of health conditions in the population, it may be regarded as a subjective and imprecise measure of health and may reflect a woman's general perception of the quality of her life.

Self-reported health is widely used in European and American studies (184-187). Self-reported health has been shown to have a strong relationship with diagnosed chronic diseases (188-190), with the use of health care (190-193) and with mortality (110, 194).

In addition, some studies have found an independent association between poor self-reported health and sick days when controlling for other variables (195-197). Furthermore, self-reported health status has shown good test-retest reliability (190, 198), and the concept is considered to be important in measuring health, psychological well-being and the health-related quality of life (142).

Study I is a cross-sectional study and no definite conclusions can be drawn regarding causality. Another possible limitation is a selection bias (Studies I and II) because of the non-response rate, but the non-response rate is rather low. Some respondents might have left Sweden without reporting it to the Swedish authorities (Studies II and III). In that case, they should be regarded as constituting over-coverage.

A misclassification bias is possible in all studied variables (Studies I-V). For example, the different groupings of the foreign-born women including different nationalities were crude. In Studies IV and V, the grouping of the foreign-born women into 12 groups of countries including different nationalities and ethnic and cultural groups is also very heterogeneous. This grouping has been done, however, to reflect some similarity in the cultural and/or health situation demonstrated in earlier studies (114, 134). However, the Kurdish immigrants constitute a large group, they could not be treated as a group of their own, as their country of birth might be i.e. Turkey, Iran and Iraq (here, Arab countries). Furthermore (Studies I-V), it has not been possible to increase the number of subgroups to create more homogeneous groups because the sample size would be too small. Another misclassification bias is possible in that some refugees have been classified as labour migrants or vice versa (Studies I-III). We assume that this is a minor problem.

A further limitation could be the definition of second generation in the Swedish registers, i.e. Swedish-born individuals with only one foreign-born parent and who may be very similar culturally and socially to Swedish-born women with both parents native-born (Studies II and III). Another limitation (Study III) is diagnostic misclassification or underclassification, which could be more evident among foreign-born women (42, 44, 49). However, in the validation of the Medical Birth Register (Studies IV and V) only 1-2 % of the birth diagnoses are misclassified (133).

The variable 'Acculturation' (Study I) based on the question "What language do you speak at home?" can be called into question concerning the information it actually gives. Speaking Swedish at home was reckoned as an indicator of being acculturated into Swedish society, which constitutes a rather ethnocentric view of integration.

A limitation in Study II is that not all the changes that might have occurred during the eight-year period are known, only the status at the time of the two interviews. A change in self-reported LLSI may have taken place at any time between the two assessments.

The crude division of the outcome variable in Study IV, non-normal birth, could be regarded as a limitation. However, in reading reports and evaluations of the Medical Birth Registers, several question about missing data, especially cases with

complications, local PM and difficulties to control and adjust for, are raised when dividing them into more specific diagnoses. A limitation in Study V is that we only have information on non-pharmacological pain relief and use of epidural/spinal analgesia without any knowledge of expectations, satisfaction, expression or perception of pain from the women. A further limitation is missing data in the variables (Studies IV and V). When checking the dataset with the variables, the missing data seemed to be randomly distributed by both country of birth and diagnosis.

The strength of cross-sectional studies is the possibility of examining differences over time, at two points in time. Another strength of this study is the large, well-defined study population, which is a simple random sample of the whole Swedish population. This type of survey has a long tradition and experience. Another strength is that the data are collected in face-to-face interviews by well-trained interviewers. The questions are validated, have been consistent over the years (199) and have been proved to possess great reliability (132). Moreover, in Study II, the marginal model using GEE is effective in analysing correlated data and gives also an estimate of change over the 8-year period. (138)

The strength of study III is the “MigMed”, the longitudinal research database comprising the entire Swedish population. By using national registration numbers, assigned to each person in Sweden, including refugees and immigrants staying more than six months, it was possible to follow the population with regard to the first hospital admission, and also taking in to account country of birth and sociodemographic factors at the start of the study.

The strength of Studies IV and V is the database “WomMed” which comprises data from several other sources. In studies IV and V the study population consist of 215,497 childbirths during 1996-98. The information in the Medical Birth Register is collected prospectively from standardised medical records from all antenatal care and birth units and covers more than 99% of all births in Sweden. The register has been validated and the birth data were considered to be good (82, 133, 200).

### 7.3.2 Theoretical model

One limitation of reflecting the results of the studies in the model with interdisciplinary influences is that it may be confusing and it demands clear concepts and a stringent structure. This process is ongoing and in this thesis it could always be reworked and further improved. Another limitation is that the feminist perspectives can sometimes give the impression of biased and one-sided representation of gender relation (130). That is not the intention of this model. However, there may be a risk of reproducing and recreating gender stereotypes if the differences are pronounced.

The strength of reflecting the results of the studies in a theoretical model with interdisciplinary influences of the perspective is that it can be regarded as a way to disarrange our established way of conceptualising findings and elucidate the results in a different context in order to see things from a different angle. The method used to

perform the analysis, abduction, is regarded as a way of looking beyond the apparent reality to discover hidden patterns and tendencies and recreate them in a new context (130, 131). These are interpretation, however, and it can always be questioned whether these hidden patterns really exist.

#### **7.4 CONCLUSIONS**

The results in this thesis demonstrate associations between country of birth and women's health, presented as self-reported health, hospital admissions, non-normal childbirth use of non-pharmacological methods for pain relief and pain control by epidural analgesia at childbirth.

A theoretical model is developed in the context of the results of the studies and clinical experiences. The aim was to reflect how the foreign-born women's higher risk of poor health and the childbirth-related outcomes could be conceptualised in the model.

From a feminist and ethnic/antiracist perspective the thesis shows that foreign-born women have restricted opportunities to influence and handle decisive life experiences, such as poor health and childbirth. The invisible structural frames in society (the Swedish health care system) and in families that women are tied to, limit their real opportunities. These structural frames appears clear when women are changing their 'cultural mirrors'. The health care system itself may oppress the women and in this context the individual caregiver unconsciously reproduces the Official Patriarchal. The question can be raised if sometimes, poor health in general and childbirth in particular keeps being reconstructed by the health care system.

This is also a reality of native-born Swedish women, who reported poorer health and had more psychosomatic complaints in the 1990s than in the 1980s. However, they are so used to the prevailing demands and impregnated with the reality of the Swedish society.

An interchange of experiences on an equal level between foreign-born and native-born women could be fruitful for finding new strategies to handle life experiences. With awareness, women can find a balance in setting limits for their constant accessibility and sensitivity to the needs of others and manage to acquire or create an intrinsic worth of their own as women.

#### **7.5 IMPLICATIONS**

In the light of the results of this thesis, it is important to raise awareness among women as individuals, because being aware of and understanding what influences the circumstances of daily life can create an opportunity for changes.

It is important in health care system and education for caregiver's at all levels to question and be aware of the structural context that rules our ways of acting, meeting

and treating women and men and, as pointed out in this thesis especially meeting foreign-born women and men.

An awareness is also needed at the societal level to elucidate the structural contradiction in Swedish society that influences our lives.

## **7.6 FUTURE PERSPECTIVES**

The result of this thesis raises more questions, to be explored in further epidemiological and qualitative studies. The theoretical model could also be further developed.

Moreover, to explore the results in these studies in order to obtain insights into the underlying reasons, such as factors that seem to influence women's choices, expectations, attitudes and preferences, and in order to improve the quality of care and provide equitable health care for all.



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## 9 SVENSK SAMMANFATTNING

Även om vår kunskap om kvinnors hälsa har ökat under de senaste årtiondena, är det oftast en förenklad syn som utan reflektion utgår från de biologiska skillnaderna. Män utgör fortfarande normen både inom folkhälso- och medicinsk vetenskap. Det socialt och kulturellt skapade, av sammanhang betingade och historiskt bestämda har lämnats utanför. De senaste åren har studier visat att kvinnors hälsa i Sverige ytterligare har försämrats i förhållande till mäns hälsa och att oroväckande många unga kvinnor står för en allt större del av långtidssjukskrivningarna. Några som har blivit än mer osynliggjorda i medicinska sammanhang är kvinnor i barnafödande ålder med utländsk bakgrund. Vår kunskap om deras hälsa är ytterst begränsad.

Syftet med avhandlingen är att undersöka om det finns något samband mellan födelseland och försämrad hälsa, risk för icke-normalt förlossningsförlopp och om medicinsk smärtlindring används vid förlossning. Vidare har en teoretisk modell utvecklats med utgångspunkt från ett feministiskt och ett etnicitets/anti-rasistiskt perspektiv, för att tolka resultaten i ett vidare perspektiv.

### *Finns det något samband mellan födelseland och kvinnors självskattade hälsa?*

De två första studierna utgår från ULF (SCB: s Undersökningar av levnadsförhållanden i Sverige). Första studien är en tvärsnittstudie gjord 1980-85 och 1992-97 som belyser sambandet mellan självrapporterad hälsa/psykosomatiska besvär och födelseland, där utlandsfödda kvinnor jämförs med svenskfödda kvinnor. Den andra studien är longitudinell (1991-1998), där man undersöker sambandet mellan långvarig sjukdom med nedsatt arbetsförmåga och födelseland, varvid utlandsfödda kvinnor jämförs med svenskfödda kvinnor. I båda studierna tar man också hänsyn till andra faktorer som kan påverka det studerade sambandet.

Studierna visade ett klart samband mellan födelseland/region och självrapporterad ohälsa samt psykosomatiska besvär. Det finns också ett samband mellan självrapporterad långvarig sjukdom och nedsatt arbetsförmåga. De utlandsfödda kvinnorna hade större risk för ohälsa än svenskfödda kvinnor. Styrkan i sambandet minskade något, men kvarstod, när hänsyn hade tagits till faktorer som ålder, civilstånd, antal barn, utbildningsnivå, arbete respektive arbetslöshet, ekonomiska resurser och socialt nätverk.

Gruppen kvinnor med flyktingstatus rapporterade en ytterligare försämring av ohälsan mellan 1980- och 1990-talet. Så var det inte för de andra grupperna av utlandsfödda kvinnor. Däremot hade svenskfödda kvinnor förhållandevis sämre hälsa på 1990-talet jämfört med 1980-talet. Även risken för självrapporterade psykosomatiska besvär ökade för kvinnliga flyktingar, svenska samt finska kvinnor

från 1980-talet till 1990-talet. Den andra studien visade att både invandrarkvinnor och svenska kvinnor rapporterade ett försämrat hälsotillstånd 1998 jämfört med i början av 1990-talet.

*Har utlandsfödda kvinnor ökad risk för inläggning på sjukhus på grund av psykiatrisk respektive somatisk sjukdom?*

I den tredje studien används data från MigMed och Patientregistret för att studera sambandet mellan födelseland och olika faktorer som inverkar på risken för första inläggningen på sjukhus på grund av psykiatriska respektive somatiska sjukdomar under åren 1994-98.

Studien visade att utlandsfödda kvinnor och andra generationens invandrarkvinnor (dvs. födda i Sverige med minst en utlandsfödd förälder) hade högre risk för sjukhusinläggning på grund av psykiatriska sjukdomar än svenska kvinnor. Risken minskade något, när man tog hänsyn till ålder, civilstatus, antal barn och disponibel inkomst. Endast kvinnor med utomeuropeisk flyktingstatus hade högre risk för inläggning på sjukhus på grund av somatiska sjukdomar än svenskfödda kvinnor.

*Har födelseland något samband med risker för icke-normalt förlossningsförlopp och om medicinsk smärtlindring används vid förlossning?*

I den fjärde och femte studien används data från WomMed för åren 1996-1998, där bland annat data från Medicinska Födelseregistret ingår. I den fjärde studien skattades sambandet mellan födelseland, indelat i tolv grupper, och olika faktorer (såsom ålder, antal barn, utbildningsnivå och antal mödravårdsbesök) inverkan på risken att få ett icke-normalt förlossningsförlopp. Den femte studien undersökte sambandet mellan födelseland och att inte använda medicinsk smärtlindring vid förlossning, och benägenhet att använda epidural/spinal bedövning (ryggbedövning) som smärtlindring vid förlossning.

Den fjärde studien visade att kvinnor från Afrika söder om Sahara, Iran, Asien och Latinamerika löpte högre risk för ett icke-normalt förlossningsförlopp än svenskfödda kvinnor. Däremot löpte kvinnor från Sydeuropa, Turkiet och arabiska länder lägre risk för icke-normalt förlossningsförlopp än svenskfödda kvinnor. Flera av grupperna avvek också när det gäller flera av de förklarande faktorernas inverkan på att få ett icke-normalt förlossningsförlopp jämfört med svenskfödda kvinnor. Den femte studien visade att det fanns ett klart samband mellan kvinnor från Sydeuropa, Bosnien, Turkiet, arabisk talande/muslimska och asiatiska länders och deras benägenhet att inte använda medicinsk smärtlindring. Samma grupper av kvinnor hade också mindre benägenhet att använda ryggbedövning som smärtlindring vid förlossning. Däremot, var kvinnor från Iran och Latinamerika mer benägna att använda ryggbedövning som smärtlindring vid förlossning än svenskfödda kvinnor.

*Hur skulle dessa resultat kunna tolkas i ett vidare perspektiv?*

Krav att orka, att bära ansvaret, att vara till för andra och att inte se sina egna gränser leder till utmattning, både fysiskt och psykiskt, och i förlängningen till vanmakt och försämrad hälsa. Många kvinnor ägnar flera år åt barnafödande arbete, jämsides med annat betalt och obetalt arbete, där gränsen är vag mellan vad som är "normalt" arbete, hälsa och ohälsa. Omständigheterna under dessa år och hur kvinnor blivit bemötta visade sig ha stor betydelse för kvinnors hälsa senare i livet.

*Hur kan resultat från studierna tolkas utifrån ett feministiskt och etnicitets/anti-rasistiskt perspektiv?*

Dagens svenska samhällsdebatt genomsyras av jämställdhetsfrågor. Men ojämlikheten finns kvar i löneskillnader, yrkessegregering, stress och hushållsarbete. I vissa avseenden har den också fördjupats. Endast tretton procent av de svenska paren kan idag räknas som jämställda, när detta definieras som att dela lika på/ta halva ansvaret för barn och hushållsarbete.

Jämställdhetsdiskussionen i samhället förmedlar samtidigt värderingar, normer och föreställningar som skapar samhörighet mellan "oss svenskar", och som skiljer oss från "dem, invandrarna". Media- och samhälls debatten kopplar intresset för etnicitetsfrågor till problem som sexism, misshandel, och tonårsäktenskap. Det förmedlar ofta en bild av invandrarkvinnor som kuvade och av invandramännen som förtryckande och aggressiva. Det ligger en stor makt i att definiera andra människors egenskaper. Och beroende på sammanhanget är dessa definitioner ofta motsägelsefulla. Det rör sig ofta om grova generaliseringar.

En teoretisk modell har växt fram utifrån studiernas resultat och mina erfarenheter av att ha arbetat inom kvinnohälsa och mödravård med kvinnor från mer än hundra nationaliteter. Modellen har utvecklats från ett feministiskt och etniskt/anti-rasistiskt perspektiv för att belysa utlandsfödda kvinnors möjlighet att påverka sin livssituation vid ohälsa och barnafödande.

Resultaten visar att de strukturella ramarna, (i modellen kallade Offentliga och Privata Patriarkala system) binder fast många kvinnor till villkor som begränsar de synbart fria valen. Det gäller ännu mer i situationer av ohälsa och barnafödande, då det kan vara svårt att orka med den vanliga belastningen i livet. Det är än mer markant för utlandsfödda kvinnor som har bytt "kulturella speglar", oftare saknar släkt och större socialt nätverk - men det gäller också andra kvinnor oavsett ursprung.

Många kvinnor upplever vanmakt när de inte blir bemötta med förståelse och erkännande i vården. I modellen kan det ses som att hälso- och sjukvården genom de enskilda vårdgivarna förtrycker kvinnorna som i sin tur ger negativa hälsoeffekter. Det är viktigt för vårdgivare att bli medvetna om vilka konsekvenser dåligt bemötande, generaliseringar och stereotyper medför och att det i ett längre perspektiv skapar ohälsa.

Modellen belyser även hur kvinnor kan ha en ”huvudroll” kontra ”åskådarrull” i sitt liv. Det betyder att, för att lyckas balansera mellan olika situationer i livet söker kvinnor att motstå kraven att uppfylla samhällets kvinnoideal. Dels genom att sätta gränser för sin ständiga tillgänglighet och lyhörddhet för andras behov, och dels för att skapa sig själv ett egenvärde i egenskap av kvinna.

## 10 REFERENCES

1. **Valenzuela, C. & Benguigui, Y.** Integrated approaches and components in maternal and child health. In: Benguigui, Y., Land, S. et al., eds. *Maternal and child health activities at the local level: Toward the goals of the world summit for children*. Washington, DC, Pan American Health Organization, 1998, pp. 29-52.
2. **Höjeberg, P.** *Tröskelkvinnor. Barnafödande som kultur*. Stockholm, Carlssons Bokförlag, 2000.
3. **Grönlén Zetterquist, K.** Att vara kroppssubjekt. Ett fenomenologiskt bidrag till feministisk teori och religionsfilosofi. (Being a Body subject. A phenomenological contribution to feminist theory and philosophy of religion). *Department of Theology*. Uppsala, Uppsala University, 2002, pp. 222.
4. **Artschwager Kay, M.** Writing an Ethnography of Birth. In: Artschwager Kay, M., ed. *Anthropology of Human Birth*. Philadelphia, F.A.Davis Company, 1982, pp. 1-24.
5. **Avotri, J.A. & Walters, V.** "We women worry a lot about our husbands": Ghanian women talking about their health and their relationship with men. *J Gender Studies*. 10 (2) (2001).
6. **Walters, V., Avotri, J.A. & Charles, N.** Your heart is never free: Women in Wales and Ghana talking about distress. *Can Psychology*. 40: 129-42 (1999).
7. **Carlstedt, G. & Forssén, A.** *Mellan ansvar och makt. En diskussion om arbete, hälsa och ohälsa utifrån tjugo kvinnors livsberättelser. Akademisk avhandling*. Luleå tekniska universitet, Institutionen för arbetsvetenskap, 1999.
8. **Berkowitz, G. & Daling, J.R.** Reproductive health. In: Goldman, M.B. & Hatch, M.C., eds. *Women and Health*, Academic Press, 2000.
9. **Doyal, L.** *What Makes Women Sick: Gender and the Political Economy of Health*. London, Macmillan Press LTD, 1995.
10. **Doyal, L.** *Women and Health Service*. Buckingham, Philadelphia, Open University Press, 1998.
11. **Krieger, N. & Zierler, S.** Accounting for the health of women. *Critical Public Health*. 7 (1/2): 38-49 (1997).
12. **Smaje, C.** *Health, Race and Ethnicity: Making sense of the evidence*. London, King's Fund Institute/Share, 1995.
13. **Douglas, J.** Meeting the health needs of women from black and minority ethnic communities. In: Doyal, L., ed. *Women and Health Service*. Buckingham, Open University Press, 1998.
14. **Douglas, J.** Black women's health matters: putting black women on the research agenda. In: Roberts, H., ed. *Women's health matters*. London, Routledge, 1992.
15. **Riska, E.** Women's health: issues and prospects. *Scand J Public Health*. 28 (2): 84-7. (2000).

16. **Ruiz, M.T. & Verbrugge, L.M.** A two-way view of gender bias in medicine. *J Epidemiol Community Health*. 51 (2): 106-9. (1997).
17. **Malterud, K.** Feministisk teori kan utmana medicinsk kunskap. *Kvinnovetenskaplig Tidskrift* (2-3): 5-18 (2002).
18. **Mulinari, D.** Teorier för en antirasistisk feminism-dialoger. In: Mulinari, D., Sandell, K. et al., eds. *Mer än bara kvinnor och män. Feministiska perspektiv på genus. (More than just women and men. Feminist perspective on gender)*. Lund, Sweden, Studentlitteratur, 2003, pp. 21-59.
19. **Elvin-Novak, Y.** Accompanied by Guilt. Modern Motherhood, the Swedish way. *Department of Psychology*. Stockholm, Sweden, University of Stockholm, 1999.
20. **Jansson, M.** Livets dubbla vedermödor. Om moderskap och arbete. *Department of Political Science*. Stockholm, Sweden, University of Stockholm, 2001.
21. **Schömer, E.** Jämställdhetens dilemman. In: Mulinari, D., Sandell, K. et al., eds. *Mer än bara kvinnor och män. Feministiska perspektiv på genus. (More than just women and men. Feminist perspective on gender)*. Lund, Sweden, Studentlitteratur, 2002, pp. 89-118.
22. **Ahrne, G. & Roman, C.** Hemmet, barnen och makten: Förhandlingar om arbete och pengar i familjen. Stockholm, Statens Offentliga Utredningar 1997:139, 1997.
23. **United Nations.** Constitution of the World Health Organisation. Geneva, World Health Organisation, WHO, 1947.
24. **Eriksson, K.** *Vårdprocessen*. Stockholm, Almqvist & Wiksell, 1988.
25. **Eriksson, K.** *Hälsans idé*. Stockholm, Almqvist & Wiksell, 1989.
26. **Nordenfelt, L.** *On the Nature of Health. An Action Theoretic Approach*. Dordrecht, Reidel Publishing House, 1987.
27. **FRN & Forskningsrådsnämnden.** Self-rated health in a European perspective, report 2000:2. Uppsala, The Swedish Council for Planning and Coordination of Research, 2000, pp. 213.
28. **Weitzman, B. & Berry, C.** Health status and health care utilization among New York City home attendants: an illustration of the needs of working poor, immigrant women. *Women Health*. 19 (2-3): 87-105 (1992).
29. **Jacobs, D., Tovar, J., Hung, O., Kim, M., Ye, P., Chiang, W. & Goldfrank, L.** Behavioral risk factor and preventive health care practice survey of immigrants in the emergency department. *Acad Emerg Med*. 9 (6): 599-608 (2002).
30. **Gross, R., Brammli-Greenberg, S. & Remennick, L.** Self-rated health status and health care utilization among immigrant and non-immigrant Israeli Jewish women. *Women Health*. 34 (3): 53-69 (2001).
31. **Gilthorpe, M., Lay-Yee, R., Wilson, R., Walters, S., Griffit, R. & Bedi, R.** Variations in hospitalization rates for asthma among black and minority ethnic communities. *Respir Med*. 92 (4): 642-8 (1998).
32. **Chen, K., Tham, K., Seow, E. & Wong, H.** Extent and appropriateness of emergency department services usage by foreign workers in Singapore. *Ann Acad Med Singapore*. 28 (2): 199-204 (1999).



33. **Bahl, V.** Cancer and ethnic minorities--the Department of Health's perspective. *Br J Cancer Suppl.* 29: S2-10 (1996).
34. **Van Os, J., Castle, D., Takei, N., Der, G. & Murray, R.** Psychotic illness in ethnic minorities: clarification from the 1991 census. *Psychol Med.* 26 (1): 203-8 (1996).
35. **Mortensen, P.B., Cantor-Graae, E. & McNeil, T.F.** Increased rates of schizophrenia among immigrants: some methodological concerns raised by Danish findings. *Psychol Med.* 27 (4): 813-20. (1997).
36. **Selten, J.P., Slaets, J.P. & Kahn, R.S.** Schizophrenia in Surinamese and Dutch Antillean immigrants to The Netherlands: evidence of an increased incidence. *Psychol Med.* 27 (4): 807-11. (1997).
37. **Zolkowska, K., Cantor-Graae, E. & McNeil, T.F.** Increased rates of psychosis among immigrants to Sweden: is migration a risk factor for psychosis? *Psychological Medicine.* 31: 669-678 (2001).
38. **Johansson, L.M., Sundquist, J., Johansson, S.E. & Bergman, B.** Ethnicity, social factors, illness and suicide: a follow-up study of a random sample of the Swedish population. *Acta Psychiatr Scand.* 95 (2): 125-31 (1997).
39. **Bayard-Burfield, L., Sundquist, J. & Johansson, S.E.** Self-reported long-standing psychiatric illness as a predictor of premature all-cause mortality and violent death: a 14-year follow-up study of native Swedes and foreign-born migrants. *Soc Psychiatry Psychiatr Epidemiol.* 33 (10): 491-6. (1998).
40. **Johansson, L.M.** Migration, mental health and suicide: An epidemiological psychiatric and cross-cultural study. *Department of Clinical Neuroscience and Family Medicine, Psychiatric Section, Huddinge University Hospital.* Stockholm, Karolinska Institutet, Sweden, 1997, pp. 114.
41. **Bayard-Burfield, L., Sundquist, J., Johansson, S.E. & Träskman-Bendz, L.** Attempted suicide among Swedish-born people and foreign-born migrants. *Arch Sui Res.* 5: 43-55 (1999).
42. **Bruxner, G., Burvill, P., Fazio, S. & Febbo, S.** Aspects of psychiatric admissions of migrants to hospitals in Perth, Western Australia. *Aust N Z J Psychiatry.* 31 (4): 532-42 (1997).
43. **Roberts, N. & Crockford, D.** Psychiatric admissions of Asian Canadians to an adolescent inpatient unit. *Can J Psychiatry.* 42 (8): 847-51. (1997).
44. **Li, H. & Browne, A.** Defining mental illness and accessing mental health services: perspectives of Asian Canadians. *Can J Commun Ment Health.* 19 (1): 143-59 (2000).
45. **Stronks, K., Ravelli, A. & Reijneveld, S.** Immigrants in the Netherlands: equal access for equal needs? *J Epidemiol Community Health.* 55 (10): 701-7 (2001).
46. **Folkes, C.** Thought field therapy and trauma recovery. *Int J Emerg Ment Health.* 4 (2): 99-103 (2002).
47. **Haasen, C.Y., O. Mass, R. Krausz, M.** 2000 Feb;101(2):. Potential for misdiagnosis among Turkish migrants with psychotic disorders: a clinical

- controlled study in Germany. *Acta Psychiatr Scand.* 101 (2): 125-9 (2000).
48. **Leclere, F., Jensen, L. & Biddlecom, A.** Health care utilization, family context, and adaptation among immigrants to the United States. *J Health Soc Behav.* 35 (4): 370-84 (1994).
49. **tenHave, M.L. & R.V., B.** Inequalities in mental health care and social services utilisation by immigrant women. *European Journal of Public Health.* 9: 45-51 (1999).
50. **Parker, J.D., Schoendorf, K.C. & Kiely, J.L.** Associations between measures of socioeconomic status and low birth weight, small for gestational age, and premature delivery in the United States. *Ann Epidemiol.* 4 (4): 271-8 (1994).
51. **Zelaya Blandon, E.** Adolescent pregnancies in Nicaragua. *Epidemiology, Department of Public Health and Clinical Medicine.* Umeå, University of Umeå, 1999, pp. 1-47.
52. **Castro, T.** The impact of women's education on fertility in Latin America: Searching for explanations. *Inst Fam Plann Perspect.* 21: 52-57 & 80 (1995).
53. **Sundquist, J. & Johansson, S.-E.** Long-term illness among indigenous and foreign-born people in Sweden. *Soc Sci Med.* 44 (2): 189-198 (1997).
54. **Wamala, S.P.** [Large social inequalities behind women's risk of coronary disease. Unskilled work and family strains are crucial factors]. *Lakartidningen.* 98 (3): 177-81. (2001).
55. **Sundquist, J.** Ethnicity, social class and health. A population-based study on the influence of social factors on self-reported illness in 223 Latin American refugees, 333 Finnish and 126 south European labour migrants and 841 Swedish controls. *Soc Sci Med.* 40 (6): 777-87 (1995).
56. **Johansson, S.E. & Sundquist, J.** Unemployment is an important risk factor for suicide in contemporary Sweden: an 11-year follow-up study of a cross-sectional sample of 37,789 people. *Public Health.* 111 (1): 41-5 (1997).
57. **Bakketeig, L.S., Cnattingius, S. & Knudsen, L.B.** Socioeconomic differences in fetal and infant mortality in Scandinavia. *J Public Health Policy.* 14 (1): 82-90. (1993).
58. **Martikainen, P.T. & Valkonen, T.** Excess mortality in unemployed men and women during a period of rapidly increasing unemployment. *Lancet.* 348 (9032): 909-912 (1996).
59. **Johansson, L.M., Sundquist, J., Johansson, S.E., Qvist, J. & Bergman, B.** The influence of ethnicity and social and demographic factors on Swedish suicide rates. A four-year follow-up study. *Soc Psychiatry Psychiatr Epidemiol.* 32 (3): 165-70 (1997).
60. **King, E.** Suicide in the mentally ill. An epidemiological sample and implications for clinicians. *Br J Psychiatry.* 165: 658-663 (1994).
61. **Roy, A.** Risk factors for suicide in psychiatric patients. *Arch Gen Psychiatry.* 39 (9): 1089-95. (1982).
62. **Belle, D.** *Lives in Stress: Women and depression.* Beverly Hills, CA, Sage Publications, 1982.

63. **Leigh, W.A.** The health of African American women. In: Adams, D., ed. *Health issues for women of color: a cultural diversity perspective*. Thousand Oaks, CA, Sage Publications, 1995, pp. 112-131.
64. **Harding, S. & Balarajan, R.** Limiting long-term illness among black Caribbeans, black Africans, Indians, Pakistanis, Bangladeshis and Chinese born in the UK. *Ethn Health*. 5 (1): 41-46 (2000).
65. **Harding, S. & Balarajan, R.** Patterns of mortality in second generation Irish living in England and Wales: longitudinal study. *BMJ*. 312 (7043): 1389-92. (1996).
66. **Guendelman, S., Gould, J.B., Hudes, M. & Eskenazi, B.** Generational differences in perinatal health among the Mexican American population: findings from HHANES 1982-84. *Am J Public Health*. 80 Suppl: 61-5. (1990).
67. **Rumbaut, R.G. & Weeks, J.R.** Unraveling a public health enigma: Why do immigrants experience superior perinatal health outcomes? *Research Sociology Health Care*. 13: 337-391 (1996).
68. **World Health Organisation.** Care in normal birth: a practical guide/report of a technical working group. Geneva, Maternal and Newborn Health Safe Motherhood Unit, 1996, pp. 53.
69. **Pittroff, R., Cambell, O.M.R. & Filippi, V.G.A.** What is quality in maternity care? An international perspective. *Acta Obstet Gynecol Scand*. 81: 277-283 (2002).
70. **Chalmers, B., Mangiaterra, V. & Porter, R.** WHO principles of perinatal care: The essential antenatal, perinatal, and postpartum care course. *Birth*. 28 (3): 202-206 (2001).
71. **WHO & World Health Organisation.** Essential antenatal, perinatal, postpartum care training modules. Copenhagen, WHO Regional Office for Europe, 2002.
72. **Morgan, B., Bulpitt, C. & P.J., L.** Analgesia and satisfaction in childbirth (The Queen Charlotte's 1000 Mother Survey). *Lancet*. 9: 808-11 (1982).
73. **Waldenström, U., Borg, I.-M., Olsson, B., Sköld, M. & Wall, S.** The childbirth Experience: A Study of 295 New Mothers. *Birth*. 23: 144-153 (1996).
74. **Lundgren, I. & Dahlberg, K.** Women's experiences of pain during childbirth. *Midwifery*. 14: 105-110 (1998).
75. **Lowe, N.K.** The Nature of Labor Pain. *American Journal of Obstetrics and Gynecology*. 186 (5 Supplement): S 16-24 (2002).
76. **Caton, D., Corry, M.P., Frigoletto, F.D., Hopkins, D.P., Lieberman, E., Mayberry, L., Rooks, J.P., Rosenfield, A., Sakala, C., Simkin, P. & Young, D.** The Nature and Management of labor Pain: Executive Summary. *American Journal of Obstetrics and Gynecology*. 186 (5 Supplement): S 1-15 (2002).
77. **National Board of Health and Welfare.** Pain relief during birth (in Swedish) Smärtlindring vid förlossning). Stockholm, Sweden, National Board of Health, Socialstyrelsen, 1978.

78. **Waldenström, U., Bergman, V. & Vasell, G.** The complexity of labor pain: experiences of 278 women. *Journal of Psychosomatic Obstetric and Gynaecology*. 17: 215-228 (1996).
79. **Rooks, J.P.** Evidence-based practice and its application to childbirth care for low-risk women. *Journal of Nurse-Midwifery*. 44 (4): 355-369 (1999).
80. **Caton, D., Frölich, M.A. & Euliano, T.Y.** Anesthesia for Childbirth: Controversy and Change. *American Journal of Obstetrics and Gynecology*. 186 (5 Supplement): S 25-30 (2002).
81. **Åberg, A. & Lindmark, G.** Competence and compliance in antenatal care. Experience from Sweden. *Int J Technol Assess Health Care*. 8 (Suppl 1): 20-4 (1992).
82. **National Board of Health and Welfare, C.f.E.** Facts about mothers, births and newborn children. Medical Birth Register 1973-2000 (in Swedish). Stockholm, National Board of Health and Welfare, 2002.
83. **Hildingsson, I., Waldenström, U. & Rådestad, I.** Women's expectations on antenatal care as assessed in early pregnancy: number of visits, continuity of caregiver and general content. *Acta Obstet Gynecol Scand*. 81: 118-125 (2002).
84. **Olsson, P.** Antenatal midwifery consultations. A qualitative study. *Inst. for Caring Science*. Umeå, Sweden, University of Umeå, 2000.
85. **Sikorski, J., Clement, S., Wilson, J., Das, S. & Smeeton, N.** A survey of health professional's views on possible changes in provision and organisation of antenatal care. *Midwifery*. 11: 61-8 (1995).
86. **Villar, J., Carroli, G., Khan-Neelofur, D., Piaggio, G. & Gulmezoglu, M.** Patterns of routine antenatal care for low-risk pregnancy. *Cohrane Database Systematical Review 2001*, Software Update, Oxford, 2001.
87. **Sikorski, J., Wilson, J., Clement, S., Das, S. & Smeeton, N.** A randomised controlled trial comparing two schedules of antenatal visits: the antenatal care project. *British Medical Journal*. 312 (7030): 546-553 (1996).
88. **Delvaux, T., Buekens, P., Godin, I. & Boutsen, M.** Barriers to prenatal care in Europe. *Am J Prev Med*. 21 (1): 52-9 (2001).
89. **Petrou, S., Kupek, E., Vause, S. & Maresh, M.** Antenatal visits and adverse perinatal outcomes: results from a British population-based study. *Eur J Obstet Gynecol Reprod Biol*. 106 (1): 40-49 (2003).
90. **Castles, S. & Miller, M.J.** *The age of migration: international population movements in the modern world*. New York, The Guildford Press, 1993.
91. **Castles, S.** *Ethnicity and globalisation: from migrant worker to transnational citizen*. London, Sage Publications, 2000.
92. **Papastergiadis, N.** *The turbulence of migration*. Cambridge, Polity Press, 2000.
93. **Essed, P.** *Diversity: Gender, color and culture*. Amherst, United states of America, University of Massachusetts Press, 1996.
94. **Anthias, F. & Lloyd, C.** *Introduction. Fighting racisms, defining the territory*. London and New York, Routledge, 2002.

95. **Castles, S., Booth, H. & Wallace, T.** *Here for good: Western Europe's new ethnic minorities.* London, Pluto Press, 1984.
96. **Weigers, M.E. & Sherraden, M.S.** A critical examination of acculturation: the impact of health behaviours, social support and economic resources on birth weight among women of Mexican descent. *Int Migration Rev.* 35 (3): 805-39 (2001).
97. **Marsella, A.J. & Yamada, A.M.** Culture and mental health: an introduction and overview of foundations, concepts, and issues. *Handbook of multicultural health: assessment and treatment of diverse populations,* Academic Press, 2000.
98. **Gordon, M.** *Assimilation in American life.* New York, Oxford University Press, 1964.
99. **Portes, A. & Rumbaut, R.G.** *Immigrant America, a portrait,* University Press California, 1996.
100. **Buriel, R. & DeMent, T.** Immigration and sociocultural change in Mexican, Chinese and Vietnamese. In: Booth, A., Crouter, A.C. et al., eds. *Immigration and the family: research and policy on U.S. immigrants.* Mayway, NJ, Lawrence Erlbaum Associates, 1997, pp. 165-200.
101. **Glazer, N. & Moynihan, D.P.** Introduction. In: Glazer, N. & Moynihan, D.P., eds. *Ethnicity: theory and experience.* Cambridge, Harvard University Press, 1975.
102. **Smith, A.D.** *The ethnic origins of nations.* Oxford, Blackwell, 1986.
103. **DeLaet, D.L.** Introduction: the invisibility of women in scholarship on international migration. In: Kelsan, G.A. & DeLaet, D.L., eds. *Gender and immigration.* London, Macmillan Press Ltd, 1999.
104. **United Nations.** The migration of women: methodological issues in the measurement and analysis of internal and international migration. Santo Domingo, Dominican Republic, United Nations: International Research and Training Institute for the Advancement of Women, 1994.
105. **Zlotnik, H.** The south-to-north migration of women. *Int Migration Rev.* 29 (1): 229-54 (1995).
106. **Moss, N.** Socio-economic inequalities in Women's Health. In: Goldman, M.B. & Hatch, M.C., eds. *Women and health.* San Diego, California, Academic Press, 2000, pp. 541-553.
107. **Hattar-Pollara, M. & Meleis, A.I.** The stress of immigration and the daily lived experiences of Jordanian immigrant women in the United States. *West J Nurs Res.* 17 (5): 521-39. (1995).
108. **Meadows, L.M., Thurston, W.E. & Melton, C.** Immigrant women's health. *Soc Sci Med.* 52 (9): 1451-8. (2001).
109. **Mendias, E.P., Clark, M.C. & Guevara, E.B.** Women's self-perception and self-care practice: Implications for health care delivery. *Health Care Women Int.* 22: 299-312 (2001).
110. **Sundquist, J. & Johansson, S.E.** Self-reported poor health and low educational level predictors for mortality: a population-based follow-up study of 39,156 people in Sweden. *J Epidemiol Community Health.* 51 (1): 35-40 (1997).

111. **Malmstrom, M., Sundquist, J., Bajekal, M. & Johansson, S.E.** Indices of need and social deprivation for primary health care. *Scand J Soc Med.* 26 (2): 124-30 (1998).
112. **Kindlund, H.** (Early retirement pension and sickleave among immigrants and Swedes in 1990)Förtidpensionering och sjukfrånvaro 1990 bland invandrare och svenskar. Stockholm, Swedish National Board of Health and Welfare, 1995, pp. Report 1995;5: 135-151.
113. **Sundquist, J. & Johansson, S.E.** Migración y salud. La consecuencia social y médica del exilio y la rapatriación. [Migration and health. Social and medical consequences of exile and repatriation] Original paper in Spanish. *Rev Med Chil.* 123 (4): 426-38 (1995).
114. **Sundquist, J., Behmen-Vincevic, A. & Johansson, S.-E.** Poor quality of life and health in young to middle-aged Bosnian female war refugees: a population-based study. *Public Health.* 112: 21-26 (1998).
115. **Essen, B.** *Perinatal mortality among immigrants from Africa's Horn. The importance of experience, rationality and myths for risk assessment during pregnancy. Dissertation.* Malmö, Studentlitteratur, 2001.
116. **Lazarus, E.S. & Philipson, E.H.** A longitudinal study comparing the prenatal care of Puerto Rican and white women. *Birth.* 17 (1): 6-11. (1990).
117. **Woollett, A., Dosanjh, N., Nicolson, P., Marshall, H., Djhanbakhch, O. & Hadlow, J.** The ideas and experiences of pregnancy and childbirth of Asian and non-Asian women in east London. *Br J Med Psychol.* 68 (Pt 1): 65-84. (1995).
118. **Hildingsson, I.** Kvinnors förväntningar på och upplevelser av vården under graviditet och förlossning. (Women's expectation and experiences of care during pregnancy and childbirth. *Department of Nursing.* Stockholm, Sweden, Karolinska Institutet, 2003.
119. **Lieberman, L.S., Stoller, E.P. & Burg, M.A.** Women's health care: cross-cultural encounters within the medical system. *J Fla Med Assoc.* 84 (6): 364-73. (1997).
120. **Esposito, N.W.** Marginalized women's comparisons of their hospital and freestanding birth center experiences: a contrast of inner-city birthing systems. *Health Care Women Int.* 20 (2): 111-26. (1999).
121. **Cuesta, M.** Vardagssamtal mellan kvinnor. Feministiska reflektioner kring berättandet. In: Mulinari, D., Sandell, K. et al., eds. *Mer än bara kvinnor och män. Feministiska perspektiv på genus. (More than just women and men. Feminist perspective on gender).* Lund, Sweden, Studentlitteratur, 2003, pp. 119-136.
122. **Arnfred, S.** Simone de Beauvoir in Africa: Woman= The Second Sex? Issues of African Feminist Thought. In: Conference Report, Ö.n., ed. *Svensk Genusforskning i Världen (Swedish Gender Research in the World.* Göteborg, Sweden, Nationella sekretariatet för genusforskning, 2001, pp. 62-83.
123. **Mohanty, C.** Under Western Eyes: Feminist Scholarship and Colonial Discourses. In: Mohanty, C., ed. *Third World Women and the Politics of Feminism.* Bloomington, Indiana, USA, Indiana University Press, 1991.

124. **Mellberg, N.A.** När det överkliga blir verklighet. Mödrars situation när deras barn utsätts för sexuella övergrepp av fäder. *Department of Sociology*. Umeå, Sweden, University of Umeå, 2002.
125. **hooks, b.** *Feminism is for everybody : passionate politics*. Cambridge Md., South End Press, cop., 2000.
126. **Amadiume, I.** *Daughters of the goddess, daughters of imperialism African women struggle for culture, power and democracy*. London, Zed, 2000.
127. **Akpınar, A.** Shame: Gender and Ethnic Identity Construction among Turkish Divorcees in Migration Context. *Department of Sociology*. Uppsala, University of Uppsala, 1998.
128. **Small, R., Yelland, J., Lumley, J., Brown, S. & Liamputtong, P.** Immigrant women's views about care during labor and birth: an Australian study of Vietnamese, Turkish, and Filipino women. *Birth*. 29: 266-277 (2002).
129. **Blackford, J. & Street, A.** Cultural conflict: the impact of western feminism on nurses caring for women of non-speaking background. *Journal of Clinical Nursing*. 11: 664-671 (2002).
130. **Alvesson, M. & Sköldberg, K.** *Tolkning och reflektion. vetenskapsfilosofi och kvalitativ metod*. Lund, Sweden, Studentlitteratur, 1994.
131. **Kirkeby, O.** Abduktion. In: Andersen, O., ed. *Vetenskapsteori och metodlära, en introduktion*. Lund, Sweden, Studentlitteratur, 1994.
132. **Wärneryd, B.** Levnadsförhållanden. Återintervjustudie i undersökningen av levnadsförhållanden 1989 (ULF). (Living conditions. Reinterview in ULF 1989.) Appendix 12, Statistics Sweden, 1991.
133. **Cnattingius, S., Ericson, E., Gunnarskog, J. & Källén, B.** A quality study of a medical birth registry. *Scand J Soc Med*. 18: 143-8 (1990).
134. **Bayard-Burfield, L.** Migration and Mental Health. Epidemiological Studies of Immigrants in Sweden. *Department of Community Medicine*. Malmö, University of Lund, 1999, pp. 138.
135. **Statistics Sweden.** Background information to "Louise"; Labourmarket and Education Statistics. Disposable income; pp 152-158. Bakgrundsfakta till Arbetsmarknads och Utbildningsstatistik Louise. Stockholm, Statistics Sweden, 2001, pp. 152-158.
136. **Hosmer, D.V. & Lemeshow, S.** *Applied logistic regression (2nd edition)*. New York, Wiley & Sons, Inc., 2000.
137. **Breslow, N.E. & Day, N.E.** *Statistical methods in cancer research. Volume 11*. Oxford, Oxford University Press, 1987.
138. **Diggle, P.J., Liang, K.Y. & Zeger, S.L.** *Analysis of Longitudinal Data*. Oxford, Clarendon Press, 1996.
139. **Kleinbaum, D.** *Survival Analysis*. New York, Springer Verlag, 1996.
140. **SAS.** SAS Software Release 8.2, Release 8.2 ed. Cary, NC, USA, SAS Institute Inc., 1999-2001.
141. **Johansson, S.E. & Sundquist, J.** Change in lifestyle factors and their influence on health status and all-cause mortality. *Int J Epidemiol*. 28 (6): 1073-80 (1999).

142. **Statistics Sweden.** The Swedish survey of living conditions. Design and methods. Stockholm, Statistics Sweden, 1996, pp. Appendix 16.
143. **Statistics Sweden.** Levnadsförhållanden: Appendix 17. Analys av bortfallet bland "utsatta" grupper i Undersökningen av levnadsförhållanden (ULF) 1986-1999, Statistics Sweden, 2001.
144. **Ahmadi, F. & Ahmadi, N.** *Iranian Islam: The concept of the Individual.* London & New York, Macmillan Press LTD & St. Martin's Press Inc., 1998.
145. **Darvishpour, M.** Invandrarkvinnor som bryter mönstret. Hur maktförskjutning inom iranska familjer i Sverige påverkar relationen. (Immigrant Women who Break Established Patterns: How changing power relations within Iranian families in Sweden influence relationships). *Faculty of Social Science, Institution of Sociology.* Stockholm, University of Stockholm, 2003, pp. 216.
146. **Statistic Sweden.** Skilsmässor och separationer. Stockholm, SCB Statistic Sweden, 1995.
147. **Walters, V. & Charles, N.** "I just cope from day to day": unpredictability and anxiety in the lives of women. *Soc Sci Med.* 45 (11): 1729-39. (1997).
148. **Johansson, E., Hamberg, K., Lindgren, G. & Westman, G.** "I've been crying my way" -qualitative analysis of a group of female patients' consultation experiences. *Family Practices.* 13: 498-503 (1996).
149. **Esseved, J. & Eldén, S.** Frånvarande kvinnliga subjekt -en analys av medicinska texter om klimakteriet. *Kvinnovetenskaplig Tidskrift* (2-3): 45-59 (2002).
150. **Malterud, K.** The (Gendered)Construction of Medical Diagnosis. Interpretation of Symptoms and Signs in Female Patients. *Theoretical Medicine and Bioethics* (1999).
151. **Foss, C. & Sundby, J.** The construction of the gendered patient: hospital staff's attitudes to female and male patients. *Patient Education and Counseling.* 49 (1): 45-52 (2003).
152. **Oakley, A.** *The captured Womb: a history of the medical care of pregnant women.* Oxford, Basil Blackwell, 1981.
153. **Rumbaut, R.C.** The crucible within: ethnic identity, self-esteem, and segmented assimilation among children of immigrants. In: Portes, A., ed. *The New Second Generation.* New York, Russel Sage Foundation, 1996.
154. **Phinney, J.S.** Ethnic identity in adolescents and adults: review of research. *Psychol Bull.* 108 (3): 499-514. (1990).
155. **Ekblad, S.** Diagnostik och behandling av patienter med invandrabakgrund. Stressforskningsrapport nr. 262. Stockholm, Statens institut för psykosocial miljömedicin, 1996.
156. **Hosseini-Kaladjahi, H.** Iranians and the Swedish labour market. Forskningsrapport Nr 15. Stockholm, Stockholms Universitet, Sociologiska Institutionen, 1992.
157. **Franzén, E.C.** *Invandring och arbetslöshet.* Lund, Studentlitteratur, 1997.



158. **Kemuma, J.** *The past and the future in the present Kenyan adult immigrants stories on orientation and adult education in Sweden. Dissertation.* Uppsala, Uppsala Universitet, 2000.
159. **Hemström, Ö.** Klasskillnader i hälsa och dödlighet. In: Marklund, S., ed. *Arbetsliv och hälsa 2000.* Stockholm, Arbetslivsinstitutet, 2000.
160. **Ekblad, S.** Gender and mental health in a multicultural society. In: Wamala, S.P. & Lynch, J.W., eds. *Gender and Social Inequities in Health -A Public Issue.* Lund, Sweden, Studentlitteratur, 2002, pp. 233-264.
161. **Wijma, B. & Siwe, K.** Empowerment i gynstolen. Teori, empiri och möjligheter. *Kvinnovetenskaplig Tidskrift* (2-3): 61-74 (2002).
162. **Trulsson, K.** Konturer av ett kvinnligt fält. Om missbrukande kvinnors möten i familjeliv och behandling . *Department of Social Science.* Lund, Sweden, University of Lund, 2003.
163. **Sheiner, E.K., Sheiner, E., Shoham-Vardi, I., Mazor, M. & Katz, M.** Ethnic differences influence care giver's estimates of pain during labour. *Pain.* 81 (3): 229-305 (1999).
164. **Cheung, N.** The cultural and social meanings of childbearing for Chinese and Scottish women in Scotland. *Midwifery.* 18 (4): 279-95 (2002).
165. **National Board of Health and Welfare, C.f.E.** Birth outcome among immigrant women in Sweden (in swedish). Stockholm, National Board of Health and Welfare, 1998, pp. 54.
166. **Carballo, M., Divino, J.J. & Zeric, D.** Migration and health in the European Union. *Tropical Medicine and International Health.* 3 (12): 936-944 (1998).
167. **Vangen, S., Stoltenberg, C., Johansen, R., Sundby, J. & Stray-Pedersen, B.** Perinatal complications among ethnic Somalis in Norway. *Acta Obstet Gynecol Scand.* 81 (4): 317-22 (2002).
168. **Lundgren, I. & Dahlberg, K.** Midwives' experience of the encounter with women and their pain during childbirth. *Midwifery.* 18: 155-164 (2002).
169. **McCourt, C. & Pearce, A.** Does continuity of carer matter to women from minority ethnic groups. *Midwifery.* 16: 145-154 (2000).
170. **Sheiner, E., Sheiner, E.K., Hershkovitz, R., Mazor, M., Katz, M. & Shoham-Vardi, I.** Overestimation and underestimation of labor pain. *Eur J Obstet Gynecol Reprod Biol.* 91 (1): 37-40 (2000).
171. **Green, J.** Expectations and experiences of pain in labor: findings from a large prospective study. *Birth.* 20: 65-72 (1993).
172. **Senden, I., Wetering, M., Eskes, T., Beierkens, P., Layube, D. & Pitkin, R.** Labor pain: a comparison of parturients in a Dutch and an American teaching hospital. *Obstet Gynecol.* 71: 541-4 (1988).
173. **Weisenberg, M. & Caspi, C.** Cultural and educational influences on pain of childbirth. *Journal of Pain Symptom manage.* 4 (1): 13-9 (1989).
174. **Cavillo, E. & Flaskerud, J.** Evaluation of the pain response by Mexican American and Anglo American women and their nurses. *Journal of Advanced Nursing.* 18 (3): 451-9 (1993).

175. **Engle, P., Scrimshaw, S., Zambrana, R. & Dunkel-Schetter, C.** Prenatal and postnatal anxiety in Mexican women giving birth in Los Angeles. *Health Psychol.* 9 (3): 285-99 (1990).
176. **Kitzinger, S.** Birth and violence against women: generating hypotheses from women's accounts of unhappiness after childbirth. In: Roberts, H., ed. *Women's Health Matters*. London, Routledge, 1992.
177. **Wijma, B., Shei, B., Swahnberg, K., Hilden, M., Offerdal, K., Pikarinen, U., Sidenius, K., Steingrimsdottir, T., Stoum, H. & Halmesmäki, E.** Emotional, physical, and sexual abuse in patients visiting gynaecology clinics. a Nordic cross-sectional study. *Lancet.* 361 (9375): 2107-2113 (2003).
178. **Murray, S.F.** Relation between private health insurance and high rates of caesarean section in Chile: qualitative and quantitative study. *British Medical Journal.* 321 (7275): 1501-1505 (2000).
179. **Behauge, D.P., Victoria, C.G. & Barros, F.C.** Consumer demand for caesarean sections in Brazil: population based birth cohort study linking ethnographic and epidemiological methods. *British Medical Journal.* 324 (7343): 942-945 (2002).
180. **Bowler, I.M.** Stereotypes of women of Asian descent in midwifery: some evidence. *Midwifery.* 9 (1): 7-16. (1993).
181. **Bowes, A.M. & Domokos, T.M.** Pakistani women and maternity care: raising muted voices. *Soc Health Illness.* 18: 45-65 (1996).
182. **Tsianakas, V. & Liamputtong, P.** What women from an Islamic background in Australia say about care in pregnancy and prenatal testing. *Midwifery.* 18: 25-34 (2002).
183. **Goldman, M.B. & Hatch, M.C.** Women and Health. In: Goldman, M.B. & Hatch, M.C., eds. *An overview of women and health*, Academic Press, 2000, pp. 5-14.
184. **Heistaro, S., Vartiainen, E. & Puska, P.** Trends in self-rated health in Finland 1972-1992. *Prev Med.* 25: 625-632 (1996).
185. **Power, C., Matthews, S. & Manor, O.** Inequalities in self-rated health: explanations from different stages of life. *Lancet.* 351 (9108): 1009-14 (1998).
186. **Grant, M.D., Piotrowski, Z.H. & Chappell, R.** Self-reported health and survival in the Longitudinal Study of Aging, 1984-1986. *J Clin Epidemiol.* 48 (3): 375-87. (1995).
187. **McGee, D.L., Liao, Y., Cao, G. & Cooper, R.S.** Self-reported health status and mortality in a multiethnic US cohort. *Am J Epidemiol.* 149 (1): 41-46 (1999).
188. **Goldstein, M.S., Siegel, J.M. & Boyer, R.** Predicting changes in perceived health status. *Am J Public Health.* 74 (6): 611-4. (1984).
189. **Kaplan, S.H.** Patient reports of health status as predictors of physiologic health measures in chronic disease. *J Chronic Dis.* 40 (Suppl 1): 27S-40S. (1987).
190. **Miilunpalo, S., Vuori, I., Oja, P., Pasanen, M. & Urponen, H.** Self-rated health status as a health measure: the predictive value of self-

- reported health status on the use of physician services and on mortality in the working-age population. *J Clin Epidemiol.* 50 (5): 517-528 (1997).
191. **Krakau, I.** Perception of health and use of health care services in a Swedish primary care district. A ten year's perspective. *Scand J Prim Health Care.* 9 (2): 103-8. (1991).
192. **Fylkesnes, K.** Determinants of health care utilization - visits and referrals. *Scand J Soc Med.* 21 (1): 40-50 (1993).
193. **Ren, A., Okubo, T. & Takahashi, K.** Health-related worries, perceived health status, and health care utilization. *J UOEH.* 16 (4): 287-99. (1994).
194. **Idler, E.L. & Angel, R.J.** Self-rated health and mortality in the NHANES-I Epidemiologic Follow-up Study. *Am J Public Health.* 80 (4): 446-452 (1990).
195. **Liang, J.** Self-reported physical health among aged adults. *J Gerontol.* 41 (2): 248-60. (1986).
196. **Moum, T.** Self-assessed health among Norwegian adults. *Soc Sci Med.* 35 (7): 935-47. (1992).
197. **Moller, L., Kristensen, T.S. & Hollnagel, H.** Self rated health as a predictor of coronary heart disease in Copenhagen, Denmark. *J Epidemiol Community Health.* 50 (4): 423-8. (1996).
198. **Lundberg, O. & Manderbacka, K.** Assessing reliability of a measure of self-rated health. *Scand J Soc Med.* 24 (3): 218-224 (1996).
199. **Lindström, H.** Non-response errors in sample surveys. Stockholm, Statistics Sweden, 1983.
200. **National Board of Health and Welfare, C.f.E.** Medical Birth Registration 1996 (in Swedish). Stockholm, National Board of Health and Welfare, 1998.