

# MIGRATION AND HEALTH

GUEST EDITORS: KATARINA HJELM, BJÖRN ALBIN, ROSA BENATO,  
AND PANAYOTA SOUTZI





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# **Migration and Health**

Nursing Research and Practice

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Guest Editors: Katarina Hjelm, Björn Albin, Rosa Benato,  
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## Editorial

# Migration and Health

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Global migration is extensive and ongoing and is today an international process and an international issue affecting every country in the world [1]. As a result of global migration many countries have been transformed into multicultural societies with an increased chance of encountering migrants or those with a migrant history in health care. This can be a challenge for health professionals as disease patterns, health-related beliefs and behaviours, ability to express symptoms and signs of health and illness as well as expectations on health care providers and nursing care may differ significantly. An understanding and knowledge of the relationship between migration and health is limited; however, it is urgently needed all over the world.

International migration is increasing and it is estimated that today 190 states in the world are points of origin, transit, or destination for migrants. It is also estimated that the number of migrants has risen from 82 million in 1970 to 175 million in 2000, more than doubling over the course of thirty years [2], and further into 214 million in 2010 [1]. The reasons for the increase of migration are many; in some instances these are linked to better opportunities for work and better life standards, in others to safeguarding one's life from turbulent political situations or environmental disasters. For example, one important reason for the increase of migration in Europe has been disintegration of the Soviet Union [1].

Health can be influenced by migration and several earlier ecological studies have examined health in relation to lifestyle factors and certain diagnoses of cancer in different migrant groups [3]. The increase in international migration also makes it important to study the consequences on different

elements and levels of the host countries' society using a variety of research designs.

The studies in this edition reflect perspectives from different countries such as Sweden, Canada, the UK, and the United States, countries to which migration is high.

Two of the studies are longitudinal epidemiological studies focusing on the situation in Sweden for migrants in a long-term perspective concerning mortality and the utilization of health care (Albin et al.). The other four studies investigate the health situation for particularly vulnerable groups among migrants, women and migrant farmworkers (Babatunde et al., MacDonnell et al., Guruge et al., and Bail et al.). The latter uses a qualitative approach with focus groups interviews, grounded theory, narrative interviews in a case-study, and structured interviews.

Women's mental health is highlighted in three of the studies; in one it is related to postnatal depression, in another it is discussed in relation to a history of violence and the third one is in relation to health promotion and empowerment. The fourth qualitative study illustrates how isolation from family and community, as well as perceived invisibility within institutions, for example, in health care and social service, affect health and well-being of migrant farm workers.

Although the variety of migrant populations and study designs is limited, we hope that this compilation provides readers and researchers with an overview of contemporary and relevant research activity and helps them find new information in the area of migration and health. We also hope we can inspire others to use different migrant groups and research methods appropriate to the research question and further broaden the existing knowledge base so that

health care professionals have the possibility to adapt their care to the needs of migrant populations.

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## Research Article

# Utilization of In-Hospital Care among Foreign-Born Compared to Native Swedes 1987–1999

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In previous longitudinal studies of mortality and morbidity among foreign-born and native-born Swedes, increased mortality and dissimilarities in mortality pattern were found. The aim of this study is to describe, compare, and analyse the utilization of in-hospital care among deceased foreign- and Swedish-born persons during the years 1987–1999 with focus on four diagnostic categories. The study population consisted of 361,974 foreign-born persons aged 16 years and upward who were registered as living in Sweden in 1970, together with 361,974 matched Swedish controls for each person. Data from Statistics Sweden (SCB) and the National Board of Health and Welfare Centre for Epidemiology, covering the period 1970–1999, was used. Persons were selected if they were admitted to hospital during 1987–1999 and the cause of death was in one of four ICD groups. The results indicate a tendency towards less health care utilization among migrants, especially men, as regards *Symptoms, signs, and ill-defined conditions* and *Injury and poisoning*. Further studies are needed to explore the possible explanations and the pattern of other diseases to see whether migrants, and especially migrant men, are a risk group with less utilization of health care.

## 1. Introduction

In previous longitudinal studies of mortality and morbidity among 723,948 foreign-born and native-born Swedes during 1970–1999, increased mortality and dissimilarities in mortality pattern were found [1, 2]. The results showed increased mortality (OR = 1.08, 95% CI: 1.07–1.08) and a lower age at time of death for foreign-born persons compared with the Swedish controls. The highest risk odds were found for men born in Finland (OR = 1.21), Denmark (OR = 1.11), and Norway/Iceland (OR = 1.074). The mortality pattern showed dissimilarities in causes of death, with a significant higher number of deaths from *Neoplasm* found in migrants from Denmark in, from *diseases of the circulatory system* in migrants from Finland and Poland and from *symptoms, signs, and ill-defined conditions* in migrants from former Yugoslavia.

The differences in mortality and morbidity pattern could indicate differences in utilization of health care among

foreign and native-born Swedes; this needs to be further studied.

Earlier studies of utilization of health care among immigrants and the native population have had a predominantly cross-sectional design and have shown diverging results. Lower utilization has been explained as lack of economic resources such as access to health insurance, and the higher utilization could be a consequence of poorer health [3–10]. Results from The Netherlands showed differences between different migrant groups with more use of hospital care among persons from The Netherlands Antilles and more use of care from a general practitioner among persons from Surinam, Turkey, and Morocco [11]. In Denmark, two studies found no differences for time in hospital between migrants and nonmigrants [12] but persons from Somalia, Turkey, and former Yugoslavia had higher utilization rates for emergency room than Danish-born persons. This was explained by disparities in health, lack of knowledge about the health care system or low satisfaction with primary care

[13]. Studies in Sweden have found that migrants from Chile, Iran, and Turkey had more visits to a physician during a three-month period than native Swedes [14]. This was due to a lower self-rated health and previous exposure to violence in their country of origin. One longitudinal study of admission to hospital for women during 1993–1998 showed a higher risk of psychiatric hospital admission for all foreign-born, but only non-European refugees had a higher risk of somatic hospital admission [15]. In a Swedish study, health care expenditure was not seen as related to country of birth; instead, individual low income and living alone explained the differences demonstrated [16]. Previous predominantly cross-sectional studies of utilization of health care among immigrants and the native population have shown diverging results, and a systematic literature review found a lack of appropriate epidemiological data [16]. This justified new studies, as this one, with a longitudinal design.

Foreign-born persons living in Sweden today constitute 11.5 percent of the total Swedish population, or slightly more than 1 million persons [17]. The migrant population is dominated by labour migrants from the Nordic countries, especially Finland, and European countries like Yugoslavia, Germany, and Poland, but the whole migrant population represents about 140 different nationalities [17].

The aim of this study is to describe, compare, and analyse the utilization of health care, measured as the number of hospital admissions and days in hospital, among deceased foreign and Swedish-born persons during the years 1987–1999. The study will focus on four diagnostic categories where significant differences in mortality and morbidity have been shown. The pattern will be discussed in relation to gender, year of birth, and country of birth testing the hypothesis that no differences exist in health care utilization in relation to being foreign-born.

## 2. Material and Methods

This study is a case-control study based on national register data from a large number of subjects. The study population consisted of 361,974 foreign-born persons aged 16 years old and upward who were registered as living in Sweden in 1970, together with 361,974 matched Swedish controls for each person. This database was originally set up by CAFO (Centre for Labour Market Research) at Växjö University. The data came from Statistics Sweden (SCB) and the National Board of Health and Welfare Centre for Epidemiology, covering the period 1970–1999 and including all foreign-born persons registered as living in Sweden in 1970. The control was matched and was similar in age ( $\pm 3$  year), sex, occupation, and type of employment and lived in the same county in 1970. Type of employment was divided into three groups (government, municipal, or other employer). Occupation was coded according to the Nordic Occupation Classification System (NYK), and county represented all the 24 county council areas in Sweden. This data relates to the situation on November 1, 1970 and was taken from the National Census of 1970, which was a total census, and checked against the National Population Register (RTB), which included data up to December 31, 1999.

Each person was given a code if, he/she was deceased, still living in Sweden, had emigrated, or if no information was available. Information from the National Board of Health and Welfare Centre for Epidemiology on date of death and death diagnosis was added to the database. In total, 906,564 people were included with 50 percent foreign-born persons.

A Swedish matched control could not be found for 20,518 of the foreign-born persons due to the matching criteria.

Exclusion criteria were if no information was available or if a person had emigrated or migrated back (“remigrated”); thus, in total 163,896 persons were excluded from the database. Persons were then also excluded if the information from the control subject was missing due to migration. The database used for analysis finally consisted of 723,948 persons. Causes of death were registered according to the system of International Classification of Diseases (ICD) revision 8 (1969), 9 (1987), or 10 (1998).

From the database, persons were selected if their registered causes of death were in one of the ICD groups of *Neoplasms* (code 140-239 and C00-D48), *Diseases of the circulatory system* (code 390-459 and I00-I99), *Injury and poisoning* (code 800-999 and S00-T98), or *Symptoms, signs, and ill-defined conditions* (code 780-799 and R00-R99). They also had to be admitted to hospital care at least one time during the studied time period 1987–1999.

The rationale for studying the selected ICD groups was an earlier study showing significant higher numbers of deaths among foreign-born than native Swedes in these groups.

The analysis involved, first, a comparison of foreign-born with a selected cause of death with Swedish-born persons with the same cause of death and secondly a comparison of groups of foreign-born from specific countries or regions with the total group of Swedish-born with the same cause of death. Natives from the following countries have been studied in particular: Denmark, Finland, Norway/Iceland, Yugoslavia, Poland, Germany, other European countries, and non-European countries. The rationale for studying the selected countries was that increased mortality and different pattern of causes of death had been shown among these migrant groups in previous analyses and that they constitute the dominant groups (74.9%) of all migrants in Sweden included in the database during the studied period.

**2.1. Statistical Analysis.** Values are given as numbers, means, and percentages. Comparisons were made by tests of significance with Mann-Whitney *U*-test. A value of  $P < 0.05$  was considered statistically significant [18]. Stepwise multiple-linear regression was performed with age at death, being foreign-born, and age as independent variables to investigate the importance of them on the dependent variables, number of hospital admissions, total number of days in hospital, and number of days in hospital during the last two hospital admissions.

All analyses were performed using SPSS (Statistical Package for Social Sciences), version 11.5.

2.2. *Ethics.* The Ethics Committee of the University of Lund approved the study after all other Swedish University Ethics Committees had reviewed it.

### 3. Results

3.1. *Characteristics of the Study Population.* The total number of deceased foreign-born persons was 41,688 persons, of whom 15,372 had *Neoplasms* as cause of death and 23,837 persons *Diseases of the circulatory system* and 1605 persons were related to the death diagnosis *Injury and poisoning* and 874 persons had *Symptoms, signs, and ill-defined conditions* as cause of death. Corresponding numbers for Swedish-born were 44,941 persons in total, of whom 16,651 had *Neoplasms* and 26,042 had *Diseases of the circulatory system* as cause of death. Persons with *Injury and poisoning* and with *Symptoms, signs, and ill-defined conditions* as cause of death were 1671 and 577 respectively (Table 1).

3.2. *The Number of Days in Hospital during the Last Two Hospital Admissions.* The number of days in hospital during the two last hospital admissions was similar for foreign-born and native Swedes for persons with *Neoplasm* as cause of death. Foreign-born persons with *Diseases of the circulatory system* as cause of death had a higher number of days than native Swedes (48.2 versus 46.0  $P = 0.001$ ). Foreign-born persons had a higher number of days (32.1 versus 29.9,  $P < 0.001$ ) than Swedish-born persons in the ICD group *Injury and poisoning* but a lower number of days in the ICD group *Symptoms, signs and ill-defined conditions* (55.5 versus 78.2,  $P < 0.001$ ), see Table 1.

Multiple-linear regression analysis, with age and being foreign-born as independent variables, showed that being a foreign-born person was a significant factor in relation to number of days in hospital during the two last hospital admissions only in the ICD diagnosis group *Diseases of the circulatory system* ( $P = 0.005$ ,  $\beta = 0.012$ ), Table 2.

3.3. *Number of Hospital Admissions.* The total number of hospital admissions during 1987–1999 was similar for foreign-born and native Swedes with the two exceptions of persons who had *Injury and poisoning* and *Symptoms, signs and ill-defined conditions* as causes of death. Foreign-born had a lower number of admissions to hospital (4.7 versus 5.3,  $P = 0.041$ , and 5.4 versus 6.1,  $P < 0.001$ ) than Swedish-born persons), Table 1.

Multiple-linear regression analysis showed that being a foreign-born person adjusted for age was an independent determining factor for a higher number of hospital admissions in the ICD diagnosis groups *Diseases of the circulatory system* ( $P = 0.038$ ,  $\beta = 0.009$ ) and lower number in *Injury and poisoning* ( $P = 0.012$ ,  $\beta = -0.043$ ) and *Symptoms, signs, and ill-defined conditions* ( $P = 0.006$ ,  $\beta = -0.072$ ), Table 2.

3.4. *Total Number of Days in Hospital.* Total number of days in hospital differed between foreign- and Swedish-born persons in three ICD groups: *Diseases of the circulatory system*, *Symptoms, signs, and ill-defined conditions* and *Injury*

and poisoning. Foreign-born had a significantly higher total number of days in hospital in the ICD group *Diseases of the circulatory system* than Swedish-born persons (114.8 versus 110.4,  $P = 0.008$ ) but a significantly fewer number of days in hospital in the ICD groups *Symptoms, signs, and ill-defined conditions* (107.6 versus 158.6,  $P < 0.001$ ) and *Injury and poisoning* (90.5 versus 91.3,  $P < 0.001$ ), see Table 1.

Being a foreign-born person was an independent determining factor for the total number of days in hospital among persons with *Diseases of the circulatory system* and *Symptoms, signs, and ill-defined conditions* as cause of death. Age was also a significant factor and had a higher  $\beta$ -value in all cases, see Table 2.

3.5. *The Influence of Gender.* An analysis was also performed of the number of days during the last two admissions to hospital with regard to gender and cause of death classified as ICD groups, see Table 3. For persons with *Neoplasm* as cause of death, no differences was found between Swedish and foreign-born persons. Foreign-born men with *Diseases of the circulatory system* and *Symptoms, signs, and ill-defined conditions* as cause of death had fewer days in hospital (33.4 versus 34.8,  $P < 0.001$ , and 26.3 versus 41.0,  $P = 0.001$ ) than Swedish-born men. A higher number of days in hospital was found for foreign-born men with *Injury and poisoning* as cause of death (27.2 versus 26.2,  $P < 0.001$ ). Foreign-born women had a higher number of days in hospital than Swedish-born women (38.9 versus 35.3,  $P = 0.001$ ) in the ICD group of *Injury and poisoning* and a lower number of days (83.3 versus 100.1,  $P = 0.014$ ) in the ICD group *Symptoms, signs, and ill-defined conditions*, see Table 3.

In relation to gender, foreign-born men had fewer hospital admissions (4.5 versus 5.4,  $P = 0.024$ ) for *Injury and poisoning* and *Symptoms, signs, and ill-defined conditions* (5.3 versus 6.5,  $P = 0.003$ ), Table 4. Foreign-born women had fewer hospital admissions in relation to the diagnosis group *Symptoms, signs, and ill-defined conditions* than Swedish-born women (5.5 versus 5.9,  $P = 0.034$ ).

When multiple linear regression analysis was performed separately for men and women, it was found that being a foreign-born person was an independent determining factor for hospital admissions adjusted for age for men in the ICD groups *Symptoms, signs, and ill-defined conditions* ( $P = 0.010$ ,  $\beta = -0.102$ ) and *Injury and poisoning* ( $P = 0.004$ ,  $\beta = -0.065$ ) but had less influence than age.

3.6. *The Influence of Age.* Analysis of the number of days during the last two admissions to hospital in relation to age revealed a clear tendency, with increasing number of days in hospital with increasing age. A separate analysis of three death age intervals (25–44, 45–64, and 65–84 years) during the period 1992–1999 showed significantly fewer days in hospital in the age interval 65–84 years for foreign-born persons with *Injury and poisoning* ( $P = 0.011$ ) and *Symptoms, signs, and ill-defined conditions* ( $P = 0.015$ ) as cause of death, Table 5. Foreign-born persons in the age interval 45–64 years had significantly fewer days in the ICD group *Diseases of the circulatory system* ( $P = 0.026$ ), see Table 5.

TABLE 1: Number of hospital admissions and days in hospital (mean values) for deceased persons 1987–1999 in four ICD groups.

Diagnosis	Foreign-born					Swedish-born				
	In-patient record	Age 1970 (95% CI)	Hospital admissions (95% CI)	Total days in hospital (95% CI)	Days during the two last hospital admissions (95% CI)	In patient record	Age 1970 (95% CI)	Hospital admissions (95% CI)	Days in hospital (95% CI)	Days during the two last hospital admissions (95% CI)
<i>Neoplasm</i>	15 372	46.5** (46.7, 47.0)	7.2 (7.1–7.3)	81.0 (78.8, 83.3)	33.1 (32.2, 33.9)	16 651	46.9 (46.7, 47.0)	7.2 (7.1–7.3)	84.1 (80.7, 87.5)	33.1 (32.2, 34.1)
<i>Diseases of the circ. syst.</i>	23 837	53.2* (53.9, 54.2)	6.0 (5.9–6.1)	114.8*** (110.4, 119.3)	48.2** (46.3, 50.2)	26 042	54.1 (53.9, 54.2)	5.9 (5.9–6.0)	110.4 (106.6, 114.2)	46.0 (44.3, 47.8)
<i>Injury and poisoning</i>	1605	41.7* (41.0, 42.5)	4.7*** (4.4–5.0)	90.5* (76.5, 104.4)	32.1* (25.8, 38.4)	1671	44.3 (43.6, 45.0)	5.3 (5.0–5.6)	91.3 (79.8, 102.8)	29.9 (26.3, 33.5)
<i>Signs and ill-defined conditions</i>	874	53.0* (52.0, 53.9)	5.4* (5.0–5.8)	107.6* (89.7, 125.5)	55.5* (43.6, 67.4)	577	58.2 (57.1, 59.3)	6.1 (5.5–6.62)	158.6 (124.9, 192.3)	78.2 (60.9, 95.5)

\* $P = 0.000$ , †\*\* $P = 0.001$ , ‡\*\*\* $P = 0.008$ , \*\*\*\* $P = 0.041$ .

TABLE 2: Multiple linear regression with age at death (constant) and being/not being a foreign-born person adjusted for age in relation to utilization of hospital care.

Diagnosis	Number of hospital admissions Significance	$\beta$ -value	Total number of days Significance	Number of days at the two last hospital admissions Significance	$\beta$ -value
<i>Neoplasm</i>					
Age	0.000	-0.613	NS	0.000	0.864
Foreign-born person or not	NS	—	NS	NS	—
<i>Diseases of the circ. syst.</i>					
Age	0.000	-0.782	0.000	0.000	0.299
Foreign-born person or not	0.038	0.009	0.018	0.005	0.012
<i>Injury and poisoning</i>					
Age	0.000	-1.199	NS	NS	—
Foreign-born person or not	0.012	-0.043	NS	NS	—
<i>Signs and ill-defined conditions</i>					
Age	0.000	-0.718	0.000	0.000	0.898
Foreign-born person or not	0.006	-0.072	0.040	NS	—

TABLE 3: Number of days in hospital (mean) at the two latest admissions to a hospital for deceased persons 1987–1999 in four ICD groups stratified for gender.

Diagnosis	Foreign-born men			Swedish-born men			Foreign-born women			Swedish-born women			P value
	n	Days in hospital (range)	n	Days in hospital (range)	n	Days in hospital (range)	n	Days in hospital (range)	n	Days in hospital (range)	n	Days in hospital (range)	
<i>Neoplasms</i>	7646	30.6 (0, 1438)	8424	30.8 (0, 1305)	7726	35.5 (0, 1625)	8227	35.6 (0, 3211)	0.313				0.362
<i>Diseases of the circ. syst.</i>	11 614	33.4 (0, 2193)	13 156	34.8 (0, 1980)	12 222	62.3 (0, 2532)	12 886	57.5 (0, 2253)	0.000				0.297
<i>Injury and poisoning</i>	933	27.2 (0, 2474)	996	26.2 (0, 1091)	672	38.9 (0, 1632)	675	35.3 (0, 808)	0.000				0.001
<i>Signs and ill-defined conditions</i>	426	26.3 (0, 1539)	214	41.0 (0, 1671)	448	83.3 (0, 1775)	362	100.1 (0, 1673)	0.001				0.014



TABLE 4: Number of hospital admissions (mean) in relation to gender for deceased persons 1987–1999 in four ICD groups.

Diagnosis	Foreign-born men				Swedish-born men				Foreign-born women				Swedish-born women			
	<i>n</i>	Age 1970 (95% CI)	Admissions (range)	<i>n</i>	Age 1970 (95% CI)	Admissions (range)	<i>P</i> value	<i>n</i>	Age 1970 (95% CI)	Admissions (range)	<i>n</i>	Age 1970 (95% CI)	Admissions (range)	<i>P</i> value		
<i>Neoplasm</i>	7646	46.0* (45.8, 46.2)	7.0 (1, 115)	8424	47.8 (46.6, 47.0)	7.0 (1, 134)	0.717	7726	47.0 (46.8, 47.3)	7.4 (1, 125)	8227	47.0 (46.7, 47.2)	7.3 (1, 79)	0.488		
<i>Diseases of the circ. syst.</i>	11 615	49.6* (49.4, 49.8)	6.0 (1, 107)	13 156	51.0 (50.8, 51.2)	6.0 (1, 99)	0.776	12 753	56.6* (56.4, 56.8)	5.9 (1, 114)	13 426	57.2 (57.0, 57.4)	5.8 (1, 107)	0.746		
<i>Injury and poisoning</i>	933	38.5* (37.6, 39.4)	4.5 (1, 96)	996	41.0 (40.1, 41.8)	5.4 (1, 95)	0.024	672	46.1** (44.9, 47.4)	4.9 (1, 74)	675	49.3 (48.0, 50.5)	5.1 (1, 52)	0.641		
<i>Signs and ill-defined conditions</i>	426	46.1* (44.9, 47.4)	5.3 (1, 60)	214	51.5 (49.5, 53.6)	6.5 (1, 76)	0.003	448	59.5*** (58.4, 60.6)	5.5 (1, 52)	363	62.1 (61.1, 63.2)	5.9 (1, 55)	0.034		

\* *P* = 0.000, \*\* *P* = 0.001, \*\*\* *P* = 0.003.

TABLE 5: Days in hospital during the two latest admissions stratified for age groups among foreign and Swedish-born persons with deceased in four different diagnose groups 1992–1999.

Age (years)	<i>n</i>	Foreign-born		Swedish-born		<i>P</i> value
		Days in hospital mean	Range	<i>n</i>	Days in hospital mean	Range
<i>Neoplasm</i>						
65–84	6294	28.8	0, 1625	7011	28.7	0, 1305
45–64	2849	26.9	0, 528	2880	26.6	0, 902
25–44	73	26.2	2, 106	71	33.5	1, 873
<i>Diseases of the circulatory system</i>						
65–84	9588	35.6	0, 2532	10 636	34.7	0, 2253
45–64	2184	19.4	0, 1477	1882	17.3	0, 1254
25–44	45	12.5	0, 188	27	15.3	0, 143
<i>Injury and poisoning</i>						
65–84	283	32.3	0, 2054	349	32.4	0, 832
45–64	365	24.8	0, 2474	354	25.5	0, 1091
25–44	71	39.7	0, 1738	47	17.1	1, 159
<i>Signs and ill-defined conditions</i>						
65–84	275	26.5	0, 922	109	32.7	1, 539
45–64	144	13.2	0, 136	64	39.8	0, 1671
25–44	2	8.5	7, 10	2	8.0	4, 12



3.7. *The Influence of Country/Region of Birth.* Country/region of birth was not an independent determining factor for number of days in hospital during the two last hospital admissions when multiple-linear regression analysis was performed. Age was an independent determining factor for number of days during the two last hospital admissions in the ICD group *Symptoms, signs, and ill-defined conditions* but not in the group *Injury and poisoning*.

## 4. Discussion

The main finding in the study was the differences in utilization of hospital care between foreign-born and Swedish-born persons in three out of four selected ICD diagnosis groups.

No differences were found for persons with *Neoplasm* as cause of death. Foreign-born persons dying of *Diseases of the circulatory system* had a higher number of days in hospital, both in total and during the two last admissions, than native Swedes. Fewer days were found for foreign-born persons dying of *Symptoms, signs, and ill-defined conditions*. Foreign-born men with death diagnoses *Injury and poisoning* and *Symptoms, signs, and ill-defined conditions* had fewer hospital admissions than Swedish men.

Differences in days in hospital during the two last admissions was not influenced by specific country/region of birth.

The similarities in number of admissions, total number of days, and number of days in hospital during the last two admissions, especially in diagnosis groups *Neoplasms* and *Diseases of the circulatory system*, could be interpreted as showing that standardized treatment and care plans are established and used for diseases related to these diagnosis groups. National guidelines and evaluations of treatment have been published for both cardiac and cancer care [19, 20].

An earlier study in Sweden of equity in access to health care for migrants has not indicated any gross pattern of inequity in the utilization of health care [14]. A study of diabetic patients showed no differences between foreign and Swedish-born persons in attendance rate to specialists in internal medicine [21]. The finding is also in accordance with the main goal, care on equal terms for the whole population stated in the Swedish Health and Medical Services Act [22].

The studied foreign-born population was mainly persons from the Nordic countries and Europe with a long stay in Sweden and labour migrant background, but it also included refugees. Adaptation to Swedish society and hence adaptation to the same utilization of health care could also explain similarities between foreign- and Swedish-born persons [21].

The number of days during the last two admissions and the total number of days in hospital was higher among foreign-born persons than native Swedes in the ICD group *Diseases of the circulatory system*. An explanation could be that migrants express health and illness differently from native Swedes [23] and/or difficulties in communication between patients and hospital staff have occurred [24] and made it more difficult and more time consuming to use guidelines and standardized treatment.

Migrants showed shorter total time in hospital and for migrant men also fewer admissions to hospital in the ICD diagnosis group *Symptoms, signs, and ill-defined conditions*. The diagnosis group in itself indicates difficulties in finding a correct diagnosis, and shorter time and fewer admissions could be due to migrants' expressing health and illness differently from native Swedes [23]. Difficulties in communication have also been described as a problem among native Swedish health care staff in their relations with migrants [24], and this could also influence both admissions to hospital and number of days in hospital. The seriousness of the health problems could be underestimated due to lack of information and hence the time in hospital could be shorter or the patient might not be admitted to hospital.

Fewer days in hospital could also be explained if more care among migrants than native Swedes was carried out within the families or close social networks, but this study does not allow for this type of analysis. However, immigrant families have been described as providers of more care, especially for the aged [25], but analysis of spousal earnings and participation in the labour market among migrant households with persons with illness in the household has not found that persons leave their work to take care of family members [26]. Studies of diabetes patients in Sweden have indicated less use of home care from public authorities by foreign-born persons [21].

Gender differences could explain why foreign-born men but not women had fewer hospital admissions. Gender differences have been discussed, such as that more women have more contacts with physicians, more ability to recall minor health problems, and give more details about symptoms [27, 28]. Women have been described as not only more demanding but also easier to communicate with [29]. Women have also been shown to have a more active and information-searching behaviour than men [30]. Foreign-born women may thus compensate for communication problems better than foreign-born men.

Fewer hospital admissions were also found among foreign-born men in the ICD group *Injury and poisoning*. This might, as previously discussed, be a consequence of gender differences and communication problems [24, 27, 28]. The number of hospital admissions does not reflect the situation in the labour market. The working environment for migrants was known to be different from that of native Swedes, with more physically demanding and stressful work [31], which could involve greater risk of injuries. In relation to work environment women had more total injury reports than men [32], but serious accidents were more common among men [33]. Injuries were also found as the main reason for hospitalisation among younger men in a study from Italy [34].

In two ICD diagnosis groups, *Symptoms, signs, and ill-defined conditions* and *Injury and poisoning*, migrants showed significantly fewer days in hospital during the two latest hospital admissions in the age intervals 65–84 years than native Swedes. This could be a consequence of old age accentuating communication problems such as language skills among migrants [35, 36].

Previous studies have shown increased mortality and a lower mean age at time of death among foreign-born persons living in Sweden than among native Swedes [1, 2]. The analysis of utilization of hospital care, measured as total time in hospital, number of hospital admissions, and time in hospital during the last two admissions, gave no information that could explain these differences to any great extent.

The study of utilization of hospital care among deceased foreign-born and native Swedes 1987–1999 in four selected causes of death was based on data from Statistics Sweden and from the National Board of Health and Welfare Centre for Epidemiology. Causes of death were registered according to the system of International Classification of Diseases (ICD) revision 9 (1997) or 10 (1998).

The four selected cause-of-death groups—*Neoplasms, Diseases of the circulatory system, Injury and poisoning* and *Symptoms, signs, and ill-defined conditions*—were chosen since previous studies had shown significant differences in mortality and morbidity in these groups between foreign-born persons and native Swedes [1, 2].

The time period for the study is limited to 12 years (1987–1999) because no data on hospital care was nationally registered before 1987. One important change has been made in the Swedish health care system during this period that can influence the number of total days and days during the two last admissions in hospital. Before 1992 the days elderly persons spent in nursing homes was registered as days in hospital. In 1992 the responsibility for elderly care was transferred from the counties to the local authorities and care in a nursing home was no longer regarded as hospital care. Due to this change the analysis of days during the two last admissions in hospital stratified for age was limited to the period 1992–1999. There are still no national data available in Sweden on care outside of hospital settings such as visits to GP or visits to nurses in primary care centres.

The data used to establish the database originated from the Population and Housing Census of 1970, which is considered to be a total census as it was compulsory by law to take part in the census. No number of dropouts has been estimated for the total census, only for some of the variables such as “occupation,” and Statistics Sweden estimates the dropout on this variable to be 3.5–4.5%. It can only be speculated whether participation in the census is related to health problems and whether there were a number of migrants that did not take part as well as a number of Swedes. Other reasons for migrants not participating in the census could be language problems.

Persons were excluded from the database if they had emigrated, migrated back (remigrated), or if the control subject had migrated or if no information about the person was available. A followup of Finns who had remigrated was performed and showed no differences in mortality from the group of Finns included in the study [1]. There are no reasons to believe that “remigrants” born in other countries differ from the Finnish group.

The diagnosis given at death is in most cases not based on autopsy. The autopsy frequency in Sweden has varied during the period and has decreased from 41% for men and 31% for women (1987) to 22% for men and 13% (1998) (The

National Board of Health and Welfare, 1998). There could be a bias in diagnosing the right cause death because of a low autopsy frequency. Studies of cancer incidence indicate about 10% higher incidence when autopsy is performed [35]. Another bias could occur when the correct death diagnosis code written in the register; in 1998 this *coding error* was estimated at  $1.2 \pm 0.2\%$  [36].

In conclusion, the study indicates a tendency towards less health care utilization among migrants, especially men, as regards *Symptoms, signs, and ill-defined conditions* and *Injury and poisoning*. Further studies are needed to explore possible explanations and pattern of other diseases to see whether migrants, and especially migrant men, are a risk group with less utilization of health care. If the findings of less health care utilization are verified in other studies, special policy and special care plans need be developed to reduce the problems of finding the correct diagnoses and delay of correct management and, thus, also reduce the risk of premature death.

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## Research Article

# Daily and Cultural Issues of Postnatal Depression in African Women Immigrants in South East London: Tips for Health Professionals

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Postnatal depression has profound effects on the quality of life, social functioning, and economic productivity of women and families. This paper presents the findings of an earlier exploration of the perception of postnatal depression in African women immigrants in South East London. The aims of this research were twofold: firstly, to establish cultural elements related to postnatal depression through women's narratives regarding their daily life situations, including the nuances and complexities present in postnatal depression, and secondly, to help health professionals understand and acknowledge postnatal depression signs in these immigrant women and some of the cultural ambiguities surrounding them. The study used a qualitative approach mainly through the implementation of two focus groups. Thematic analysis of the women's narratives suggested that almost half of the participants in the study struggle with some signs of postnatal depression. The women did not perceive the signs as related to illness but as something else in their daily lives, that is, the notion "that you have to get on with it." The study also highlights the fact that the signs were not identified by health visitors, despite prolonged contact with the women, due to the lack of acknowledgement of women's silence regarding their emotional struggle, household and family politics, and intercultural communication in health services.

## 1. Introduction

Depression is a major public health problem that is supposedly twice as common in women during the childbearing age as it is in men. [1]. It accounts for the greatest burden of disease among all mental health problems, and it is expected to become the second most prevalent of all general health problems globally by 2020 [2, 3]. According to [4] describe depression not just as a syndrome but also as an affective state that might be experienced by anyone at some point in their daily lives. According to them, depression is a mood disorder where mood refers to the prolonged emotions that colour psychic life. Affects, on the other hand, are the feeling tones or emotional states and their manifestations at a given moment. Mood disorders affect anybody without distinction of class, ethnicity, gender, education, age, or religion.

Postnatal depression, a type of depression and, therefore, a mood disorder, is experienced by 1 in 10 women in the United Kingdom (UK) [5]. Technically defined, postnatal depression is constructed as an affective mood disorder often occurring in women up to one year after childbirth [6]. Furthermore, it is often characterised by feelings of loss and sadness and, sometimes, the loss of self-esteem [7]. The depressive scale of this disorder and its presentation ranges from mild depression requiring minimal intervention to puerperal psychosis which often requires multitherapy intervention, hospitalization, and long-term support [8].

Postnatal depression has profound effects on the quality of life, social functioning, and economic productivity of women and families [9]. The health consequences could also lead to adverse effects on the long-term emotional and physical development of the infant [10–12]. It is also



predictive of child cognitive and behavioural disturbances at the age of 3 years [13, 14]. Moreover, failure by health professionals to identify postnatal depressed women often leads to safeguarding concerns for both mothers and infants [15, 16].

In general, health professionals and, in particular, health visitors in the UK play a vital role in identifying and supporting women who experience postnatal depression in the community. Their role includes supporting families during the period from the birth of the child to the age of five, thus enabling them to provide a prolonged period of contact and support for women affected by it. However, evidence suggests that most vulnerable women, including Black Minority Ethnic (BME) groups in the UK, do not always access or demand this service. This is because the symptoms are either overlooked or endured in silence by the women themselves in some cases, or they are not picked up by the health professionals in others [1, 5, 17–20]. In a study by [21] and in the study reported here, some women were reluctant to expose frailty and “stigma,” thus making it difficult for health professionals to provide adequate diagnoses or treatment.

There is a national recognition that over 6 million of the population of the United Kingdom experience some form of mental illness (depression); however, about 2 million of these do not have access to psychological therapies [22]. The fact that the BME population is growing in the UK and in South East London generates the need to explore and understand African women immigrants’ perception of postnatal depression in order to improve service development and outcomes for them. For example, the African population is the second-largest ethnic group in Greenwich [23]. Women who are affected by postnatal depression often find themselves isolated and unable to return to employment. This problem is further exacerbated by the overwhelming evidence of the link between depression and domestic violence [24], and the differing conceptualisations of postnatal depression among health professionals [25]. This study presents the findings of an earlier exploration of the perception of postnatal depression in African women immigrants in South East London [26]. The aims of this research were twofold: firstly, to establish cultural elements related to postnatal depression through women’s narratives regarding their daily life situations including the nuances and complexities present in postnatal depression, and secondly, to help health professionals understand and acknowledge postnatal depression signs in these immigrant women and some of the cultural ambiguities surrounding them.

## 2. The Multicultural Literature Concerning Postnatal Depression

The literature on mental health illness addresses the fact that people from diverse cultural backgrounds might display different constructions of mental health illness and, therefore, various ways of handling and coping with it. For example, some studies on depression among South Asian women, in particular Punjabis, have identified a cultural

idiom called “sinking heart” which they experience as a result of excessive heat, exhaustion, worry, or a feeling of social failure [27]. Similarly, among women of African descent in America who had experienced postpartum depression (PPD) in the past, a study reports that they described and managed their depression in culturally specific ways, such as relying on their religious beliefs and the counsel of family members as well as keeping the depression a secret in the family [21]. The women also believed that only white women experience postnatal depression, as postnatal depression is considered a sign of weakness that does not represent a legitimate illness [21].

Some authors argued that the individual is bound by the rules of their culture which in turn shape and influence their behaviour [28, 29]. Similarly, cultural aspects of one’s social system have a major impact on one’s emotional life [28]. Major cultural differences influencing depression are family structure and dynamics, social organization, socially-sanctioned defence mechanisms, rituals, and social stresses [30]. Other cultural factors that may be important for a general understanding of depression include a distinctive language related to depression, the transmission of information among people about depression, and beliefs about healthcare and the healthcare system.

Prevalence rates of postnatal depression vary widely from culture to culture. Studies in developed countries report prevalence rates of 10% or more for postpartum depression [31]. In developing societies the figures are variable. Postnatal depression is thought to occur three times more in the developing societies than in developed ones [32], for example, in Khayelitsha, Cape Town, in South Africa, the prevalence rate of major depression was reported to be 34.7% at two months postpartum [32]. Other African studies that have looked at postpartum women have dealt with the prevalence of psychological distress in general rather than focusing on major depression or postnatal depression [33–35], which looked at prevalence of major depression at six weeks postpartum in Uganda, found a figure of 6.1%.

Similarly, the literature on mental health illness addresses the fact that aspects such as perceptions and attitudes towards depression in different cultures may affect help-seeking behaviour and access to treatment [10, 11]. Most studies in the literature regarding women’s health-seeking behaviour coincide, for example, in pointing out that BME women tend to rely on family and religion as their main coping strategies. In the same way, for some women, postnatal depression is not perceived as an illness, yet they recognise the need to seek spiritual intervention. Equally, additional findings suggest that some black Caribbean women face difficulties describing or talking about perinatal depression due to their tendency to underreport their psychological feelings. Thus, barriers to health-seeking behaviour relate very much to the reluctance of some BME women to discuss problems as well as the way in which problems are dealt with [21, 27, 36, 37].

Another significant and controversial aspect of the literature, particularly in regard to the UK, relates to the diagnosing of postnatal depression among BME women through the Edinburgh Postnatal Depression Scale (EPDS). The

EPDS is a psychometric measuring tool [38]. It comprises a ten-item self-rating questionnaire which is administered by health visitors approximately at eight weeks and at twelve months after childbirth. The EPDS is used by health visitors in the community. Following its validation for use in the UK it was implemented across the country by health visitors as a universal method of identifying mothers who were at risk of postnatal depression [39] argued that EPDS was originally designed as a screening test and was not intended as a diagnostic tool. However, many GP practices have continued to utilise the questionnaire as a single psychometric diagnostic tool. Thus, the controversy in the literature regarding the use of EPDS displays two positions: the one that considers this tool as culturally insensitive for BME women [40, 41] and the one that argues that it is effective [42, 43].

The literature that considers the EPDS to be less culturally sensitive to the needs of women from black and ethnic minority backgrounds states that it does not translate into other languages, let alone cultures [44, 45]. These authors also cautioned against direct translations of the tool, pointing out that some cultures do not have a word for depression, and suggesting that other screening methods should be considered depending on ethnicity. It is argued that the use of standardised Western methods and diagnostic classification systems, even by local-but-Westernised investigators, may be culturally insensitive and could increase the risk of practitioners missing symptoms or signs prevalent in non-Western cultures [46, 47]. Using EPDS as the assessment tool for these women might result in them often being inappropriately diagnosed or misdiagnosed, leading to omission. Additional arguments related to this position in the literature claim that most research has been conducted in the Western developed countries [31, 48] and has not taken into account the range of different psychosocial experiences likely to be involved in childbirth, for example differences in rates of lone motherhood, the nature of marriage, family kinship, and variations in the support new mothers receive in different countries and cultures.

For those who consider EPDS an effective tool for diagnosing postnatal depression the main evidence comes via some empirical studies that have screened women to check prevalence and associated factors in two groups: Nigerian and Black Caribbean women reporting a significant level of diagnosis [42, 43].

On the part of the health professionals, the literature addresses various factors that could contribute to the lack of awareness, late diagnoses, undetected cases or, worse, excessive medicalisation of symptoms. For example, [28] in a study investigating the influences of cultural factors in relation to postpartum depression, found that mothers from different cultural backgrounds may display culturally explicit behaviours and actions when suffering from depression. Another author [49] argued that the way a person perceives and understands their health is related to the subjective cultural experience in her or his society. [50] posits the idea that all cultures are unstable and subject to daily variations, innovations and change. Similarly, [51] clearly demonstrates this in a study on how women understood and responded

to depression according to their cultural understanding of the disorder. According to [30], culture can be understood as shared beliefs, learned values, and attitudes which shape and influence perception and behaviour. In other words, African women immigrants in the UK could be seen as a group of people who share history, religion, language, thoughts and, overall, the experience of being immigrants. Thus, how the cultural background of women is understood and constructed by the providers of health services and how these providers and the women communicate is a matter of great interest for researchers focusing on intercultural communication in the context of health services in various multicultural societies.

Ultimately, although postnatal depression affects all women regardless of ethnicity or social class, additional contributory risk factors include social exclusion, deprivation, and relationship complexities [52]. Thus, despite all the attempts in the literature to explain the causes of this illness, no single factor has been successfully identified as its cause. On the contrary, as discussed above, several explanations have been put forward by the literature. This qualitative study presented here [26] expects to add to this ample range of explanations in the literature on postnatal depression particularly among African Women Immigrants in South East London.

### 3. Materials and Method

The qualitative study reported here used focus groups as a means of collecting data from participants. The focus group is an in-depth, open-ended group discussion that explores a specific set of issues on a predefined and limited topic [53]. Focus groups within feminist work have been devised to elicit and validate collective testimonies and group resistance narratives. These testimonies and narratives have been used by women and could be used by any subjugated group “to unveil specific and little-researched aspects of women’s daily lives, their feelings, attitudes, hopes, and dreams” [54, page 835]. They can also facilitate the identification of cultural values and are said to be valuable when researching ethnic minority groups [55].

*3.1. Recruitment, Focus Groups, and Ethics.* The group targeted for the study was all African women immigrants registered on the general lists of the health visitors of four health centres in South East London. Participants were contacted personally, through leaflets, and a phone call by the researchers but the gate keepers for the research were the health visitors. Twenty-six immigrant women of African background between sixteen and forty-five years of age were purposively identified and selected. They were identified by both the health visitors and the researchers. However after the selection of twenty six women, only seventeen were able to confirm and attend the focus groups (see Table 1 below). These were divided into two groups as seventeen people would have been a too large number for only one focus group. The women were then given the choice of the focus group they preferred to attend. There were nine in the first focus

group and eight in the second one. The numbers of women for each group were within the standard methodological recommendation for a number of people in a focus group which can be from six to nine people in accordance with [56]. Furthermore, the purposive selection followed [57] suggestion that a deliberate nonrandom sampling should include a group of people with particular characteristics, in this case: immigrant women of African background.

During the two focus groups a psychologist was in attendance and acted as a research cofacilitator, taking field notes. Two nursery nurses were also in attendance. They help to organise play activities for the toddlers who came with their mothers and with the signing of the consent forms. Further, each focus group lasted for about two hours with fifteen-minute breaks in between. The two groups were held in a Children's centre, a familiar environment for the participants. Having a cofacilitator meant that the two other researchers were able to lead the discussion while the cofacilitator was free to take notes and assist with the subsequent transcription of the data collected [53]. All activities took place in the same large room and no major disruptions took place.

The main inclusion criteria which applied to the women participating in the research were (i) women in the postnatal period who had delivered a baby up to a year earlier, (ii) immigrant women who identified themselves as being of African descent between the ages of 16 and 45 years (the age range within which women's fertility and reproductive capacity is at its peak), (iii) women who spoke and understood English, (iv) women whose bab(ies) were in a good health, and (v) women who lived in the South East (women with little children are always busy and will hesitate to attend any group if the distance is more than two miles) and (vi). The inclusion criteria were kept flexible. However, strict exclusion criteria were: (i) women who had children subject to the child protection procedures, (ii) women aged over 45 years, and (iii) women who were under 16 years of age (parental consent issues).

Ethical approval for the research was obtained from the South London Research and Ethics Committee. An application was made through the Integrated Research Application System (IRAS). The National Health Service Trust also gave the required Research and Development (R&D) approval. Ethical Research Committees in the UK endorse the Declaration of Helsinki which seeks to minimize harm towards research participants [56]. Thus, in this case voluntary informed consent, confidentiality and anonymity were explained to the women at the beginning of each focus group. They also were informed about their right to withdraw at any point should any discomfort arise [56]. Participants were picked up from their homes and taken back. They were also given a gift voucher as a token of appreciation for attending the focus groups.

**3.2. Data Collection and Data Analysis.** In order to collect women's narratives, the logic of qualitative inquiry was used. In the discussion on research into sensitive issues such as postnatal depression, and the differences between qualitative and quantitative studies, an important phenomenon to recall

is the *ergodic* hypothesis as postulated by George Devereux in the seventies [58]:

*"The analysis of a great number of relatively superficial facts—ampleness—provides exactly the same insights as the in-depth analysis of only one phenomenon. Ampleness is depth, rotating 90 degrees in horizontal position; the depth is ampleness if the 90-degree turn is on a vertical position. The equivalence of the two phenomena takes exact root in the Ergodica hypothesis... In fact, under this premise, it is postulated that the same results are obtained whether throwing X number of coins simultaneously (for example, 10 coins at the same time) or only one coin X number of times (1 coin 10 times). In the context of social research, this yields an equivalence for a survey with one thousand answers of yes or no type questions, and three in-depth interviews of, say, 4 hours" (page 108).*

Following the qualitative approach, the researcher asked the women at the very beginning of the two focus groups about their marital status and the kind of support network they had at home. Studies have shown that women's marital status and the kind of support network they have are significant risk factors that may predispose a woman to postnatal depression [52]. Similarly, their educational background or employment status may also affect their perception and the way they describe postnatal depression. Thus, a basic task here was to map the sociodemographic characteristics of the participants as illustrated in Table 1.

Regarding group dynamics while the focus groups were implemented two main observations emerged. First, according to [59], in a group setting group norms may silence dissent; indeed, in one of the focus groups a social hierarchy was observed. One of the women tended to dominate the group, silencing any mention of family problems and thus intimidating the less confident women within the group. This was dealt with by inviting the less vocal among the women to contribute their experiences. An attempt was also made to contact these individuals soon after the group to ensure they actually had a voice in the data collection process. Secondly, an observation that became pretty obvious during the two focus groups was that those participants who were more educated, up to degree level, were more vocal and their perception of the symptoms of postnatal depression were freely expressed whereas those who had achieved GCSE level were less expressive. In fact the most vocal and educated women in the first focus group contributed to within—data saturation [60], since they articulated many themes setting the trend, that reemerged in the second focus group and, later, during the analysis of the data.

Following each focus group the data were transcribed verbatim using a thematic analysis. As a qualitative research practice, theme analysis comprises the process of examining a piece of data as many times as possible until patterns or themes emerge. A theme, broadly speaking, is nothing more than a cluster of similar units of meaning that had been stated by the different participants in the focus group.

TABLE 1: Participants' socio-demographic characteristics.

Country	Number	Education	Marital status	Employment status
Nigeria	11	2 have bachelor degree, 9 educated to a general certificate for secondary education (GCSE)	9 married and 2 single parents	1 self-employed, 1 on maternity leave, 9 unemployed
Ghana	2	1 above advanced level 1 studying for degree	One married, the other single parent	1 looking for job 1 student
Kenya	1	Studying for a national vocational qualification	Has a boyfriend but not living together	Student
Somalia	1	General certificate of secondary education (GCSE)	Husband abroad	Unemployed
Sierra Leone	2	General certificate of secondary education (GCSE)	2 single parents	2 unemployed

In the particular case of the study reported here, the thematic analysis was performed by reading the women's statements several times. Initial coding of the transcripts was performed with the goal of remaining open to all possible interpretations. Codes either stored information about patient demographics or were far more analytical, representing links between the data and an idea [61]. Codes were made as descriptive of the participants' experience or thoughts as possible. Thus, once the data were sorted by units of meaning, the themes were identified. The themes were grouped and examined in all cases to make sure that all the descriptions of each theme had been captured and compared.

Table 2 shows some of the most significant stages in the thematic analysis of the data (narratives). The first column on the left shows some significant excerpts from the statements provided by the women. The second column identifies units of meaning based upon the narratives. The last column shows the emerging themes from the data. However, this paper moves from just description of the themes to examine how the themes are interconnected according to Pope et al. [62].

## 4. Results

The results discussed here present the data through the main themes and literal quotations (narratives) as stated by the women regarding events, episodes, points of view, settings, and comments related to the main focus of this research: postnatal depression among a group of African women Immigrants in South East London. The main themes accordingly were: responses to their pregnancy, feelings before and after giving birth, social support or the lack of it, feeling alone, lack of information about health services, poverty, signs of postnatal depression, and not coping with their situation.

**4.1. Responses to Pregnancy.** Participants were asked to reflect on when they first realized they were pregnant. This was to allow them to consider what their reaction had been at the time and to describe their emotional feelings. Ranging from the ones who experienced difficulties in seeing the good side of being pregnant to the ones who were happily surprised,

the main trend in this theme was that being pregnant is always a good thing for all women but particularly for African women immigrants who are married or cohabiting. It was considered that If a woman is not married, nobody cares whether she is pregnant or not; once married, the expectation is that she is ready for the responsibility and that includes having babies. For example, describing her experience, a first-time mother educated up to secondary school level said:

*"When I first became pregnant, I was scared, during the pregnancy it was quite difficult for me because I felt ill, sick all the time, lost a lot of weight and this happened throughout the pregnancy. It was really hard."*

Participants also reported their experiences and feelings during the antenatal period that made it extremely difficult for them to see the good side of being pregnant. As another participant clearly stated:

*"So I realise it was the pregnancy, it was mixed feelings... I'm very happy... I'm very healthy but not so happy as there are all other stuff going on in my mind, such as not being with the father or married to him, only empty promises, happy but sad."*

**4.2. Emotional Feelings before the Birth of the Baby.** The women reported emotional feelings associated with being pregnant and almost all participants reported these. For example, a woman reported the emotional stress she incurred by getting pregnant while still at school and not finishing her secondary school education. The participants described feelings of being sad, angry, annoyed, and irritable, not with anyone else but with themselves; they blamed themselves for being pregnant or evaluated the tasks before them and assessed their ability to cope with the tasks. As illustrated by another participant:

*"This was my first baby, I was afraid and also I don't have family here... and was crying all the time and very lonely."*



TABLE 2: Themes arising from data analysis.

Illustrative quotations from women	Unit of meaning	Emerging themes
<i>"When I first became pregnant, I was scared; during the pregnancy it was quite difficult for me because I was sick all the time. It was really hard."</i>	Sick all through pregnancy; anxiety about job loss and discontinuation of education	Responses to pregnancy
<i>"This was my first baby, I was afraid and also I don't have family here... and was crying all the time and very lonely."</i> <i>"So I realise it was the pregnancy, it was a mixed feelings I'm very happy, I'm very healthy but not so happy as there are all other stuff going on in my mind, such as not being with the father or married to him only empty promises, happy but sad."</i>	Crying a lot; sadness; lonely; unexpected expectation	Emotional feelings before birth of baby
<i>"OK. For the first one, after I had the baby, I didn't have much help for the first one, and I felt really isolated, and even though I had people around, but they were not helping me, I was doing things for them, even though they should have been doing things for me because pregnancy is difficult... I mean having a baby is difficult but I did all the cooking, my in-laws were around, I was frustrated, nobody helped me do anything for six months, I changed the baby's diapers all the time, nobody helped me once. I was cooking, I was going to the market, there was no help for me. I cried a lot, felt rejected by my husband."</i> <i>"OK. I'm Ghanaian, I will go straight to the question which is my emotional feelings. When I first realised I was pregnant, it was a mixture of excitement and sadness because of my own situation that I was going through. So I suppose I was happy to become a mum, emotionally I was sad, and I... but I had sessions of uncontrolled cries and could not explain why."</i>	Very tired/baby cried all the time; mixed feelings; isolated; rejected by husband; depressed  In-laws causing rift	Emotional feelings after the birth of the baby
<i>"When I found out I was pregnant, I was really happy because we'd been trying for some years, and I was actually in the process of finding out if there was something wrong, and then I went to the Chinese man for my hay-fever, so we're always like... we'll never know whether it was nature or if it was the herbs, and we were really happy."</i> <i>"... pregnancy is difficult... I mean having a baby is difficult but I did all the cooking, my in-laws were around, I was frustrated, nobody helped me do anything for six months, I changed the baby's diapers all the time, nobody helped me once. I got pregnant the second time, I wasn't looking forward to having the baby, I was..."</i> <i>"... And those, all those things, all the culture and all the things that happen, make the afterbirth very difficult, something that a bright person, very vibrant and passionate, all of a sudden you're just like demoted..."</i>	In-laws' interference when pregnancy not forthcoming, Husband left	Social support or the lack of it
<i>"Well for me, being pregnant is always an exciting experience for a mum, you know, knowing that you're going to bring forth someone, a child, that can change the course of the world, so I was excited."</i>	Source of joy; happy; long-awaited surprise	Expected pregnancy
<i>"It's something nobody else can help you with. Like someone can help you with the baby and help you with other things, but the way that you're feeling, you don't get help for that."</i> <i>"That I'm going mad, mentally and sometimes I'd be crying... the baby and I will be crying, and sometimes I feel like throwing the baby out, but I can't."</i> <i>"I don't know. Maybe it's my culture, I don't know. It could be cultural. I can't imagine myself going to my mum, or my mother-in-law... probably I can say to my mum, but I still didn't, I just couldn't imagine saying to somebody, 'Oh do you know what? I'm really struggling, I'm really down...' It just sounds odd. It's just not... it's not something that you do, you just... Everybody expects you to get on with it and you get on with it."</i>	To express feelings is a sign of weakness	Being alone with feelings
<i>"I felt that (health authority) spend a lot of money on teaching you to breastfeed in the hospital, but the people who were trying to teach me I don't think were very good and I felt like they were pressuring me a bit as well, but they didn't really give me some of the other information that as a new mother I would have found really useful, without me having to look on the internet or buy a book. And speaking to some people doesn't help because they just make you feel like it's just your baby crying..."</i>	Not enough information of what to expect as a first-time mother	Lack of information

TABLE 2: Continued.

Illustrative quotations from women	Unit of meaning	Emerging themes
<p><i>"I'm not that After my first baby I think my depression was caused by. . . because after the first child I wanted to get a job and to start working maybe."</i></p> <p><i>"Money, yeah, but I'm trying my best, you know, to do all I can do, you know. type of person that I want to wait for my husband to put the money on the table all the time, you know, whatever I think I can do I do to get extra money. . ."</i></p>	Hardship experienced in terms of finance, shopping and working/extra income	Poverty
<p><i>"That I'm going mad, mentally and sometimes I'd be crying. . . the baby and I will be crying, and sometimes I feel like throwing the baby out, but I can't."</i></p> <p><i>"It was like a torture. I mean I was screaming at the midwife so I was just screaming, I cried, postnatal depression, so I said No, I want to go home."</i></p> <p><i>"Very tired/baby cried all the time."</i></p>	Failing to admit that they are depressed as it is taboo to admit to such	Signs of postnatal depression
<p><i>"Mixed feelings—happy at times and sad sometimes."</i></p> <p><i>"Feeling isolated/rejected by husband."</i></p>	Crying at times but only in secret as cannot be seen to be failing	Not coping

**4.3. Emotional Feelings after the Birth of the Baby.** The cultural ideal for describing the postnatal period was strongly endorsed by and pervasive amongst participants. This was accompanied by tacit acknowledgement that the actual experience of many women would fall short, leading to disappointment at unfulfilled expectations and potential risk of postnatal depression. Rest was considered a necessity following the demands of pregnancy and childbirth but the participants were totally disappointed as the shock of having a crying baby hit them. They received no help from husbands or family members and had to cope with the demands that came with this new, vulnerable child, who needed help and care constantly.

*"So I suppose I was happy to become a mum, emotionally I was sad, and I. . . . . but I just kept crying and she was quite shocked and she spoke to me and said to me "Oh it's OK to cry because if you don't cry you can become very depressed. And I said Why am I crying?" I couldn't think why I was."*

These feelings were attributed to practical problems: for example, having little opportunity to rest, and lack of support at home. These are serious issues in women's lives so, for them, it was a case of finding a way to cope with feelings nobody else understood or which they could not explain to others for fear of being labelled or misunderstood. As various participants stated:

*"so the first week was very difficult for me to cope with changing him, feeding him, it wasn't easy, it was my first time, so I would cry sometimes; and not until when my mum came, things were a little bit easier for me. But I couldn't really cope with the emotions. Sometimes like I said, it was mixed feelings."*

Here symptoms are very much associated with a state of unhappiness following delivery, although by no means

all recognised it as an illness—postnatal depression—or a requirement for treatment by healthcare professionals.

**4.4. Social Support or the Lack of It.** The participants, being relatively recent immigrants to the UK, spoke of the difficulties they faced in this country, which promotes equality between men and women. On average these women have been in the UK for about five years. However, the reality in their homes is different. As narrated by various women, they did all the household chores regardless of the number of days that had elapsed since the birth. They received no help from their husbands nor even from their mothers-in-law; in fact, some women reported that the in-laws made matters worse. As one of the participants strongly stated:

*"..... I mean having a baby is difficult but I did all the cooking, my in-laws were around, I was frustrated, nobody helped me do anything for six months, I changed the baby's diapers all the time, nobody helped me once. I was cooking, I was going to the market, and there was no help for me. I cried a lot, felt rejected by my husband, So by the time I got pregnant the second time, I wasn't looking forward to having the baby, I was. . . . ."*

*"[The in laws] would come around just to see the baby, ask me how I'm doing, and leave when they should actually be helping me, but they didn't do any of that. So that was one of the things that really got to me, like I've got help here but. . ."*

And although most of the participants had husbands they emphasised that they did not help at all. They described it as an "African thing" and called for awareness training for some African men in order to educate them on issues of the postnatal period.

*"I mean for African perspective, this is how we do it. We do it this way. Why do you want to do it that*

*way? So then whatever you want to say has been short out of you or stays in you. If you want to with mum, I'll deal with the person who's trying to tell you what you have to do."*

**4.5. Being Alone with Feelings.** For some participants, their postnatal status meant that they were unable to escape and thus had to stay and endure the hardship. Participants indicated that a major source of distress was being unable to share their emotions with their immediate family for fear of being seen as a failure. Some participants spoke about talking to their husbands about their emotions while others did not hold any hope that it would improve the situation as the men do not see their role as providing help even though they live in the UK. Participants felt there was no generally accepted person to talk to; one participant pointed out that, even when the health visitors come, the mother-in-law is sometimes present, thus making her (the participant) uncomfortable about displaying her emotions in front of the mother-in-law. The quotations below are illustrative of this theme:

*"It's something nobody else can help you with. Like someone can help you with the baby and help you with other things, but the way that you're feeling, you don't get help for that."*

*"That I'm going mad, mentally and sometimes I'd be crying... the baby and I will be crying, and sometimes I feel like throwing the baby out, but I can't."*

*"I don't know. Maybe it's my culture, I don't know. It could be cultural. I can't imagine myself going to my mum, or my mother-in-law... probably I can say to my mum, but I still didn't, I just couldn't imagine saying to somebody, "Oh do you know what? I'm really struggling, I'm really down..." It just sounds odd. It's just not... it's not something that you do, you just... Everybody expects you to get on with it and you get on with it."*

**4.6. Lack of Information.** Participants pointed out that there is a general lack of awareness among UK health visitors and healthcare professionals in identifying when African women immigrants are in distress or are crying out for help. A woman remarked that she was given a questionnaire (referring to the EPDS), which to her made no sense:

*"but they didn't really give me some of the other information that as a new mother I would have found really useful, without me having to look on the Internet or buy a book." "To me, the information given by the health visitor did not help me at all; I had to search the Internet myself for answers to some of my questions."*

The same woman pointed out threats to her mental health arising from her postnatal experience. Her inherent vulnerability and the potential consequences of her distressed mental state were not adequately dealt with,

probably because of the professionals' failure to capture the struggle and nuances, in this case, of what this woman was going through. This participant also felt she needed more information from the care providers that would have helped her cope better after the birth of her baby.

**4.7. Poverty.** Another theme repeatedly raised by the participants is the issue of social class and working-class women. Money or poverty seemed to be a major concern for participants. There is the issue of the father/partner, mother or both working long hours and not earning enough. There were also issues about providing for the family, because social welfare provision is not a practice in their country of origin or they do not have recourse to public funds due to their status as recent immigrants. As a result both parents have to provide for the family and that is the acceptable norm. This is harder in the United Kingdom because of childcare arrangements. As another participant stated:

*"With this baby I felt really depressed because I didn't want to have another child because I raised my other daughter on my own. She's nine now so I thought that's the hard work... I didn't want to do it all over again, so all the time I was up and down, some days I feel ok some days I feel really depressed."*

**4.8. Signs of Postnatal Depression.** Participants described some of the signs of postnatal depression; however, the main theme here is that they would not dare admit to their families or relatives that that was how they were feeling at that moment in their lives. The fears of being seen as a failure or being stigmatised or labelled as mad were some of the reasons women kept their feelings to themselves. As one participant added:

*"It was like a torture. I mean I was screaming at the midwife so I was just screaming, I cried, postnatal depression, so I said No, I want to go home."*

**4.9. Not Coping.** Participants also stated that there are instances when they feel out of control—not coping—and even sometimes the feeling of "losing it" completely. Furthermore, almost all of the seventeen participants agreed that there is a problem with the present system of provision of healthcare services for African women immigrants in capturing these emotional distresses. They also recognised that they do not speak to professionals about their true emotional feelings for fear of being labelled depressed, which is a taboo or a stigma in both their country of origin and to a lesser extent in the UK. As another participant stated:

*"so the urge to want to speak up and say Hey, I actually need help... you know, I'm not coping here, superwoman, you know, I can do this, but you're not. Inside you're not."*

## 5. Discussion

The main findings were related to: response to participants' pregnancies, feelings before and after giving birth, social support or the lack of it, feeling alone, lack of information about health services, poverty, signs of postnatal depression, and not coping with their situation. And as mentioned before, these were women's statements that reached a good level of within-data saturation [60], since they emerged rapidly from the first focus group and kept being repeated in the subsequent focus group. In order to synthesize them, the statements are discussed in terms of the direct experience of the women (feelings before and after giving birth, signs of postnatal depression, a feeling that they are not coping with the situation, feeling alone, and expectations of and responses to their pregnancy) and, also in terms of perceived support from families (husband and mother-in-law), community and health services (lack of information and health visitors).

The majority of the statements articulated by some of participants and related to their direct experiences indicated symptoms associated with a state of unhappiness following delivery, although by no means all recognised it as an illness—postnatal depression—or felt they required treatment by healthcare professionals as addressed too by the literature [10, 11, 21, 27, 36, 37]. As one of the participants stated powerfully, rendering it invisible, it is “something that you have to get on with.” However, their narratives showed features such as distressed states manifested by sadness, irritability, anger and unhappiness, all of which characterise the medical construct of postnatal depression. So, certainly, the narrative of those states was comparable to the criteria for a diagnosis of postnatal depressive disorder but, as seen, these become invisible because they are not identified as postnatal depression as such.

Further descriptions of the women's experiences related to their emotional feelings when facing lack of social support. They perceived themselves as drained, which made them feel emotionally down. Additional units of meaning here included “caring for my baby alone”, “cooking for the family,” “worrying about my finances” and “looking after the house.” So, as the literature also shows, the lack of all types of social support cannot be ignored here as a major risk factor for postnatal depression [31] particular in immigrant women, whose close relatives are absent.

In their narratives women expressed emotional distress as something different from physical illness, and that one may cause or influence the other. Their descriptions fitted in many ways the psychosocial model of health as this conceptualises health as a bio-psychosocial issue [58, 63], rather than an exclusively biomedical issue. They acknowledged that emotional distress was a product of their social conditions combined with their own individual issues.

According to the literature two major stressors for mothers of newborns going through the postnatal period are: (i) recovering from the immediate physiological changes caused by delivery; (ii) returning to functional status (which rarely returns to normal prior to six weeks) during the days and weeks after delivery [64]. Thus, discussions with

new mothers during this period must include those two stressors. In the case of women in the two focus groups, most of the stressors expressed by the women are included among the themes as, for example, mental stress such as loneliness, unmet expectations, birth plan disappointment and abandonment, and external stressors such as crying baby, sibling care, lack of support, and financial concerns. Of course, while women in the study reported here did not experience all the stressors at once, most experienced some simultaneously. Experiencing multiple stressors during the postnatal period can lead to sleeplessness, fatigue, and irritability, which were also part of the narratives. Studies have shown that these multiple stressors are risk factors for postnatal depression [31, 65].

From the women's narratives it was apparent that their African cultural background has a bearing on their help-seeking behaviour. Although some of them felt sad, unhappy, and stressed, they kept their feelings to themselves because, culturally, to admit having problems coping with the after-effects of childbirth is probably a sign of failure or weakness in front of the extended family—husbands, mothers-in-law, and others. Thus, as [66] argues, the culturally appropriate terminology for depression seems to be an issue for further research here.

Also, as expressed in their narratives, the fact that women may choose to make their emotional problems invisible to health professionals could find explanation in their cultural backgrounds and their status as newly arrived immigrants. As the literature addresses, among various factors, cultural background is one that could lead to some women being undiagnosed [18], particularly African immigrant women in the UK. Women from black ethnic minority backgrounds may not be diagnosed with postnatal depression because of their fear of being stigmatised and their cultural perception and understanding of postnatal depression [5, 17].

The cultural background of immigrants as a factor in the concealment of postnatal symptoms is important because it is vital to recall that cultural practices are not frozen activities that determine unequivocally the behaviour of an individual. Culture is reenacted by individuals daily and is responsible for the embedded ambiguity in the way they react. Immigrants are neither in the old familiar place nor fully tailored to the new place—including, among other things, their access to or demand for health services that are mainly biomedically oriented [28, 29, 67]. So the common conceptualization of culture by health services as a frozen element that determines people's behaviour, attitudes, or understanding of the lifeworld should be modified to that of daily enactment and ambiguity which needs to be understood by the health professionals in each specific case [67]. Here, there is a need for skilful health professionals to work with women who experience this cultural ambiguity regarding postnatal depression.

As some of the participants narrated, counting on their own mothers for support seems to have helped some participants cope with the distress they faced during this postnatal period although not in all cases, as a few never had the opportunity for their own mothers to be present due to their immigrant status. Similarly, as described in



the literature [21], turning to prayer in order to cope with their stress levels was seen by other participants as a coping mechanism, particularly for those with strong religious beliefs.

Interestingly, the two focus groups welcomed the idea of a group such as the focus group which allowed them to communicate their internal emotional struggles and feelings with women who were going through the same experience.

Another important and recurrent finding as presented in the narratives of the participants in the two focus groups was the mention of the mother-in-law as one of the sources of unhappiness in the dynamics of the household once the baby has arrived. As described by participants in some African groups, once a woman gets married, it is expected that, in the next few months, she will become pregnant. The absence of babies causes unfulfilled expectations in both families—the woman is seen as an alien and the longer she remains without a child the more sadness she experiences. She receives unfriendly comments from her mother-in-law and other members of her husband's family, and not even the husband will intervene in this matter. In the study reported here, this fact was revalidated by the comments of two of the participants who were married for about a year before conceiving. So, when the pregnancy finally came they were elated. This happiness, however, was cut short by the arrival of their mothers-in-law, who did not help them at all but rather caused them distress.

After the mother-in-law, the second most culpable figure seen as failing to provide any social support was the husband. And, although most of the participants had husbands, they emphasised that they did not help at all. They described it as an “African thing” and called for awareness training for some African men in order to educate them on issues of the postnatal period.

Ultimately, without denying the biomedical mechanisms present in postnatal depression, the interesting issue to discuss here in closing this discussion is the fact that the women through their narratives volunteer the sources of solutions based on the psychosocial model of health [58]. Social support from family, practical and emotional support from partners and having someone to talk to were unanimously expressed as the “remedies” for what they were experiencing: isolation and self-inflicted suffering endured in silence because of the fear of being labelled and stigmatised as emotionally unstable by the immediate family (partners and in-laws). This overwhelming result found by the study reported here was also very well addressed by the literature on postnatal depression [21, 27, 33–37].

**5.1. Research Implications for Clinicians and Health Providers.** Contextualising the most important findings discussed above (acknowledgement of postnatal depression, social support, and emotional distress, cultural identification and coping strategies) in some of the recent discussions in social sciences, three issues are addressed below, particularly for health professionals to consider when offering health services for people of different cultural backgrounds, in this case African immigrant women. The dialogue between social sciences and

nursing science is imperative in the context of framing health as a bio-psychosocial, cultural and political issue rather than a biomedical one.

The first issue is that of the acknowledgement of suffering, which has been addressed by medical anthropology. In particular, [68] have addressed the issue of the role of language in the incommunicability of pain and suffering. As the authors brilliantly state:

*“To be in pain is to be certain about this knowledge. To be asked to react to another person's pain is to be in doubt about its existence. From the perspective of theories of social suffering, such a preoccupation with individual certainty and doubt simply seems a less interesting, less important question to ask than that of how such suffering is produced in societies and how acknowledgement of pain, as a cultural process, is given or withheld. After all, to be ignorant or incapable of imagining another person's pain does signal blindness in moral sensibility in the same way in which the incapacity to acknowledge that pain does” (page.xiii).*

Unquestionably, failure to acknowledge that African immigrant women to the UK are struggling in an ambiguous way with their emotions in their postnatal period calls into question the understanding of suffering and pain by the health services and health managers trapped in frameworks of accountability and quantitative indicators. Can we imagine the health services, managers and professionals acknowledging the statement “it is something that you have to get on with” with something like: “No, it is not something that you have to get on with!”? Certainly the health services could show these women that their struggle has alternative solutions.

The second issue has to do with the contemporary conceptualisation of power. According to this notion, power is a multiple force cross-cutting human relations and therefore spaces such as the domestic arena and even the clinical space. Power, as described by the narratives of the women, plays a role in the dynamics of their households through the family politics and certainly underpins most of the features the themes are pointing out such as domineering husbands and lack of support for the women, powerful role of the mother-in-law, isolation, and self-inflicted suffering by the women themselves who remain silent about their stress.

So, an understanding of the family politics—that is, how all the members of the extended family display and wield power around the pregnancy issues as described by these African women immigrants—is something that needs to be incorporated in the bio-psychosocial model of health services when working with them. These compelling features should make it clear to the health professionals that they are not working with the assumed normality that is the reconstructed British nuclear family. Of course, this is not say that such politics are not also played out among the reconstructed British nuclear family. It is just that the politics differ between different groups.

The third issue to be discussed here has to do with intercultural communication in the health setting between these immigrant women and health professionals. As demonstrated by the narratives, on the one hand the women's concealment of the emotional stressors from themselves, complemented by the fear of failure, generates some self-inflicted suffering. On the other hand, the family members' disregard and stigmatisation of the stressors, along with the professionals' failure to acknowledge the cultural ambiguities, adds to the women's suffering. The fact that professionals often report women as being well because they have hidden their internal turmoil is significant evidence of the lack of awareness of intercultural communications among health professionals in observing culture and power at play. And this could be the result of the lack of education among health professionals in the discussion of contemporary social sciences as well as the new discussion on compassionate care.

Combining the features described above along with more specific tips for health professionals, it is evident that the main one comes via the approach used by health service managers and professionals, at least in the in the UK, to conceptualising health. If health is a bio-psychosocial issue [63], the acknowledgement of the suffering of these immigrant women, the household politics they face and the intercultural communication between them and the health professionals are issues that can definitely be accommodated. But this ethical and academic decision lies in the hands of the health services.

Feminist research has demonstrated that the best outcomes in improving women's lives come from the work done with both men and women and not just women [69]. Health professionals probably need to understand that postnatal depression in African immigrant women is not the exclusive issue for these women, as the research study reported here has tried to demonstrate. This has implications for health professionals working with postnatal women since their experiences should extend to and include the understanding of the entire family and not just the postnatal women. Again, as [70] points out when outlining the social suffering theory, suffering and pain as in the case presented here of postnatal depression, inasmuch as they are health and social problems, needs to take into account not only the individual but also his or her networks.

## 6. Limitations of This Study

There were four limitations in this study which eventually could relate to the literature concerning qualitative research with BME groups or other vulnerable groups [71–74]. First, when carrying out research on health issues, the researcher has to abide by the ethnic self-identification of the person that the research is about rather than engage in labelling. In this case the women who participated in the study reported here self-identified themselves as African immigrants to the UK in the last decade.

Second, regarding the issue that research with people of different cultural backgrounds should ideally look for same cultural matching between researchers and participants has been challenged. In particular, [73] argues that more

than ethnic matching, researchers and research participants should look for a mutual or shared understanding regardless of their cultural background. In the case of this research there was an effort to combine both shared understanding and ethnic matching. Thus while the ethnicity of the three main researchers involved in the data collection were, respectively, African, English, and South American, the gender mix involved two females and one male. So any possible limitations in the research reported here could be related to these cultural backgrounds.

Third, the literature on qualitative research becomes controversial where data saturation regarding focus groups is reached. While some authors mention that this is obtained between three and six focus groups, [74] other authors [75] view it as a reemerge of a theme or a topic even if it is in one focus group. In the particular case of this research, data saturation took place from the first focus group due to the influence of the most vocal and educated women. However, as was also indicated, this trend was countered by taking into account the statements of the less vocal women.

Fourth, trustworthiness and rigour in qualitative research as suggested by [72] should come through the dialogue or agreement between, on one hand, the reader of the research, and on the other, the detailed description of how the research process was conducted by the researcher. In the case of this research the materials and methods have been described as carefully as possible so that readers can follow the process by which this research with African immigrant women was conducted. Equally transferability as part of trustworthiness and rigour in qualitative research comes through the description of the specific context in which the research has taken place [72]. Thus a possible limitation of this research could be that some of the situations discussed (acknowledgement of postnatal depression, social support and emotional distress, cultural identification, and coping strategies) in African immigrant women relate only to them while the same or other similar aspects discussed relate to other women from other cultural backgrounds. However this was beyond the scope of this research.

## 7. Conclusion

The study, using the logic of qualitative inquiry, the *ergodic* hypothesis as postulated by Devereux [76], showed that African immigrant women in South East London received little practical and emotional support before, during and after delivery of their babies. As the narratives of the study illustrated, these women suffer and cope with their emotional distress alone and in silence, magnifying their suffering. They see emotional distress as something different from physical illness and very much framed in the bio-psychosocial model of health. Their narratives also allow us to infer that support from the immediate extended family (mainly in-laws and husband) is inadequate and these family members barely understand what the mothers are going through. The same lack of acknowledgement and understanding was observed by the healthcare services.

As demonstrated by the study, on the one hand, the women's tendency to keep all the emotional stressors to

themselves complemented by the fear of failing generates some self-inflicted suffering. On the other hand, when the family members ignore the stressors and stigmatise the mothers, and the professionals fail to pick up any of these cultural clues, the women's suffering is compounded. The fact that professionals often report women as being well because they have hidden their inner turmoil is significant evidence of the lack of acknowledgement of the suffering the women are going through as well as the lack of awareness of intercultural communication between health professionals and the women, in this particular case African immigrants in London. There is a need for health professionals to embed cultural ambiguities in their daily work routine, as culture is not a frozen equivocal determinant of peoples' lived world. Again, in this particular case involving immigrant women, can we imagine health services, managers and professionals acknowledging the women's statement "it is something that you have to get on with" with something like: "No, it is not something that you have to get on with!"? Their struggle has alternative solutions. The discussion of contemporary social sciences could help here immensely as well as the new discussion on compassionate care.

Simultaneous with the acknowledgement of the women's suffering, it was seen as important that the health professionals understand the family politics of any household. The inclusion of family politics in the bio-psychosocial model of health services is imperative. As the narratives showed, health professionals need to understand that, in a multicultural society, there is more than one assumed normality besides the reconstructed British nuclear family. Taking advantage of multiple readings into this will help the health services. But, as has already been stated, this and other ethical and academic decisions lie in the hands of the health services.

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## Research Article

# County Differences in Mortality among Foreign-Born Compared to Native Swedes 1970–1999

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**Background.** Regional variations in mortality and morbidity have been shown in Europe and USA. Longitudinal studies have found increased mortality, dissimilarities in mortality pattern, and differences in utilization of healthcare between foreign- and native-born Swedes. No study has been found comparing mortality among foreign-born and native-born Swedes in relation to catchment areas/counties. **Methods.** The aim was to describe and compare mortality among foreign-born persons and native Swedes during 1970–1999 in 24 counties in Sweden. Data from the Statistics Sweden and the National Board of Health and Welfare was used, and the database consisted of 723,948 persons, 361,974 foreign-born living in Sweden in 1970 and aged 16 years and above and 361,974 matched Swedish controls. **Results.** Latest county of residence independently explained higher mortality among foreign-born persons in all but four counties; OR varied from 1.01 to 1.29. Counties with a more rural structure showed the highest differences between foreign-born persons and native controls. Foreign-born persons had a lower mean age (1.0–4.3 years) at time of death. **Conclusion.** County of residence influences mortality; higher mortality is indicated among migrants than native Swedes in counties with a more rural structure. Further studies are needed to explore possible explanations.

## 1. Introduction

Earlier studies have shown that mortality and morbidity vary in different parts of a country both in European countries and the US [1–4]. To our knowledge no study has compared mortality among foreign-born and native-born Swedes in relation to catchment areas such as counties. Geographical variation in mortality is due to influencing factors, in childhood and in adulthood, such as social class, employment status and social and physical environment [5], and unequal utilization of healthcare. Districts with high or low mortality could be identified in the UK [1]. Another investigation showed an association between area of residence and stomach cancer or stroke [3]. In Italy higher mortality for men was found in the north of the country compared to the south but the reversed pattern was evident for women [2].

Previous longitudinal studies of mortality, morbidity, and health care utilization among foreign- and native-born Swedes during 1970–1999 have found increased mortality,

dissimilarities in mortality pattern, and differences in utilization of hospital care [6–8]. The results showed higher mortality and a 2.5 to 2.8 years lower mean age at time of death for foreign-born persons compared to the Swedish controls. The mortality pattern showed a significantly higher number of deaths among foreign-born from *neoplasm, diseases of the circulatory system, symptoms, signs, and ill-defined conditions, and injury and poisoning*, according to the International Classification of Diseases, ranging from 1.0% to 5.3% higher prevalence [7]. A tendency towards less healthcare utilization among migrants, especially men, as regards to the diagnosis groups *symptoms, signs, and ill-defined conditions* and *injury and poisoning* has been found [8].

In Sweden, geographical differences in mortality and morbidity of the total population have been described [9, 10]. The average lifetime was found to be longer in the southern part of Sweden. Cancer was more frequent in the three largest cities, whereas accident as cause of death was more often found in rural areas. Differences in utilization

TABLE 1: Excluded and analysed persons related to country of birth, sex, and age.

	Excluded male persons			Analysed male persons		Excluded female persons			Analysed female persons	
	<i>n</i>	Mean age 1970	Proportion excluded %	<i>n</i>	Mean age 1970	<i>n</i>	Mean age 1970	Proportion excluded %	<i>n</i>	Mean age 1970
Swedish	54 729	31.5	24.5	168 702	39.4	36 578	32.2	15.9	193 272	42.0
Denmark	3 285	34.8	17.4	15 627	43.0	2 054	34.4	13.0	13 795	44.1
Finland	27 193	29.3	30.8	60 959	34.8	18 035	29.9	17.9	82 544	37.4
Norway/Iceland	3 654	32.9	21.6	13 236	45.7	2 875	33.4	11.4	22 413	48.0
Yugoslavia	3 518	32.6	23.3	11 598	31.8	2 519	33.1	23.2	8 362	31.1
Poland	462	35.4	9.8	4 253	44.6	354	35.2	6.7	4 925	44.6
Germany	2 613	34.6	15.5	14 291	41.6	2 123	36.4	9.7	19 675	45.0
Other European	10 442	34.2	23.2	34 510	42.0	6 577	34.9	18.9	28 229	46.0
Non-European	3 496	32.4	19.9	14 035	45.0	1 966	33.9	13.1	13 081	51.7
Stateless/unknown	66	30.6	25.5	193	50.2	75	30.7	23.2	248	55.8
Total	109 458		100	337 404		73 156			386 544	

of healthcare in different age groups among elderly persons have been studied [11]. The study found fewer days in hospital care and fewer visits to a general practitioner in the oldest age group, 80+, during the last year before death.

Swedish society has changed during the last century due to international migration and foreign-born people living in Sweden constituted 2004 11.5 percent of the total population [12]. The population of foreign-born in Sweden shows a great mixture of different nationalities but is dominated by labour migrants from the Nordic countries, especially Finland, and European countries such as the former Yugoslavia, Germany, and Poland [12].

The differences in health found in previous investigations, among foreign-born and native Swedes, could be a general pattern or vary in different parts of Sweden. Whether differences in healthcare services between county council areas are related to mortality among foreign born is unknown. In accordance with the Swedish Health and Medical Services Act, there should be no differences in healthcare services [13]. Earlier findings and the lack of studies in the area of geographical differences in mortality among foreign-born and native population warrant further studies.

The aim of this study was to describe and compare the county distribution of mortality among foreign- and Swedish-born persons during the years 1970–1999. The pattern will be discussed in relation to gender, year of birth, and age at death, testing the null hypothesis that no county differences in mortality exist between foreign-born and native Swedes.

## 2. Material and Methods

Data from Statistics Sweden (SCB) and the National Board of Health and Welfare Centre for Epidemiology covering the period 1970–1999 was analysed. The study population consisted of all 361,974 foreign-born persons aged 16 years and upward who were registered as living in Sweden in 1970, together with 361,974 matched Swedish controls for each person. The control was matched and was similar

in age ( $\pm 3$  year), sex, occupation, type of employer, and lived in the same county in 1970. Type of employment was divided into three groups (government, municipal, or other employer). Occupation was coded according to the Nordic Occupation Classification System (NYK), and county represented all the 24 county council areas in Sweden. This data relates to the situation on 1 November 1970 and was taken from the National Census of 1970, which was a total census and checked against the National Population Register (RTB), which included data up to 31 December 1999. Each person was given a code if they were deceased, still living in Sweden, had emigrated, or if no information was available. Information from the National Board of Health and Welfare Centre for Epidemiology on date of death and death diagnosis was added to the database. In total 906,564 people were included, 50 percent foreign-born persons.

A Swedish matched control could not be found for 20,518 of the foreign-born persons due to the matching criteria. Exclusion criteria were as follows: if no information was available or if a person had emigrated or migrated back (“remigrated”), thus in total 163,896 persons were excluded from the database. Persons were then also excluded if the information from the control subject was missing due to migration. In total 182,614 persons, 109,458 men and 73,156 women, were excluded from the database; see Table 1.

The largest group of excluded foreign-born persons, 45,228 persons, consisted of persons born in Finland. In the original database 44,067 of them were coded as migrated (remigrated) and mortality among 37,904 (86%) of them could be analysed with data from the Population Register Centre in Finland. The analysis showed the same mortality risk among the excluded group as the Finnish-born persons who stayed in Sweden [6].

The database used for analysis finally consisted of 723,948 persons, 361,974 foreign-born and 361,974 Swedish controls. Latest county of residence was used to distribute the study population in different geographical areas in Sweden. Mobility in Sweden between different counties showed a similar pattern. Among persons still living in 1990, 27.2%

of foreign-born and 25.5% of Swedes had lived in the same county during 1970–1990 ( $P < 0.001$ ) and 81.1% versus 85.52% might have moved during the study period but were living the same county in 1990 as in 1970.

**2.1. Characteristics of County Council Areas in Sweden.** The 24 counties in Sweden differ with regard to population and area. The population varies from the largest one (Stockholm) with 1,860,872 inhabitants to the smallest (Gotland) with 57,535 inhabitants (SCB, 2004). The four most densely populated counties are, as in 1970, Stockholm, Göteborg och Bohus, Malmöhus, and Östergötland. Gotland, Blekinge, Kronoberg, and Kalmar represent the less populated and could be considered as more rural counties according to the national classification [14]. The different counties also vary in terms of area, which tends to be larger in the north of Sweden, Norrbotten is the largest, covering an area of 98,249.5 km<sup>2</sup>. In contrast, the smallest county (Blekinge) has an area of 2,946.7 km<sup>2</sup>.

**2.2. Statistical Analysis.** Values from the total cohort sample are given as numbers, means, and percentages. Comparisons were made by tests of significance with Mann-Whitney  $U$  test and Chi-square test. A value of  $P < 0.05$  was considered statistically significant [15]. Logistic regression analysis was performed and a model tested, adjusted for age and sex, with the two independent variables foreign-born and latest county of residence (categorical) and the dependent variable dead or alive. Uppsala County, with the lowest mortality, was used as reference.

Cox regression analysis was performed in two age groups: persons aged 60–69 years and 80 years or more. The analysis was adjusted for sex and age and tested the importance of being foreign born and latest county of residence (categorical). Uppsala was also in this analysis used as reference.

All analyses were performed using SPSS (Statistical Package for Social Sciences), version 11.5.

**2.3. Ethics.** Approval of the study was granted from the Ethics Committee of Lund University, Sweden, after a reviewing process from all other university ethics committees in Sweden.

### 3. Results

**3.1. Characteristics of Counties and Differences in Mortality in relation to being a Foreign-Born Person.** The study population was geographically distributed among the 24 different county council areas that made up the regional organization of Sweden in 1970. The major groups of foreign-born persons were found in the counties of Stockholm, Göteborg och Bohus, and Malmöhus; see Table 2. There were no significant differences between foreign- and Swedish-born persons in the different counties in relation to sex. In four counties (Stockholm, Göteborg & Bohus, Västmanland, and Norrbotten), foreign-born persons had a significantly lower mean age than Swedish-born persons. The mean age was

significantly higher among foreign-born men than Swedish-born men in eight and significantly lower in three counties. Foreign-born women had a higher mean age in nine and a lower mean age in three compared to Swedish-born women (Table 3).

During the studied period 1970–1999, a total of 116,063 foreign-born and 104,865 Swedish control persons had died. There was significant higher mortality for foreign-born persons than native Swedes in all counties with one exception, Norrbotten. The highest percentage of deceased among foreign-born persons was found in Gotland (43%), Värmland (40.0%), and Jämtland (37.4%). The largest difference in deceased subjects, with higher mortality among foreign-born than Swedish-born persons, was found in the rural counties of Gotland (7.6%), Blekinge (7.1%), Kalmar (5.9%), and Kronoberg (5.7%).

**3.2. Influence of Gender on Mortality.** There was significant higher mortality in all counties for men and in 19 of the 24 counties for women (Tables 4(a) and 4(b)). The highest proportion of deceased foreign-born men was found in Gotland (49.7%), Värmland (45.3%), and Jämtland (41.3%), see Table 4(a). The largest difference in percentage between deceased foreign- and Swedish-born male persons was in Gotland (11.4%), Blekinge (9.0%), Jämtland (7.9%), and Jönköping (7.6%). Foreign-born women had the highest percentage of deceased in Gotland (39.3%), Värmland (36.0%), and Norrbotten (32.8%). The difference in percentage between foreign- and Swedish-born deceased female persons was largest in the rural counties of Kalmar (5.3%), Blekinge (5.2%), Kronoberg (4.8%), and Gotland (4.7%); see Table 4(b).

**3.3. Influence of Age on Mortality.** Mean age at time of death was significantly lower for foreign- than Swedish-born men in all counties, ranging from 1.0 to 4.4 years, except for Kalmar and Gotland (Table 5). For women significant differences in mean age at time of death were found in 19 counties. There was a larger difference in mean age at time of death between foreign- and Swedish-born men than between foreign- and Swedish-born women in all counties. Differences in survival time between foreign- and Swedish-born persons were studied in particular in two age groups of older persons, those aged 60–69 and 80+, using Cox regression analysis. In the age group 60–69 years, foreign-born persons had a significantly lower survival time in two counties, Norrbotten and Värmland. No difference was found in any of the other counties. In the age group 80+ no significant differences were found.

**3.4. Multifactorial Influence on Mortality.** Logistic regression analysis studying the influence of being foreign-born and latest county of residence on mortality showed that being foreign-born was, adjusted for age and sex, an independent influencing factor ( $P = 0.000$ ,  $B = 0.242$ ), as was county, except in four county council areas (Kronoberg, Kalmar, Kristianstad, Halland and Skaraborg) and the OR varied from 1.01 to 1.29; see Table 6.

TABLE 2: Population in relation to sex and latest County Council of residence.

County council	Proportion of foreign-born of total population 1970	Men foreign-born		Swedish-born			Women foreign-born		Swedish-born		
	%	<i>n</i>	%	<i>n</i>	%	<i>P</i> -value	<i>n</i>	%	<i>n</i>	%	<i>P</i> -value
Stockholm	10.5	50 683	45.5	45 955	45.1	0.218	60 677	54.5	55 986	54.9	0.278
Uppsala	6.1	4 016	46.5	4 178	46.3	0.512	4 614	53.5	4 849	53.7	0.278
Södermanland	9.5	7 100	49.1	7 271	49.6	0.658	7 350	50.9	7 394	50.4	0.663
Östergötland	5.0	5 444	47.8	6 048	47.9	0.913	5 942	52.2	6 570	52.1	0.918
Jönköping	5.1	4 180	46.9	4 593	47.1	0.868	4 728	53.1	5 153	52.9	0.878
Kronoberg	5.0	2 117	48.6	2 626	49.8	0.504	2 238	51.4	2 649	50.2	0.513
Kalmar	3.4	2 352	48.5	2 915	47.9	0.746	2 502	51.5	3 167	52.1	0.758
Gotland	2.5	441	38.1	561	38.8	0.811	717	61.9	886	61.2	0.861
Blekinge	5.1	1 957	49.0	2 329	49.7	0.701	2 035	51.0	2 354	50.3	0.706
Kristianstad	3.8	3 543	46.3	3 832	46.1	0.876	4 112	53.7	4 484	53.9	0.888
Malmöhus	7.3	17 990	48.8	17 002	48.6	0.778	18 893	51.2	17 984	51.4	0.785
Halland	4.7	3 583	46.8	3 887	47.3	0.685	4 079	53.2	4 331	52.7	0.708
Göteborg och Bohus	8.4	19 041	50.5	18 097	50.0	0.439	18 664	49.5	18 093	50.0	0.436
Älvsborg	7.8	8 761	44.7	9 121	44.9	0.868	10 827	55.3	11 180	55.1	0.757
Skaraborg	3.9	2 966	46.2	3 339	46.3	0.945	3 452	53.8	3 871	53.7	0.950
Värmland	4.6	4 365	43.5	4 782	44.5	0.338	5 681	56.5	5 962	55.5	0.415
Örebro	6.2	5 148	48.7	5 568	48.8	0.923	5 418	51.3	5 834	51.2	0.925
Västmanland	11.6	8 931	50.1	8 653	50.6	0.602	8 900	49.9	8 457	49.4	0.599
Dalarna	4.8	4 805	48.4	5 535	48.3	0.978	5 126	51.6	5 913	51.7	0.977
Gävleborg	3.7	3 468	49.0	4 027	48.9	0.976	3 611	51.0	4 200	51.1	0.977
Västernorrland	2.5	2 365	44.1	2 675	44.9	0.601	2 996	55.9	3 282	55.1	0.651
Jämtland	2.3	973	39.2	1 344	42.7	0.088	1 511	60.8	1 807	57.3	0.180
Västerbotten	1.9	1 323	35.7	1 622	37.9	0.163	2 383	64.3	2 655	62.1	0.329
Norrbottnen	4.5	3 150	31.6	2 742	30.6	0.292	6 816	68.4	6 211	69.4	0.532
Total		168 702		168 702			193 272		193 272		

## 4. Discussion

The major findings in this study were that latest county of residence was an independent factor influencing mortality and that a variation with significantly higher mortality was found in all but one Swedish county among foreign-born persons compared with native Swedes. The highest difference compared to native controls of deceased foreign-born was found in counties with a more rural structure. Several factors might explain the noted differences, such as the size of the foreign-born population, differences in the healthcare system's ability to deliver healthcare, social network, stress, and economic resources.

## 5. Strengths and Limitations

The study of regional differences in mortality among foreign-born and native Swedes 1970–1999 was based on data from Statistics Sweden and from the National Board of Health and Welfare Centre for Epidemiology.

The data used to establish the database originated from the Population and Housing Census of 1970, which is considered to be a total census as it was compulsory by

law to take part. The number of dropouts has not been estimated for the total census, only for some of the variables such as “occupation”, which Statistics Sweden estimates to be 3.5–4.5%. One can only speculate about whether participation in the census is related to health problems and whether dropout might differ between foreign-born and native healthy Swedes. It seems unlikely that the proportion of healthy foreign-born should be higher than native Swedes and thereby introduce selection bias. Another reason why migrants do not participate in the census could be language problems.

A Swedish matched control could not be found for 20,518 of the foreign-born persons due to the matching criteria. The geographical distribution of the excluded persons was not different from the distribution in the database used.

The excluded group varies in proportion with regard to country/region of birth. Excluded persons from Finland constitute the largest proportion (30.8%). A followup of Finns who had remigrated was performed and showed no differences in mortality from the group of Finns included in the study [6]. Persons born in Finland constitute the largest group of migrants living in Sweden and were also the largest migrant group in the database used. There are no reasons to



TABLE 3: Population in relation to age (1970) and latest county council of residence.

County council	Foreign-born men		Swedish-born men			Foreign-born women		Swedish-born women		
	Age (mean)	95% CI	Age (mean)	95% CI	P value	Age (mean)	95% CI	Age (mean)	95% CI	P value
Stockholm	39.9	39.8, 40.0	40.6	40.4, 40.7	0.000	43.0	42.9, 43.2	43.7	43.6, 43.8	0.000
Uppsala	36.6	36.2, 37.1	36.7	36.2, 37.1	0.884	39.2	38.7, 39.6	39.0	38.6, 39.4	0.524
Södermanland	38.5	38.2, 38.8	38.6	38.3, 38.9	0.670	40.0	39.7, 40.4	40.2	39.9, 40.6	0.487
Östergötland	38.8	38.4, 39.1	38.1	37.7, 38.4	0.008	40.9	40.5, 41.3	40.4	40.0, 40.7	0.037
Jönköping	38.3	37.8, 38.7	37.6	37.2, 38.1	0.026	40.5	40.0, 40.9	39.9	39.5, 40.3	0.029
Kronoberg	39.0	38.4, 39.7	38.3	37.7, 38.8	0.088	40.9	40.3, 41.6	40.1	39.5, 40.7	0.055
Kalmar	40.6	40.0, 41.2	39.0	38.4, 39.5	0.000	42.9	42.3, 43.5	41.0	40.4, 41.5	0.000
Gotland	45.7	44.1, 47.3	42.6	41.2, 44.0	0.002	47.7	46.5, 48.9	44.6	43.5, 45.8	0.000
Blekinge	39.4	38.8, 40.1	38.1	37.5, 38.7	0.001	42.1	41.3, 42.8	41.1	40.2, 41.8	0.068
Kristianstad	40.6	40.1, 41.0	39.7	39.3, 40.2	0.009	42.6	42.1, 43.1	41.8	41.4, 42.3	0.022
Malmöhus	39.7	39.5, 40.0	39.8	39.6, 40.0	0.725	42.5	42.3, 42.8	42.7	42.5, 43.0	0.377
Halland	38.6	38.2, 39.1	38.2	37.7, 38.6	0.093	40.8	40.3, 41.3	40.1	39.7, 40.6	0.037
Göteborg och Bohus	39.1	38.9, 39.3	39.5	39.3, 39.7	0.002	42.3	42.1, 42.6	42.6	42.4, 42.9	0.080
Älvsborg	39.0	38.7, 39.2	38.7	38.4, 39.0	0.071	40.8	40.5, 41.1	40.6	40.3, 40.9	0.172
Skaraborg	37.6	37.1, 38.1	37.0	36.5, 37.5	0.074	40.0	39.5, 40.5	39.4	38.9, 39.9	0.061
Värmland	44.1	43.6, 44.6	43.0	42.6, 43.5	0.001	45.4	45.0, 45.8	44.8	44.3, 45.2	0.034
Örebro	38.9	38.5, 39.3	38.6	38.2, 38.9	0.195	40.9	40.5, 41.3	40.5	40.1, 40.9	0.122
Västmanland	37.7	37.4, 38.0	38.0	37.6, 38.3	0.138	39.0	38.7, 39.3	39.5	39.2, 39.8	0.009
Dalarna	39.3	39.0, 39.7	39.0	38.7, 39.4	0.253	41.0	40.6, 41.4	40.5	40.2, 40.9	0.072
Gävleborg	38.0	37.6, 38.5	37.6	37.2, 38.0	0.230	40.6	40.1, 41.1	39.8	39.4, 40.3	0.038
Västernorrland	38.6	38.1, 39.2	38.5	38.0, 39.0	0.880	42.0	41.4, 42.5	41.5	40.9, 42.0	0.222
Jämtland	42.8	41.9, 43.8	40.4	39.6, 41.2	0.000	44.1	43.3, 44.8	42.5	41.8, 43.2	0.002
Västerbotten	37.8	37.0, 38.6	37.0	36.4, 37.7	0.389	41.4	40.8, 42.0	41.2	40.6, 41.7	0.625
Norrbottnen	38.8	38.3, 39.3	39.7	39.1, 40.3	0.022	43.5	43.1, 43.9	44.7	44.3, 45.1	0.000
Total										

believe that “remigrants” born in other countries differ from the Finnish group.

Selection bias has to be considered. The excluded persons had a lower mean age than the persons in the database, with the exception of persons born in the former Yugoslavia, but their Swedish control person of the same age was also excluded. Only 8.1% of the excluded persons had reached the age of 60–69 and 2.6% the age of 80+. There is no reason to assume that the excluded persons influenced the survival analysis using these two age groups, due to the low proportion of excluded persons above 60 years of age.

Latest county of residence has been used as a variable. Migration within Sweden might have occurred and labour migration by healthier persons to urban areas could explain the higher mortality in rural counties. However, the pattern of internal migration within Sweden showed similarities between foreign-born and native Swedes. Among foreign-born persons still living in Sweden 1990, 53.9% had changed county of residence during 1979–1999 but moved back to the same county 1990 as the one they lived in 1970, corresponding proportion for native Swedes was 60%.

## 6. Results

The rural counties had in common that the proportion of foreign-born persons in their populations was low compared

to the more urban counties. For some ethnic groups higher density in an area of persons from the same ethnic group has been shown to have a positive effect on self-rated health, limiting long-standing illness [16], and reduce odds of infants mortality [17]. Belonging to a small migrant group may be a risk factor; earlier studies have shown higher hospital rates for mental health problems in areas where migrants constitute a small proportion of the community [18]. The result has been interpreted as showing that if you belong to a larger migrant group it is likely that the stress connected with being a migrant could be reduced due to stronger social network [18]. Stress is also known to increase the susceptibility to other diseases such as diabetes and hypertension [19, 20]. Furthermore, the ability of the healthcare systems, both hospitals and outpatient facilities, to handle and to investigate symptoms and signs among migrants is most likely to be poorer in counties with few migrants. It could be hypothesized that delay or misunderstanding in diagnosis and treatment and healthcare staff with insufficient “language skills” and understanding of cultural differences could influence mortality. In a previous study it was shown that symptoms, signs, and ill-defined condition were more common as cause of death among foreign-born compared to native Swedish persons [7].

Another explanatory factor could be differences in social networks in different geographical areas [21]. Poor social

TABLE 4: (a) Deceased men in relation to latest county council of residence, (b) Deceased women in relation to latest to county council of residence.

(a)						
County council	Foreign-born men		Swedish-born men		P-value	% difference
	<i>n</i>	%	<i>n</i>	%		
Gotland	219	49.7	215	38.3	0.000	11.4
Blekinge	697	35.6	620	26.6	0.000	9.0
Jämtland	402	41.3	449	33.4	0.000	7.9
Jönköping	1 366	32.7	1 155	25.1	0.000	7.6
Västernorrland	809	34.2	723	27.0	0.000	7.2
Kronoberg	700	33.1	686	26.1	0.000	7.0
Älvsborg	3 060	34.9	2 542	27.9	0.000	7.0
Örebro	1 776	34.5	1 553	27.9	0.000	6.6
Östergötland	1 821	33.4	1 632	27.0	0.000	6.4
Kalmar	830	35.3	841	28.9	0.000	6.4
Stockholm	18 214	39.9	15 613	34.0	0.000	5.9
Värmland	1 976	45.3	1 899	39.7	0.000	5.6
Södermanland	2 482	35.0	2 142	29.5	0.000	5.5
Kristianstad	1 214	34.3	1 105	28.8	0.000	5.5
Skaraborg	891	30.0	829	24.8	0.000	5.2
Dalarna	1 668	34.7	1 634	29.5	0.000	5.2
Halland	1 077	30.1	981	25.2	0.000	4.9
Gävleborg	1 149	33.1	1 134	28.2	0.000	4.9
Göteborg och Bohus	6 816	35.8	5 610	31.0	0.000	4.8
Västerbotten	392	29.6	422	26.0	0.029	3.6
Malmöhus	6 311	35.1	5 354	31.5	0.000	3.6
Västmanland	2 737	30.6	2 343	27.1	0.000	3.5
Uppsala	1 117	27.8	1 026	24.6	0.001	3.2
Norrbottn	1096	34.8	883	32.2	0.036	2.6
Total	58 820		51 391			

  

(b)						
County council	Foreign-born women		Swedish-born women		P-value	% difference
	<i>n</i>	%	<i>n</i>	%		
Kalmar	770	30.8	807	25.5	0.000	5.3
Blekinge	640	31.4	617	26.2	0.000	5.2
Kronoberg	617	27.6	604	22.8	0.000	4.8
Gotland	282	39.3	301	34.0	0.027	4.7
Kristianstad	1 239	30.1	1 155	25.8	0.000	4.3
Jönköping	1 220	25.8	1 152	22.4	0.000	3.4
Älvsborg	3 009	27.8	2 768	24.8	0.000	3.0
Gävleborg	982	27.2	1 015	24.2	0.002	3.0
Östergötland	1 647	27.7	1 632	24.8	0.000	2.9
Malmöhus	5 791	30.7	5 014	27.9	0.000	2.8
Halland	1 028	25.2	977	22.6	0.004	2.6
Västerbotten	669	28.1	681	25.6	0.052	2.5
Örebro	1 483	27.4	1 466	25.1	0.007	2.3
Dalarna	1 397	27.3	1 478	25.0	0.007	2.3
Göteborg och Bohus	5 723	30.7	5 200	28.7	0.000	2.0
Uppsala	1 099	23.8	1 057	21.8	0.019	2.0
Västernorrland	905	30.2	925	28.2	0.078	2.0
Värmland	2 046	36.0	2 040	34.2	0.042	1.8
Södermanland	1 954	26.6	1 846	25.0	0.025	1.6
Skaraborg	843	24.4	887	22.9	0.130	1.5

(b) Continued.

County council	Foreign-born women		Swedish-born women		P-value	% difference
	n	%	n	%		
Norrbottn	2 235	32.8	2 090	33.6	0.298	0.8
Stockholm	19 140	31.5	17 289	30.9	0.015	0.6
Västmanland	2 065	23.2	1 927	22.8	0.515	0.4
Jämtland	459	30.4	546	30.2	0.920	0.2
Total	57 243		53 474			

TABLE 5: Deceased in relation to age at time of death and latest county council of residence.

County council	Foreign-born men			Swedish-born men			Foreign-born women		Swedish-born women		
	Age (mean)	95% CI		Age (mean)	95% CI	P-value	Age (mean)	95% CI	Age (mean)	95% CI	P-value
Stockholm	67.5	67.3, 67.7		70.6	70.4, 70.8	0.000	75.0	74.8, 75.2	76.9	76.7, 77.1	0.000
Uppsala	66.0	65.1, 66.8		69.1	68.2, 70.0	0.000	73.7	72.9, 74.5	75.2	74.4, 76.0	0.004
Södermanland	65.7	65.2, 66.3		70.1	69.5, 70.6	0.000	72.6	72.0, 73.2	74.8	74.2, 75.4	0.000
Östergötland	66.2	65.5, 66.9		70.5	69.9, 71.1	0.000	73.5	72.8, 74.2	75.1	74.4, 75.7	0.002
Jönköping	66.3	65.6, 67.1		70.2	69.5, 71.0	0.000	72.9	72.1, 73.7	74.2	73.4, 75.0	0.013
Kronoberg	68.5	67.4, 69.5		71.5	70.6, 72.5	0.000	73.3	72.1, 74.4	75.5	74.5, 76.5	0.008
Kalmar	68.7	67.7, 69.7		70.4	69.6, 71.3	0.060	75.5	74.6, 76.4	75.8	75.0, 76.7	0.626
Gotland	72.4	70.7, 74.1		73.6	71.9, 75.2	0.310	78.0	76.6, 79.3	77.9	76.6, 79.3	0.979
Blekinge	67.9	66.9, 68.9		71.3	70.3, 72.3	0.000	74.4	73.3, 75.5	76.6	75.7, 77.6	0.005
Kristianstad	69.7	68.9, 70.4		72.2	71.5, 72.9	0.000	74.9	74.2, 75.7	76.8	76.1, 77.5	0.001
Malmöhus	67.9	67.5, 68.2		70.6	70.3, 70.9	0.000	74.4	74.1, 74.8	76.7	76.4, 77.1	0.000
Halland	67.8	67.1, 68.6		70.7	69.9, 71.6	0.000	74.4	73.5, 75.2	76.3	75.5, 77.1	0.001
Göteborg och Bohus	65.9	65.5, 66.2		69.7	69.3, 70.0	0.000	73.9	73.6, 74.3	76.0	75.7, 76.3	0.000
Älvsborg	67.1	66.6, 67.7		71.3	70.8, 71.8	0.000	73.9	73.5, 74.4	76.1	75.6, 76.6	0.000
Skaraborg	67.0	66.0, 67.9		70.5	69.7, 71.4	0.000	73.4	72.4, 74.3	74.6	73.8, 75.4	0.105
Värmland	70.3	69.8, 70.9		72.7	72.2, 73.2	0.000	75.5	75.0, 76.1	76.8	76.3, 77.3	0.001
Örebro	66.6	65.9, 67.2		70.2	69.5, 70.8	0.000	72.3	71.7, 73.0	74.0	73.4, 74.7	0.000
Västmanland	65.7	65.2, 66.2		69.5	69.0, 70.0	0.000	71.8	71.2, 72.3	73.0	72.4, 73.6	0.002
Dalarna	66.6	65.9, 67.2		70.8	70.2, 71.4	0.000	72.5	71.8, 73.2	74.2	73.5, 74.8	0.001
Gävleborg	64.8	64.0, 65.6		68.6	67.9, 69.3	0.000	72.6	71.7, 73.4	74.5	73.7, 75.2	0.005
Västernorrland	66.4	65.5, 67.3		70.4	69.5, 71.3	0.000	73.7	72.8, 74.5	74.2	73.4, 75.1	0.340
Jämtland	70.3	69.0, 71.6		71.3	70.1, 72.4	0.000	75.3	74.2, 76.5	74.8	73.8, 75.8	0.558
Västerbotten	67.7	66.3, 69.1		70.0	68.8, 71.2	0.003	72.4	71.4, 73.4	74.4	73.5, 75.3	0.008
Norrbottn	67.1	66.3, 67.9		70.8	70.0, 71.6	0.000	74.7	74.2, 75.2	76.0	75.5, 76.5	0.000

network and low social support are more common among foreign-born persons [22] and have been shown to influence and increase mortality [23].

Generally no significantly higher mortality among migrants was found in Norrbotten, but mortality was higher for men when men and women were analysed separately.

This county has close cultural contacts with Finland [24] and many inhabitants are bilingual. A short cultural distance between migrants and native population has been described as important for health [25].

The differences in mortality in all Swedish counties, with one exception, among foreign-born persons compared with native Swedes could indicate differences in economic resources and needs in the population. One measure of economic resources in the county was the local tax rate. In the middle of the studied period (1985), local tax per unit differed from 28.46% (Kristianstad) to 32.00% in Blekinge of

taxable income [26], although the taxation differences were also equalized by a national taxation transfer system [27]. Whether differences in economic resources between counties might influence the noted mortality differences in relation to foreign-born persons requires further analysis.

More healthcare needs are connected with an elderly population [10] and in 1985 the share of the population aged 80 years or more in the counties varied from 2.7% to 4.2% [27]. The lowest percentage for this age group was found in Norrbotten. The counties of Gotland and Blekinge, with the largest proportion of deceased foreign-born persons, were also characterized in 1985 by a low percentage of foreign-born persons (2.3% and 5.1%) and average or higher than average percentage of the population 80 aged years or more (3.8% and 3.9%).

There are a strong connection between increased mortality and increased age [9, 10, 12]. A higher mean age in



TABLE 6: Multifactorial influence of being foreign-born on mortality adjusted for age and gender with latest county council of residence as independent categorical variable using Uppsala county council as reference.

County council	B-value	SE	P-value	OR	95% CI for Exp. B
Stockholm	0.180	0.023	0.000	1.197	1.144, 1.253
Södermanland	0.197	0.028	0.000	1.218	1.154, 1.286
Östergötland	0.116	0.029	0.000	1.123	1.061, 1.189
Jönköping	0.063	0.031	0.041	1.065	1.003, 1.131
Kronoberg	0.013	0.037	0.736	1.013	0.941, 1.089
Kalmar	0.062	0.035	0.079	1.064	0.993, 1.140
Gotland	0.194	0.059	0.001	1.214	1.081, 1.362
Blekinge	0.113	0.038	0.003	1.119	1.038, 1.206
Kristianstad	0.022	0.032	0.482	1.023	0.961, 1.089
Malmöhus	0.157	0.025	0.000	1.170	1.115, 1.228
Halland	−0.053	0.032	0.099	0.948	0.890, 1.010
Göteborg och Bohus	0.210	0.025	0.000	1.233	1.175, 1.294
Älvsborg	0.106	0.027	0.000	1.112	1.055, 1.172
Skaraborg	0.047	0.034	0.159	1.049	0.982, 1.120
Värmland	0.255	0.029	0.000	1.291	1.218, 1.367
Örebro	0.158	0.029	0.000	1.171	1.106, 1.240
Västmanland	0.087	0.027	0.001	1.091	1.035, 1.151
Dalarna	0.157	0.029	0.000	1.170	1.105, 1.239
Gävleborg	0.215	0.032	0.000	1.240	1.165, 1.319
Västernorrland	0.186	0.034	0.000	1.204	1.125, 1.288
Jämtland	0.194	0.043	0.000	1.214	1.116, 1.321
Västerbotten	0.126	0.039	0.001	1.134	1.051, 1.224
Norrbottn	0.230	0.030	0.000	1.259	1.187, 1.336

the foreign-born population could also explain the larger proportion of deceased foreign-born women in two counties (Kalmar and Gotland) but was not found in the counties of Kronoberg and Blekinge. Furthermore, the variation in mortality between counties with higher mortality among foreign-born remained after adjustment for age and gender.

Other explanatory factors could be work environment and type of employment. Foreign-born men have to a higher degree been employed in private manufacturing industry, which is often found in rural counties like Kronoberg, Kalmar, and Blekinge [28]. Foreign-born women in Sweden could to a higher extent be exposed to shift work and physical and stressful work [29, 30].

In most counties and especially for men, the mean age at time of death is lower among foreign-born persons than native Swedes. The mean age at time of death of foreign-born men in the two counties Norrbotten and Värmland with highest OR was 2.4 to 3.7 years lower than native Swedes and correspondingly 1.3 to 1.8 years lower for women. Cox regression analysis also confirms a lower survival time for foreign-born persons in the counties of Norrbotten and Värmland for the age group 60–69.

## 7. Conclusion

In conclusion, county of residence influences mortality, and the study indicates a tendency to higher mortality among

foreign-born persons than native Swedes in counties with a more rural structure. Further studies are needed to explore possible explanations and to establish the county-specific characteristics to explain variations between county council areas.

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## Review Article

# The Impact of Invisibility on the Health of Migrant Farmworkers in the Southeastern United States: A Case Study from Georgia

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Migrant farmworkers represent one of the most marginalized and underserved populations in the United States. Acculturation theory cannot be easily mapped onto the transnational experience of migrant farmworkers, who navigate multiple physical and cultural spaces yearly, and who are not recognized by the state they constitute, “the Citizen’s Other” (Kerber, 2009). This paper utilizes narrative analysis of a case study to illustrate, through the relationship of the narrator to migrant farmworkers and years of participant observation by the coauthors, how isolation from family and community, as well as invisibility within institutions, affect the health and well-being of migrant farmworkers in southeastern Georgia. Invisibility of farmworkers within institutions, such as health care, the educational system, social services, domestic violence shelters, and churches contribute to illness among farmworkers. The dominant American discourse surrounding immigration policy addresses the strain immigrants put on the social systems, educational system, and the health care system. Nurses who work with farmworkers are well positioned to bring the subjective experience of farmworkers to light, especially for those engaged with socially just policies. Those who contribute to the abundant agricultural produce that feeds Americans deserve the recognition upon which social integration depends.

## 1. Introduction

The agricultural industry in the Southeast of the United States is an important contributor to the economy of the region. The industry relies on the manual labor of farmworkers who plant and harvest crops, work in packing houses, processing plants, and preparation facilities associated with farms [1]. The majority of farmworkers in the southeastern United States are migrants from Latin America, with some representation from other regions [2]. A migrant farmworker is defined as an individual whose principal employment (at least 51%) is in agriculture on a seasonal basis and lives in temporary housing (US Code, Public Health Services Act, “Migrant Health”). Currently, there are over 3 million migrant farmworkers in the United States [1]. In 1964, the USA federal H-2A program was created to meet agricultural production needs. The H-2A temporary agricultural program enables farmers who are unable to recruit sufficient

domestic workers to bring foreign workers to USA to perform agricultural labor or services of a temporary or seasonal nature. Legal protections that apply to these H-2A workers are enforced through the Wage and Hour Division of the United States Department of Labor [3].

The state of Georgia in the United States has a robust agricultural industry. For example, in one county alone, Riverside County, there are over 600 farms (Riverside County is a pseudonym, for confidentiality reasons.). Many farms rely on human labor from farmworkers to plant and harvest the crops. Riverside County, an agriculture intensive region in southern Georgia, has over 600 farms, of which just 3 are H-2A farms. The balance of farms in Riverside County is staffed by undocumented farmworkers. Up until 10 years ago, there was just 1 H-2A grower in the state of Georgia. The rights of farmworkers and responsibilities of farmers are delineated in the Migrant and Seasonal Agricultural Worker Protection Act (MSPA), which apply to both

H-2A workers as well as undocumented workers. The MSPA requires housing inspection and compliance with federal and state safety and health standards, provides itemized statements of earnings and deductions, and ensures that vehicles for worker transportation meet federal and state safety standards and insurance requirements, and that each driver is properly licensed. The goal of these regulations is to protect all farmworkers from substandard and dangerous conditions.

Farmworkers in Georgia usually arrive via Mexico, and they include not only Mexicans (the majority), but Central and South Americans, as well as some persons from the Caribbean. Farmworkers in southern Georgia are typically undocumented, and farmers rely on smugglers, known as coyotes, to shuttle them back and forth from Mexico to Georgia. Farmworkers come to Georgia looking for economic opportunities, but frequently undocumented workers' ability to be financially independent is untenable given the debts owed by farmworkers to a contractor. The contractor typically finances the farmworker's travels and living expenses, while expecting full reimbursement plus interest before the farmworker leaves his/her job [1].

In 1996 the Health Centers Consolidation Act established a centralized funding source for Migrant/Seasonal Farmworker Health Centers, as well as health centers for other vulnerable populations. Today there are 154 migrant farmworker health centers in 42 of the United States, which provide health care to over 807,000 farmworkers [4]. Despite these health centers, access to health care remains a serious challenge to farmworkers.

The major threats to migrant farmworker health documented in the literature include occupational injuries, pesticide exposure, infectious disease, heat stroke, and dermatological conditions [5]. The working and living conditions of migrant farmworkers generate unique health hazards, due to both occupational challenges as well as injury and illness that stem from the conditions imposed by the culture of migrant farmwork, including dependency and poverty [6]. For example, food insecurity is prevalent among farmworkers in the state of Georgia, with as many as 63% reporting inadequate food. Undocumented workers have an adjusted risk of food insecurity 3 times higher than H-2A workers [3]. While significant research has been conducted on occupational hazards of farmwork, such as pesticide exposure, injuries, and dermal conditions, there has been little focus on the differential health risks encountered by farmworkers resulting from their marginalization. Farmworkers differ from the general immigrant population in their relatively unhealthy and unacculturated status. They also experience elevated rates of social and economic discrimination compared to the general immigrant population of the USA [5].

Multiple studies have been done of anxiety and depression among farmworkers [7–13]. Joseph Hovey has written several articles on migrant farmworker health that highlight associations between high levels of depression and various risk factors, including family dysfunction, ineffective social support, hopelessness, and high acculturative stress. While there appears to be agreement among scholars that acculturation leads to stress and increased incidence of mental health dysfunction, one study found that the prevalence of

psychiatric disorders among migrant farmworkers was lower than for Mexican Americans and the US population as a whole, but increased with further acculturation and primary residence in the United States [12].

Although debates about migrant workers have emerged across the country, they are particularly volatile in the state of Georgia. As of July 1st, 2011, Georgia House Bill 87, The Illegal Immigration Reform and Enforcement Act of 2011, was enacted with the goal of deterring the undocumented from entering the state (House Bill 87). The law requires that businesses and government agencies check the immigration status of new workers through a national system and impose fines of up to \$250,000 and 15 years in prison on those who use false identification. An additional provision requires people applying for food assistance and public housing to provide specific forms of identification [14]. The state's sixty-nine billion dollar a year agricultural industry is at stake with the passage of this new immigration law [15]. The purpose of this paper is to inform public debate by presenting empirical data about the scope of health challenges facing migrant farmworkers. Nurses play an important role in the care of migrant farmworkers in USA, but many more nurses are needed to care for farmworkers. This paper utilizes narrative analysis of a case study to illustrate, through the relationship of the narrator to migrant farmworkers and the participant observations of the co-authors, how isolation from family and community, as well as invisibility within institutions, impact the health and well-being of migrant farmworkers.

*1.1. Theoretical Framework.* Studies of migration have often been framed by "acculturation theory" also known as "assimilation theory." Acculturation theory is based on the assumption that immigrants succeed by adopting cultural practices of their host country and relinquishing those from their homes [22]. Reference [4] Theories of migration and health have held explanatory power for permanent—and not temporary—migration [1]. A 1997 review of acculturation theory, tracing its evolution and widespread critique, acknowledges the theory's absence of *recognition* for the diversity of modern day immigrant populations from the global South. Alba and Nee discuss the weakness of acculturation theory in that "a more differentiated and syncretic conception of culture is needed, and a recognition that American culture was and is more mixed, much more an amalgam of diverse influences, and that it continues to evolve." [16, page 834]. Nevertheless they define assimilation as the decline and ultimate disappearance of an ethnic/racial distinction with the social and cultural differences that express it. The idea that assimilation involves the disappearance of ethnic and racial distinction assumes recognition of individual subjectivity.

Critical migration discourse obviates acculturation theory by the interrogation of the construct of citizenship. Citizens are recognized members of the state, entitled to protection, rights, material support, and a degree of political loyalty. Noncitizens, which include undocumented, or illegal persons are not so recognized [17]. The binary category of citizen/noncitizen serves to perpetuate the invisibility of non-citizens. States are called to contain and steward



increasingly scarce resources. Thus, the effect of perpetuating migrant farmworkers in a stateless category, as “the Citizen’s Other” [18, page 76] addresses its economic need in the contemporary global structure. Nevertheless, the political desire to create boundaries between foreigners and full citizens, especially with respect to limited resources, such that health care is uneasily juxtaposed to the economic need for the productive migrant labor that non-citizens provide [19]. In addition to a legal obligation to ensure human rights within their borders, states have an economic interest in healthy workers who are physically and mentally able to work.

Recognition (or its absence) is a key concept in contemporary critical social theory. Recognition has its origin in the phenomenology of consciousness, in Hegelian philosophy, which constitutes social reality as a relationship between subjects, in which each sees the other as an equal, but also separate. In order to become an individual subject, one must recognize, and be recognized by, another subject [20, page 10]. “All social integration depends on reliable forms of mutual recognition. . . which can be regarded as the engine of social change” [20, page 245].

Since 1993, a partnership between health professional students and faculty members from several academic institutions in the state of Georgia and a farmworker health clinic in south Georgia has provided health care to migrant and seasonal farmworkers. This project, The Farmworker Family Health Program (FWFHP), brings students and faculty to the schools migrant children attend, as well as to the fields and barracks where farmworkers live and work to provide basic health care and screening services [21]. This partnership has made it possible to develop a deeper understanding of the experience of migrant farmworkers in this setting, which led to the current study.

## 2. Materials and Methods

Studying transient populations presents numerous methodological obstacles. Frequent relocation challenges researchers to gain access to this population. In addition, there is understandable fear among undocumented farmworkers that exposure may result in fines, incarceration, and deportation. Farmers may have incentive to keep farmworker barracks hidden and inaccessible, as their business could be penalized for employing undocumented workers.

In 2010, the director of the farmworker health facility in the FWFHP and one of the co-authors attended a workshop together to develop a proposal for community-based participatory research with farmworkers, sponsored by the United States National Institutes of Health (NIH). The farmworker health facility director, a middle aged Caucasian woman whom we refer to with the pseudonym Jackie, presented 5 critical health issues facing the migrant farmworker population (lack of prenatal care, alcoholism, domestic violence, poor dental care, and diabetes). The NIH faculty quickly identified Jackie to be a key informant, a source of enormous knowledge about the lives of farmworkers, because she has lived amongst and worked with farmworkers in the same site for more than twenty years. The same faculty encouraged the FWFHP partnership to tap into Jackie’s

knowledge about the experience of migrant farmworkers in her setting. Such knowledge might usefully inform policy makers and others about this little understood population.

As a result of the workshop, the authors (six of whom are faculty in the FWFHP) conducted in-depth interviews with Jackie over three months in 2010, to elicit a deeper description of the lives of farmworkers related to the critical health issues she had identified. Additionally, all the authors have been participant observers (ranging from a few days to eighteen years) at the site, as nurses who provide health clinics, health education, and referral.

Through years of advocacy and membership in the Mexican community, Jackie has earned the trust of the migrant farmworker community of southern Georgia. Jackie was married to a Mexican and has raised children in the Mexican community. She has personal and professional relationships with farmworkers and is clearly devoted to their well-being. Jackie was on the advisory council for the migrant health clinic for 8 years before she was offered the clinic director position. She is well-known and trusted within the migrant community in which she lives by both farmworkers, and farmers alike, and is an invaluable resource for migrant health.

The data analyzed here consist of 5 in-depth, in-person interviews conducted with Jackie over several weeks in the summer of 2010. Interviews were conducted either at Jackie’s house or in her car, while driving around the area, visiting farm fields and packing areas, as well as farmworker housing. The project was submitted to the Institutional Review Board (IRB) of the main university partner; they ruled that the project didn’t require IRB review. The resulting interviews were transcribed by a professional transcription service. Analysis of the transcripts of these interviews was done utilizing open coding and making memos, techniques possible with MAXQDA software. Memos were used to generate ideas and engage with the narratives. From these memos, codes were created, and ultimately several of the codes that were interrelated and most engaged with the themes developed in memos were selected for analysis.

## 3. Findings and Discussion

**3.1. Invisibility and Isolation.** While farmworkers provide the manual labor required to produce the fruits and vegetables Americans see every day in the supermarket, they are largely both figuratively and literally invisible. Driving along a rural route in Southern Georgia, a passerby cannot see the hundreds of men and women, stooped among the pepper plants, from the road. In the following passage from an interview conducted while driving through the fields, Jackie explains

*“...there is one church that we [Farmworker Family Migrant Health Project volunteers] go to for lunch and when we first started going there, the minister at that church... told the group of nurses that the first time we went to lunch there that he didn’t know there were migrant farm workers here, and see, they are oblivious to them. They ride right*



*by them. I guarantee if we stopped at any house up there and said, "I am looking for a farm labor camp close by here? Do you know where it is?" They wouldn't know this was here. They wouldn't know this was here."*

Throughout these interviews, Jackie tells the story of fragmentation of the farmworker family. Migrant farmworker children are impacted by invisibility, from their entry into the United States to their interactions with state institutions. Children of undocumented workers may cross the border with their parents and traverse the desert or rivers, while Mexicans with more social capital pay others to pass them off as their own children and travel with them. Crossing children is more dangerous when the children can talk, but do not understand why they are not allowed to talk. Once children arrive with their parents, they often fall through the cracks of the public school system if they are enrolled in school. While the parents do not need to show proof of legal residence to enroll their children in school, they must have a birth certificate, which the parents may not have brought, or may have lost, during the trip to the United States.

According to Jackie, if migrant farmworker parents are able to locate a daycare, there is a good chance that their child would not be able to enroll. Daycares would rather have children enrolled whose living situation is stable, so the daycare can have a guaranteed revenue stream. Additionally, there is often minimal bilingual staff.

*"You know, I don't think it's that they [daycares] don't want [migrant] children necessarily, but they don't have the. . . if it's a licensed daycare, they don't have the provisions in place and so you know they would be in violation [of rules about accommodations for non-English speakers] and they don't know how to do that sort of thing. They don't have anybody to translate their paperwork or anything like that. They don't have anybody that can converse with their family. That sort of thing. So you know it's, it's a combination of things. . . (Sic)"*

Jackie's narratives also chronicle the fundamental instability of farmworker employment, as crop yields are highly dependent on unpredictable environmental factors; hence, there may be a flood, a tornado, or a freeze that affects the crop yield and forces farmworkers to relocate. Farmworkers are at the mercy of the harvest for their livelihood, as they do not receive unemployment benefits. According to Jackie, in the event of crop failure, H-2A farmworkers do not receive relocation money or disaster assistance from the federal government, while there is crop insurance for farmers. Additionally, H-2A farmworkers do not typically receive unemployment, so they must follow the crops to sustain their livelihood. Jackie describes below how timing is essential in the agricultural industry.

*"During peak season [is] when they're picking squash, tomatoes, cucumbers, eggplant, those kinds of things. You can walk out in the field and see them. Let's say, the cucumbers are here. And*

*they thought they're not quite ready to be picked, but tonight if the humidity is ideal, we better wake up in the morning and they be ready, they grow over night. Cucumber, zucchini, squash, can grow overnight, can be ready in the morning when you wake up. That's why you need a labor force when you are a big grower like this. Every one of those plants is hand planted. The plastic is laid by machine, but there are people following pushing dirt up on it to keep it from blowing up. Every one of those stakes, all that stringing is done. And talking of occupational health, when the stringing is going on, we have a lot of rotor cuff injuries because they're doing this all day long up and down these rows."*

Invisibility takes a toll on the health of farmworkers. Jackie describes that when they are sick, farmworkers do not have the traditional support network of family to care for them or make sure that they take care of chronic health conditions. Not only is farmworker livelihood intimately connected to the weather and the seasons, Jackie explains that it is also inextricably connected to their health. The types of crops harvested determine the variety of pesticides used, which in turn may differentially impact their health. Certain repetitive movements elicit specific types of overuse injuries, such as rotator cuff injuries. While picking cucumbers, contact dermatitis is common among farmworkers. Cutting mustard greens with a butcher knife frequently results in laceration injuries.

Jackie was notified when a farmworker, very ill with syphilis, meningitis, and AIDS, was hospitalized and did not have anyone to care for him, or serve as his health care proxy as he was intubated and therefore unable to communicate. When he recovered, a girl claiming to be his sister-in-law picked him up from the hospital. It turned out that he had given a false name at the hospital, and he did not have a sister-in-law. This type of confusion and misrepresentation speaks to both the underlying fear of disclosing one's true identity, as well as a lack of real social support. Many farmworkers use false names and identification—they do not exist legally.

**3.2. Access to Health Care.** Jackie's narratives underscore the lack of access to health care among migrant farmworkers. As she recounted, a migrant farmworker was living in his car, and he appeared constantly intoxicated. People who lived in the surrounding area complained of his intoxicated behavior, and so Jackie went to investigate. She found that the man was not drinking at all. She found money to send him to a doctor, and it was discovered that he had a brain tumor that was exerting pressure on his brain, so as to make him appear intoxicated. The tumor was operable, and once it was removed, the man's mental status was completely restored. Late diagnosis of this brain tumor resulted from lack of access to care. Delayed diagnosis of treatable conditions leads to an increased burden on the health care system, as well as unnecessary suffering by individuals and families. This is also the case with delayed diagnosis of pregnancy.

Jackie explained the complicated situation surrounding pregnant migrant women. There are no laws regarding pregnancy and the H-2A visa program—women are not screened for pregnancy upon entering the country, and there are no consequences if a woman becomes pregnant during her contract. In fact, farmworker women are protected, as are American women, from being laid off because of their pregnancy. This results in women working under very challenging conditions during pregnancy, and yet as long as they continue to do so, their hours cannot be limited by employers. In addition, under the conditions of the H-2A contract, the woman must work and be paid for at least 75% of the time, and so taking the time off to obtain prenatal care may be especially difficult.

Jackie explained how state-funded programs in Georgia impact pregnant farmworker women. In the state of Georgia, pregnant farmworker women, whether documented or authorized to work, do not qualify for publicly funded healthcare in the USA (Medicaid). Emergency Medicaid is available to cover the delivery of pregnant farmworker women; however, their only prenatal care option is to enroll in a state-funded program, “Babies Born Healthy.” This program is commonly underfunded by the state legislature, leaving women without access to prenatal care during the last few months of the fiscal year when funds have been expended. While a farmworker’s baby will be an American citizen when born in the United States, and thus entitled to state-sponsored programs, his/her mother is not entitled to any benefits under federal law. Additionally, there is a limited access to abortion among farmworker women. They would be required to pay out of pocket and also travel a long way to obtain an abortion.

Jackie described a case where a 21-year-old woman had received no prenatal care. The father of the baby left as soon as she became pregnant. For the first 4 weeks after the child was delivered, she did not understand what was wrong with her baby and brought the newborn to the clinic. “She came in and sat down in my office...and she said, why is my baby’s head so big?...Does my baby have a brain?” Jackie took the young mother and child to the pediatrician, who referred her to a specialist at Children’s Medical in Atlanta. Finding a specialist who would accept this child as a patient was challenging, as the child’s Medicaid coverage was still pending. The child was seen and was determined to have no brainstem. While Jackie discovered that this diagnosis had been made at birth, the young woman did not understand the meaning of the diagnosis or the choices she would have to make as a result. The young woman had received no prenatal care during her pregnancy. This young mother had come to Georgia on an H-2A visa, but overstayed it, making her current status undocumented. She had to move out of the barracks once she gave birth, and was living in a trailer with several other people, sleeping on a mattress on the floor.

In order to qualify, women must have photo identification. According to Jackie, many undocumented women in Southern Georgia obtain false identification using a name that is not their own. This presents a problem at delivery, when the wrong name might go on the birth certificate of the child. If the woman wants to return to Mexico with her

child, unfortunately the only recourse is to obtain a DNA test in order to change the child’s name, which is very expensive. Just as the woman might have had to be smuggled across the border to work in the United States, she may have to smuggle her own child back across the border. Jackie described the way that this can occur—the mother might pay another woman to use her baby’s birth certificate.

In addition to the challenges of providing prenatal care to farmworker women, there is also the challenge of getting women to utilize prenatal care. They still have to pay for a portion of it that is significant in their overall income; at the Riverbend Clinic, it is \$300 for prenatal care, charged at the first visit. Women have often seen their mothers and aunts go without prenatal care, and many wonder if it is a worthwhile expense.

Access to health care includes not only physical access, but also whether health care is culturally and linguistically accessible to farmworkers. Another of Jackie’s stories illustrates the cultural divide between migrant farmworkers and the American social welfare program. A Department of Family and Children’s Services (DFCS) worker made a home visit to a young Guatemalan woman’s home. The DFCS worker was getting very frustrated with the young mother and asked the woman what the baby had eaten that day. Jackie saw the pot of *caldo*, a traditional broth made from the meat of bones and fed to children, on the stove, and already knew the answer. She opened her cabinet and found that it was full to the brim with baby cereal, which she had never opened because she never understood what to do with it. The DFCS worker also insisted that the young woman obtains a crib for the safety of her child.

*“Well, when we came the next time, she very excitedly met us at the door and told me to tell her, ‘I have a crib.’ Well, I was excited too. I said, ‘Oh, she has a crib’ and so she’s telling us to come, come with her, come with her, so we’re following her to the back of the trailer and we get back there and what again, it’s about paradigms, what you and I would see as a closet, this young girl saw as her room and she was very excited because she had been able to recall how her mother had created cunas [cradle] by creating this sling-type thing that the baby slept in. Almost like a hammock... And so to her, she had done exactly as she was taught. She had got a cuna, and the DFCS worker, before I could do anything, began ripping it out and just screaming at the top of her lungs about the baby being in a closet and the girl had absolutely no connotation of closet. Her home didn’t have closets in Guatemala, you know, just like 100 years ago our houses didn’t have closets and so she was devastated. She was crying. The baby was crying. The DFCS worker was yelling.”*

While the young mother was proud of herself for fulfilling the requirements of the DFCS worker and providing for her child, her concept of the *cuna*, or cradle, did not align with the American crib envisioned by the DFCS worker. Rather than supporting this mother’s attempts to be a loving

and attentive parent, the DFCS worker, representing the role of the state, shamed this young woman and made her feel like she was a poor parent and provider for her child.

Jackie recounted a story about a 15-year-old boy who tried to adjust to farmworker life and the painful isolation that often comes with solo migration. This boy was brought across the Mexican border in order to work on a farm in Florida, and a contractor brought him to South Georgia from Florida. He was all alone without family or friends. Several months after arriving in Georgia, the boy began to have panic attacks. One night, he had a panic attack so severe, he thought it was a heart attack, and he called 911 (emergency number) at the barracks where he lived, and an ambulance transported him to the hospital. Jackie was called by the Department of Family and Children's Services (DFCS) when the hospital realized that he did not have any relatives or guardians. She was asked to take him in, as DFCS had no foster families who would take him and nowhere else to bring him. She decided to take him, and found out that he was not free to go home to Mexico until he paid all of the money back to the contractor who had paid the coyote that crossed him (smuggled him across the border). The boy was concerned that he or his family would be hurt if he did not pay back the money he owed before returning to Mexico. Jackie used her connections to demand that one of the farm contractors pay the bus fare to return the boy to his home and promise not to hurt him or his family.

This young man traveled alone, without family or friends, to Georgia, leaving behind his support network. Once farmworkers arrive in Southern Georgia, rather than starting with a clean slate and earning money to send back to their families in Mexico or support their families in the United States, many start with the burdens described in this case. While the living quarters are close, Jackie notes a lack of human connection among the male farmworkers, whose primary socialization revolves around alcohol once the workday is over. Alcoholism is a part of daily life of farmworkers, and alcohol is available even when food is not readily available, as alcohol vendors come around the barracks in trucks. As most farmworkers do not have access to their own transportation, they are unable to reliably go out to purchase food or do laundry; however, alcohol is readily available to farmworkers and children of any age.

Documentation status has a significant impact on the mental health of farmworkers. Access to mental healthcare is a challenge for all Americans, but it is particularly challenging for those who lack insurance, a language in common with most practitioners, and transportation and availability to access services. Unique mental health challenges arise from the circumstances of migrant farmworkers and the conditions under which they work and live. Typically, they live with other men in barracks, separated from their wives, children, and extended family. This lack of social support can create situations of extreme anxiety and depression for farmworkers, compounded by their isolation and poverty, and exacerbated by the challenges of identity that spans two cultures.

Fear of violence and retribution causes unique stress on migrant farmworkers that may not be experienced by other

immigrants. Farmworkers' lives are often tightly controlled by contractors, the middle men between the growers and the farmworkers, who determine when they are paid, how much, when they arrive and leave the workplace, the type of housing and transportation they have access to, along with other basic services. Contractors are associated with some of the most severe abuses in agriculture, as they control every aspect of daily life of the farmworker [22]. Once farmworkers arrive in Southern Georgia, rather than starting with a clean slate and earning money to send back to their families in Mexico or support their families in the United States, many begin with the burden of repayment of the debt of passage to the United States.

Traditional Latino gender norms intersect with the isolation of farmwork to make for a very lonely life for many of the male farmworkers in Southern Georgia. Jackie describes explaining to the Family Farmworker Health Project students that male farmworkers might present to the students with what seems like a minor injury, and they are looking for caring and emotional support that they do not often get in their daily lives, as many are separated from their mothers, wives, and children. In addition, traditional gender norms adversely impact women, who are often expected to prepare food for men in the adjacent barracks, while also working in the fields or packing sheds for 10 to 12 hours per day. Jackie commented that if a woman ends up in a domestic violence shelter, the goal of the shelter is to assist women in becoming self-sufficient, which requires employment. If the woman is undocumented, she cannot become employed, which creates a grave problem for undocumented women who are abused. Jackie also speculated that sometimes men would prefer that their female partners remain undocumented as a way of maintaining power over the household.

While the majority of farmworkers in southern Georgia are undocumented, women are even more likely to be undocumented than men, as they may have joined their spouses in Georgia who are on H2A visas illegally [23]. Women who migrate with their partners bear unique vulnerability to mental illness and violence due to the gendered power difference within the family [24]. In addition, the fear of deportation often creates anxiety and depression. Jackie reported a very high level of domestic violence within farmworker families. If the couple has differing legal status, this may prevent women who are abused from seeking help due to many barriers, including a language barrier, lack of autonomy, and fear of deportation. While there is a way of receiving temporary documentation if a woman is being abused (a U visa), substantial paper work and legal representation are required [25].

#### 4. Conclusion

As with all case studies, our ability to generalize the findings of this case study to other cases is limited. While the results of this case study identify critical themes of migrant farmworker health among a small, rural population of farmworkers in southern Georgia, the salience of invisibility, isolation, and limited access to healthcare has been noted in several previous studies. Garcia and Gondolf identified situational



factors that increase problem drinking among Mexican farmworkers as social isolation and peer influence [26]. They concluded that programs and policies are necessary to support migratory families and offset social isolation as a means to address problem drinking [26]. Hovey and Magana, in several publications on mental health among Mexican migrant farmworkers, acknowledge the impact of social isolation resulting from physical isolation as negatively impacting their mental health [8, 9]. Isolation from family and friends results in feelings of anguish [27]. Hovey and Magana further expands upon the theme of isolation and mental health. He names “geographical and social isolation” as represented by stressors associated with being physically isolated. He also describes “emotional isolation” as characterized by the emotional inability to confide in others [9, page 114].

There are several important limitations to consider in this study. The possibility of selection bias exists in this case study—the group of farmworkers represented may have unique characteristics that brought them to the United States, and also in contact with Jackie. It is important that future studies be conducted that employ a variety of methodologies to strengthen the body of knowledge of migrant farmworker health, which in turn will inform interventions and policy decisions.

As this case study shows, the health of migrant farmworkers in southern Georgia is influenced by many factors. Farmwork is one of the top three most dangerous occupations in the United States [28]. Moreover, the risks of agricultural work for Latino migrant farmworkers go beyond the physical dangers of the job; both their physical and mental health are at increased risk. Multiple theories have been proposed to understand the health of migrant workers, with several focusing on the health of migrant farmworkers in particular [8]. While certain aspects of these theories capture elements of the health concerns voiced in this case study, they all fail to capture the impact of *isolation* from family and community, as well as the *invisibility* of farmworkers before institutions.

Years of participation and the narratives of the key informant in this study highlight the lived experience of migrant farmworkers in Georgia. Their reality constitutes an important challenge to the dominant theory of acculturation on several levels of analysis. In order to adopt American beliefs and behaviors, farmworkers would need access to institutions utilized by Americans, such as churches, health care facilities, the judicial system, and domestic violence shelters. Due to fears of deportation, lack of English skills, and transportation, farmworkers are unable to access these resources. The isolation experienced by farmworkers is exacerbated by their lack of access to health care. Despite significant disease burden and excess mortality rates from certain diseases and injuries, farmworkers utilize health care less frequently than others [29]. Without sufficient access to health care, farmworkers suffer from the late stages of preventable and treatable illness. In fact, even for the H-2A legally documented farmworkers, there is no screening for infectious or chronic disease.

Acculturation theory assumes that economic integration facilitates cultural integration. While farmworkers certainly have skills that are necessary for a successful harvest—like

correctly picking a tomato plant so that it continues to flower—their skills are not transferable. Paradoxically, acquiring skills limits the economic possibilities of farmworkers, as successfully integrated migrants fill niche positions within labor markets, whereas farmworkers’ skills are tied to a unique market where self-sufficiency is difficult [30].

The insider perspective on migrant farmworker health illuminates critical issues that impact their health. Farmworkers are invisible before the law; they lack the protections afforded to workers in every other sector. While H-2A workers are entitled to some benefits, such as workers’ compensation, at least 75% of farmworkers and up to 90% of children of farmworkers do not have health insurance [31]. Migrant farmworkers occupy a liminal space that challenges traditional definitions of group membership.

This paper has endeavored to illustrate why farmworkers remain trapped in a self-perpetuating liminal location and, thus, cannot advocate for themselves. Nurses and other health professionals are called to actively advocate for a more socially just policy towards working conditions and access to educational and healthcare institutions that could improve their physical and mental health. Much of the American discourse surrounding immigration policy addresses the strain immigrants put on our social systems, educational system, and health care system. Nurses can contribute their voices to the immigration discourse as well, so that policy makers can understand the reality of the farmworker’s life. Farmworkers play an essential and irreplaceable role in American food production, and they deserve to be seen and heard.

Nurses who care for farmworker populations are uniquely positioned to provide on-the-ground witness to the lived experience of migrant workers. Such accounts make visible the scope of the human condition within state borders; the intersubjectivity that nurses can relate to wider audiences, can in this way contribute to “the engine of social change” [20]. This paper is a contribution by nurses to make visible the subjective experience of migrant farmworkers in the case of Georgia.

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## Research Article

# Becoming Resilient: Promoting the Mental Health and Well-Being of Immigrant Women in a Canadian Context

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This paper reports on grounded theory findings that are relevant to promoting the mental health and well-being of immigrant women in Canada. The findings illustrate how relationships among settlement factors and dynamics of empowerment had implications for “becoming resilient” as immigrant women and how various health promotion approaches enhanced their well-being. Dimensions of empowerment were embedded in the content and process of the feminist health promotion approach used in this study. Four focus groups were completed in Toronto, Ontario, Canada with 35 racialized immigrant women who represented diverse countries of origin: 25 were from Africa; others were equally represented from South Asia (5), Asia (5), and Central or South America and the Caribbean (5). Participants represented diverse languages, family dynamics, and educational backgrounds. One focus group was conducted in Somali; three were conducted in English. Constructivist grounded theory, theoretical sampling, and a critical feminist approach were chosen to be congruent with health promotion research that fostered women's empowerment. Findings foreground women's agency in the study process, the ways that immigrant women name and frame issues relevant to their lives, and the interplay among individual, family, community, and structural dynamics shaping their well-being. Implications for mental health promotion are discussed.

## 1. Introduction

The notion of empowerment as a feature of mental health promotion in Canada is not new. Over one decade ago, the Centre for Health Promotion at the University of Toronto, Ontario, Canada, [1] called for a positive view of mental health promotion aligned with the Ottawa Charter for Health Promotion's [2] priorities of community development, empowerment, and community capacity to promote equity and social justice. Immigrant women are one such population that experience health inequities. Although they are not a homogenous group, having different contextual supports and challenges, for the most part, their lives are represented in mainstream discourse as a homogenous population “in need,” in terms of their risks for disease, lack of access to culturally relevant services, and thus their burden on the health system. Yet, their vulnerabilities must be contextualized in

relation to their status as racialized women who encounter other layers of resistance to support that include discrimination and/or marginalization of their health concerns [3]. Thus, accounting for empowerment in the generation of knowledge and practices relevant to their lives is an ethical imperative for researchers who advocate for them.

Nursing and interdisciplinary health researchers working within critical/feminist health promotion frameworks advocate creating opportunities for immigrant women as a population and set of subpopulations to create meaningful knowledge and responsive strategies to foster their well-being [4–7]. Certainly, given the recent political climate in Canada in which public sector policies and cuts in support for women-focused agencies and settlement programs and resources have significant impacts on women [8, 9], this focus seems even more urgent.

Minority populations bear a disproportionate burden of chronic disease including mental health concerns that have been attributed to complex social determinants of health along with the particular stresses related to minority status [10, 11]. Although gender is a critical determinant of mental health so that diverse women experience and understand mental health and the systems that address it in different ways, a focus on prevention is limited [12]. Canadian research on immigrant and racialized women's mental health points to culturally relevant support that reflects broad and holistic conceptualizations of mental health that move beyond Western-based medicine with its reductionist focus on diagnosis and treatment of psychiatric disorders (e.g., [7, 13–15]). A consideration of diversity of age and education, for example, within these groups of women is needed to promote effective prevention strategies.

Social determinants of health such as social exclusion, racism, employment, and poverty have been linked to immigrant women's well-being [6, 16]. An increasing body of research reflects the mental health implications of settlement that include ill health related to acculturation stresses including the family upheaval, social isolation, violence, addictions, language and cultural barriers, employment, certification processes, and lack of access to programs and services that many encounter (e.g., [6, 12, 17–20]), and gender is implicated in these migration processes [5, 6, 19–22]. Dynamics of stigma and silence in relation to mental health continue to pervade many Canadian communities including these diverse cultural immigrant groups. Despite an increasingly diverse population and large proportion of immigrants to Canada, our understanding of how to enhance the mental health and wellness of diverse immigrant women remains limited; nor has there been much attention to their contributions to the system in relation to promoting mental well-being.

The purpose of this paper is to report on grounded theory findings that are relevant to promoting the mental health and well-being of immigrant women in Canada. The findings illustrate the relationships among settlement factors and dynamics of empowerment that have implications for “becoming resilient” as immigrant women, as well as the relevance of various health promotion approaches to enhancing their well-being. Dimensions of empowerment were embedded in the content and process of the feminist health promotion approach used in this study.

## 2. Materials and Methods

This paper is based on focus group data collected in the Greater Toronto Area (GTA), a large city in Ontario, Canada, part of a larger qualitative policy study that aimed to understand activism as a feature of mental health promotion for immigrant women. We focus here on grounded theory findings that contribute to an understanding of “becoming resilient” in this context.

**2.1. Feminist Health Promotion.** Consistent with feminist health promotion [23], which has goals of building community capacity, this study aimed to improve the everyday

lives of diverse groups of immigrant women. We chose focus groups to spark interaction among participants in order to more deeply examine settlement experiences as the women themselves compared their stories with others in the group so that they could identify factors that shaped their lives and their actions in response to the settlement experience, that is, activism [24, 25]. A participatory and community-based research approach, a partnership between academics and a community agency, was chosen with goals of addressing social inequities and enhancing immigrant women's health using a strength-based focus to build on community knowledges and practices [26]. Study priorities included a commitment to enhancing the voices and visibility of immigrant women themselves and building in processes that foreground their agency and empowerment, all of which are key components of a feminist health promotion approach. In a similar vein, attention to gender and its intersections with race and other social differences required examination of the complex dynamics of power and privilege that shape community-academic collaborations across all dimensions of the study, from conceptualization to data collection and analysis and knowledge mobilization. The focus on mental health promotion and policy change was consistent with our partner community agency's priorities and also with the feminist health promotion priority on social action as an outcome of the research [23].

The project was conceptualized, and all phases of the research occurred in partnership between the researchers at York University School of Nursing in Toronto and community partnering agency Women's Health in Women's Hands Community Health Centre in Toronto, whose mission is to serve women from Africa, South America, and Caribbean and Asian communities including immigrant women. All except one member of the research team, who was a second-generation European immigrant, were immigrants, having arrived in Canada at least ten years ago.

**2.2. Constructivist Grounded Theory: Sampling Strategy.** This qualitative study was based on constructivist grounded theory methodology. This approach offers a substantive theory grounded in the findings that can foster understanding of the processes embedded in a phenomenon of interest, in this case, the relationships among settlement, activism, and immigrant women's well-being [24]. Theoretical sampling using a constant comparative approach directed participant selection and was used to elaborate and refine categories informing the theory which emerged. Given these inductive processes, sampling, data collection, and analysis were concurrent. Constant comparison of incidents and categories was carried out, and when no further information was added through analysis, saturation occurred; thus, sampling was complete [24].

**2.3. Study Procedures.** Ethics approval was received from York University Office of Research Ethics. To participate in the study, women were to be over the age of 18, living or working in the GTA, and either immigrants residing in Canada for a minimum of three years or those who had completed the refugee process. Recruitment of participants

occurred through the agency's extensive networks; online copies of study flyers were shared through listserves, and hard copies of study flyers were posted in the agency and in agencies serving immigrants in Toronto. Participants were directed to contact the study coordinator to participate. Arrangements were made to find a time and location for focus groups that would suit participants. Aware that these women often juggle work or family demands and may have limited time to participate and may be living in poverty, a small cash honorarium was provided to all participants.

Shortly after the study was posted, a key informant from the Somali community expressed interest in the study and met with two researchers on the team in order to discuss the nature of the study. She shared information on the study with women through her networks. The first focus group was completed by a researcher who facilitated discussion in the Somali language. For this focus group, all information postings and consent forms were translated into Somali, explanations related to the study for the informed consent process were in Somali, and the audiotaped transcript was translated into English for analysis. For reasons of feasibility, the other three focus groups were conducted in English. Participants' facility with spoken and written language varied considerably. In all focus groups, study information was provided in written format and researchers reviewed study information and points on the informed consent form verbally with each participant as part of the informed consent process. Researchers stressed the voluntary nature of participation and the researchers' plans to protect identifying information. Participants were asked not to share information shared within focus groups, but researchers cautioned that confidentiality could not be guaranteed. Given the sensitive nature of the information that could be shared in the focus group, participants were given information about counselling and other resources that were available. Participants received a copy of the signed consent. After signing the informed consent form, participants individually shared brief demographic information verbally or on a written form. Two or three researchers facilitated and digitally recorded 90-minute focus groups. There was a primary facilitator, and the other researcher(s) managed instrumental tasks such as the tape recording, obtaining consent forms, and timekeeping. They also participated in the dialogue and interview questions or probes as per the feminist health promotion principles that encouraged participatory team involvement. We followed Charmaz's [24] view of the active participation of the researcher in the focus groups in co-constructing the way the stories were emerging. As she says, the researcher remains active in interviewing, "alert to interesting leads" (p. 32). Focus group questions followed a semistructured interview guide and probed women's everyday lives, settlement, immigration experiences, and health/community connections. No identifying information was shared in reporting here. Narrative excerpts are linked to the respective focus groups (FGs).

**2.4. Participant Sample.** These four focus groups with 35 immigrant women living in the Greater Toronto Area (GTA) occurred from December, 2009 to July, 2010. The majority of participants self-identified as visible minorities (22/35);

several also self-identified as women living with disabilities and/or sexual minorities. They represented diverse countries of origin: 20/35 were from Africa, and the others were equally represented from South Asia (5), Asia (5), and Central or South America and the Caribbean (5). Their first language and ethnocultural backgrounds included South Asian, West Indian, Asian, African, and South American women including those from Uruguay, Nepal, China, Jamaica, Ethiopia, Somalia, Uganda, India, and Pakistan. Participants' education and facility with spoken and written English varied considerably, even if they spoke several languages; all but two identified a language other than English as their first language. These participants represented women ranging between 25 and 65 years of age; most were between 45 and 54 years of age.

**2.5. Grounded Theory: Concurrent Sampling, Data Collection, and Analysis.** We began sampling with a focus on immigrant women's settlement experiences and how they responded to everyday challenges. As Charmaz [24] states, "Initial sampling is where you start ... establish sampling criteria for people, cases, situations" (p. 100). Initially we recruited Somali-speaking women for FG no. 1. As per the constructivist grounded theory approach, transcripts were coded line-by-line and/or incident to incident. As an example of the latter, an incident of everyday adjustment to the weather for one woman could be contrasted with an incident of adjustment to the new neighbourhood for another. From this FG no. 1, a category of settlement experience emerged which raised questions about multiple factors that were affecting their settlement experience such as their age, family dynamics, educational and cultural background, and employment opportunities.

We then used theoretical sampling, which according to Hood as cited in Charmaz [24] indicates that "theoretical sampling is ... purposeful sampling according to categories that one develops from one's analysis and these categories are not based upon quotas; they're based upon theoretical concerns" (p. 101). Thus, for theoretical sampling of participants in the focus groups that followed the first focus group, we aimed to gather women who were diverse according to these identified settlement factors such as language, country of origin, and ethnocultural background to hear their settlement stories and better understand whether and how these factors influenced their settlement experiences and capacity to take action. Constant comparison of incidents and categories was carried out, and when no further information was added through analysis, saturation occurred; thus, sampling was complete at the FG no. 4 [24].

What emerged from constant comparison of these categories and incidents of settlement was not just these factors, but also new categories which reflected women's empowerment through taking action. These new categories pointed to a set of phases linking women's experiences and actions, and a core category emerged as relevant during FG no. 3. We continued to apply constant comparison. At the end of these four focus groups, analysis indicated that saturation had occurred, and no further information was added for this core category [21].

Over the course of this analysis, a critical lens was applied that takes into account the historical, economic, political, and sociocultural dynamics that shape people's lives, such that everyday dynamics of power and privilege related to dynamics of gender and race and other social difference, were integral to the analysis [4]. As the analysis shows, constant comparison of categories and subcategories created a substantive theory about "becoming resilient" that was grounded in the findings [24].

**2.6. Rigour.** To ensure rigour, the transcripts were analyzed independently by at least two members of the research team who noted emerging categories through a process of memoing [24]. The researchers listened to the digital recordings on several occasions and as a team reflected on the emerging categories and the implications for co-creating the realities of these women's lives in ways that would honour and represent their voices and visibility. Thick description can enhance transferability of the findings. Thus, narrative excerpts are also used to report findings. This reflexive process offered many opportunities for the research team to reflect on how they were situated with respect to the topic and participants [23]. Identifying information was removed after transcription to protect privacy and confidentiality during the analysis phase and in reporting of findings.

It was not feasible to completed member checking in a way that focus group participants would review transcripts because of the nature of the focus group discussion and variability of English language literacy. However, upon completion of the full study, a community forum which was open to community members, health care providers, and other stakeholders was held at the partnering community agency, whereby the team shared findings and invited open discussion. The forum was attended by a range of community members including a number of focus group participants. Many attendees spoke of how the findings reported here resonated with their own experiences. Such strategies of prolonged engagement with participants, creating opportunities for ongoing researcher reflection, as well as documentation of an audit trail, which would enhance rigour through confirmability, dependability, and transferability, were also congruent with ethical principles of feminist health promotion [4, 24].

As noted, this was a reflexive process and team members reflected on their own settlement experiences and social location and how this influenced the analysis. The fact that the team members represented women, both insiders and outsiders to experiences of settlement and activism, was an asset for opening space for dialogue among participants. The team collectively represented a rich understanding of the complex dimensions that could be associated with settlement, activism, and well-being in terms of co-constructing the focus group data collected and analyzed [24].

**2.7. Limitations.** This qualitative study was not intended to be generalizable to the diversity of immigrant women in Canada, but to enhance understanding of their everyday lives. Given the focus on creating a purposeful sample, these findings reflect the voices of women who were interested

and able to participate and the feasibility of providing opportunities for translation [27].

### 3. Results and Discussion

There was a great interest in this study by a variety of immigrant women as reflected by waiting lists for focus groups; participants were eager to share their stories. Analysis of findings indicates that multiple and complex settlement factors shape these women's mental health and well-being. In summary, the analysis pointed to the processes that shape resilience as a feature of mental well-being for immigrant women. These included facing everyday challenges (negative and positive experiences such as feeling hopeless and/or bouncing back from this negative feeling, i.e., resilience); naming these issues (e.g., language barriers, discrimination); framing them in terms of whether these reflected a biomedical, behavioural, or socioenvironmental health promotion perspective in order to take action. The set of categories that reflected the impacts on the women themselves of taking action (being involved in activism) at the individual or community level, for example, coalesced in a core category of "becoming resilient."

In the following section, we first detail factors implicated in the settlement processes that contribute to immigrant women's experiences and actions, linking these to resilience with attention to two categories: *immigrant women facing everyday challenges in the settlement process*; and *naming and framing the issues*. Implications for immigrant women in terms of creating conditions that foster empowerment and understanding of how they express their agency, taking action and broader implications for mental health promotion, are then discussed.

**3.1. Immigrant Women Facing Everyday Challenges in the Settlement Process.** Although each group reflected a unique dynamic of women across difference with respect to language, age, and cultural affiliations, the focus group of Somali women offered a particularly sensitive dynamic. It was comprised of women from the war-torn Horn of Africa (e.g., Somalia) whose lives and identities are inscribed by tribal affiliations, traumas, and violence from years of civil war. While we had planned for 8 participants, 15 arrived, representing diversity in modern through traditional ethnic dress and eager to take part in this forum. This was despite tribal differences and traumas that many women in these communities have faced and that have created barriers for them to come together. All participants were stirred by this opportunity to share in the tasty community-sponsored potluck meal that preceded the formal focus group and listen with openness as two participants read the informed consent to the others in Somali and then opened the discussion sharing their stories, ending with a unity song. On this day, this particular group of women put aside their home country's politics and tribal divisions and started to discuss openly their thoughts, feelings, hopes, and dreams without fear of judgment. Afterwards, one participant remarked.

This group of women comes together from time to time to support each other, and discusses



common issue such as settlement difficulties, sharing information/ideas and helping those in need, but they never openly discussed individual pains and sorrows as they did today. (FG no. 1)

Such dynamics which emerged from this first of our focus groups set the tone for forums that had the potential for empowering impacts beyond the transcribed words. Certainly the three focus groups that followed were more heterogenous with respect to ethnocultural representation.

However, in each of the focus groups, participants were keen to share details of their of everyday settlement experiences. Women spoke about challenges and barriers to accessing services, care, housing, education, employment, language, and credentialing, plus family concerns often related to changed gender roles in addition to many other dynamics. Through this process of narrating stories and having opportunities to describe their own lives and learn about issues common to others, the focus groups fostered spaces to affirm the emotional work of settlement that can be, in itself, empowering and therapeutic. As a number of women indicated explicitly, they found the focus group a safe environment. Certainly such moments reflect a spiritual dimension to the study processes that reflects support for women to make meaning of their lives, and that is also consistent with a sense of connectedness that spirituality can represent.

Narratives reflected many factors which affected participants' capacity for well-being. To enhance voices of diverse women, show the complexity of their everyday experiences, and offer a flavour of these everyday challenges, examples of verbatim narratives are used in the next sections. Challenges encompassed concrete factors such as lack of knowledge, disabling health conditions, social isolation, family roles, age, language, or financial barriers as well as social dynamics such as identities and discrimination.

Social support and isolation were embedded in many narratives. We focus here on narratives that link their well-being to social isolation and provider, family, and community support. In this first example, a woman who struggles with depression talks about having no relationships with neighbours or family such that she is unable to locate basic information about health services when she becomes ill and struggles to find health system support for her illness.

I was very sick ... too weak to go to the hospital ... not eating ... back home the doctor comes home. I was then 3 days in the emergency room. They did not take me to a room ... it was terrible listening to everything .... So my experience with health system not very good. Even I call places and say, "Please, I am alone." (FG no. 4)

Isolated parents, whether they were partnered or raising children on their own, at times struggled with language barriers that exacerbated their capacity find effective support from providers. A mother who had become pregnant with her second child shared.

I said, "This is so crazy .... I have to do something, like not just sit down and raise a child.

So I do not want to feel guilty that I put them in daycare." ... and I feel depressed ... like losing my mind. Like the baby is crying all the time and I feel like throwing her. Somebody take [sic] her. Like I feel inside there is no family to help you and talk to. And nurse used to come and she does not understand me and she's trying to encourage me saying "Breastfeed her." I say, "I will." and "Just go." (FG no. 4)

Participants spoke generally about the impacts of stress on their lives and families. As a number of them indicated, however, they are hopeful and use a variety of strategies to stay healthy which include tapping into their inner resources and contributing to the development of community and neighbourhood support. As one woman remarked.

I always exercise and I do the meditation everyday ... the second thing is very important is to help people ... our neighbour, our family, our city, our country ... help always brings satisfactions. And study, continuous study .... I think even though the situation has not been easy we have to be in good attitude always to be positive. (FG no. 4)

Another spoke of relaxing by "just listen[ing] to my radio stations back home. Just do stuff to say I am not there physically, but spiritually I can still find out things are going on .... Just try a coping mechanism that's what I did" (FG no. 4). The links between stress and physical well-being were noted as a young mother shared.

As for me, I was in swimming before. After coming here, having babies, I have no time to exercise. My husband buy me treadmill and still do not have time to use it for two years .... I gained lots of weight. I weighed 200 lbs because of stress. After taking classes I feel happy and my situation improved and lost weight. (FG no. 2)

A number of them talked about their individual experience of trauma and violence in war-torn countries prior to settlement, as well as after settlement, related to family violence and discrimination based on health status such as being HIV positive. As each woman discussed the challenges for her community, she highlighted how individual barriers are affected by the community and structural supports more broadly, as described in the following section.

*3.2. Naming and Framing the Issues.* It was clear that as they described everyday challenges as individual immigrant women, as members of families, diverse communities, and larger societies, participants across the lifespan situated these individual factors in the larger family, community, and social contexts. The participants' narratives moved beyond description to analysis.

Family networks were identified as one of the most accessible settlement resources. Participants described family in a variety of configurations as close and distant kinship



networks including but not limited to tribal relations from the country of origin, female-headed households that encompassed both heterosexual and same-sex relationships. Despite the stressful nature of immigration, resettlement dynamics were often mediated in positive ways in relation to the availability of a supportive family. Women's perceptions of instrumental support such as food, shelter, and emotional support varied depending on the woman's immigration status, class background, sexuality, family configuration, and reason for immigrating to Canada.

Effective support for one new mother was reflected in her male partner's offer to seek a survival job while she looked after their infant. Intergenerational support was noted by an older Somali woman who found emotional and financial support from her grandson so that she could find an apartment away from social housing. "Thank God, he turned out to be a good boy. He completed high school ... is saving money to attend university. He helps me financially as well. Alhamdulillah" (FG no. 1). Some women reunited with their husbands in Canada. A number with a supportive partner found this journey enjoyable in spite of the stressful nature of immigration, while others experienced isolation and unexpected upheaval that can emerge with the changed gender roles upon migration to Canada. As a young Asian woman shared.

My husband also faces health problem because he have [*sic*] to go to work and has tension. I am very sensitive, start to cry when I talk to him and he give me confidence. He shows me he is strong, but he is not .... So men and women both affected. (FG no. 2)

Those with inconsistent or no supportive family, especially without other community connections, felt emotional stress. A number of them shared stories of grief, family disruption and violence which resulted in encounters with the health and social service system. In the following excerpt, a mother describes the overwhelming grief that underpins her everyday capacity to face life and work, identifying patience and silence as strategies for survival in the face of ongoing frustration with career opportunities.

It is not easy. It is almost six years .... My son he got in an accident. I was work[ing] when they said to me that your son is dying .... He died under the car .... Instead of supporting me they blame me, painful, painful wherever you go .... So I have to do whatever I can do. Patient is more than anything that is important, otherwise ... stress will kill you .... Almost you blow out your brain. You cannot save yourself. You cannot save your children. You cannot [*sic*] do nothing, paralyze you .... Do what you have .... I have Masters degree, but I ... work at hospital, cleaning. I hide my career, to survive .... I recommend patience to everyone. (FG no. 3)

Immigrant women's culture, precarious immigration status, language barrier, and lack of networking in the

postmigration setting increased their vulnerability for being abused. Women living in poverty who dealt with violence from abusive husbands who were also dealing with addictions and past experiences of war-related trauma were at risk for mental health problems as illustrated by the following participant. She arrived in Canada with her two sons to be reunited with her husband, only to encounter violence not just from him, but also within a few years from one son in the cycle of violence that plagues the family within these traumatized communities. She shared.

He wanted to assist us, but he was having drinking problem .... When I found out .... I decided to leave him .... On one occasion he threatened me with violence and said, "I will cut you into pieces." I experienced fear, trauma .... He also tried to turn the boys against me ... accused me for neglecting our boys—leaving them all alone in the house. He made complaints against me and took such complaint to Children's Aid which found such allegation baseless .... This really affected me .... I suffered insomnia for 10 years. There were times that I felt that I was going to lose my mind. (FG no. 1)

Another dimension of family support was illustrated by an older South Asian woman who talked about her living conditions. She had been sponsored by her daughter and had the role of caring for her active preschool and school-aged grandchildren and cleaning the house. "Always I am in mental depression. My husband and me always .... I live with my daughter. She has three bedrooms, but .... I live in one bedroom ... my husband and me. Very difficult for me" (FG no. 4). Whether the daughter was aware or not of the impact of living conditions on her mother, both older and younger members of the family were affected by social policies that limit childcare support in ways that older immigrant women often assume child-minding responsibilities.

Lack of childcare was frequently noted as a crucial barrier for completing required education and credentialing programs, as well as for job searches and employment. One participant needed childcare to continue a part-time job but was refused.

The case worker ... said, "No. Either you get a full time job by [this date] or your children will not get child care. I cried for a few days, and thought, "I cannot find a full time job. I am almost in the position to do good things for community and how the system is killing us." I cannot say anymore than this. I have no word. (FG no. 3)

Women frequently made links between employment and underemployment in ways that point out the ongoing diminishment of immigrant women's knowledge and skills and the racialization processes that structure their lives in ways that focus on language, job training, and volunteer opportunities with implications for families' physical and mental well-being. As a participant remarked.

And always in my country I am more intelligent. I am member of .... International Lions Club. And I help many people and I volunteer in camp, free eye camp. Full day I am working and volunteering here and there. I enjoy very much my country ... but few time I am in depression .... But now joined many program [*sic*] in my neighbourhood here and there then I am a little bit okay now. (FG no. 4)

Underemployment surfaced frequently as a stressor that interacted with financial hardship, credentialing, and gender to shape their lives. In the following excerpt, a single mother identifies mental health concerns while she raised a family and engaged with higher education. She links her individual well-being to dynamics of family roles and expectations that shift with settlement in the new country. Her well-being cannot be divorced from the ways in which her life is inscribed by traditional cultural expectations that place the responsibilities of informal caregiving and unpaid work for children and elders on women. Nor can it be understood, as she points out, without taking into account the lived realities of inadequate Canadian health and social policies that have similar impacts and which exacerbate stresses for all family members rather than supporting their well-being and rights to live with dignity. The intersections between age, gender, poverty, employment, and immigration status are clear.

I had to deal with depression/anxiety, being the head of my own house, two kids and so much debt because my parents could not afford it .... My mom, professor, and dad, a dentist, and they come here and my dad is cleaning toilets and my mom is struggling getting community work. So just trying to balance with money and housing, paying medication that is not covered. That whole experience is so disgusting. You learn all the benefits that Canada has and you are living the experience where it does not apply to you, where I make a bit too much money ... will they cut back on my health [benefits]? (FG no. 4)

One participant makes links between her health and finances, housing, and underemployment and notes it has implications for her role in caring for others in the family.

You have to do two or three jobs to maintain family ... pay rent which is high. You cannot afford to buy proper food, to eat proper food, the time to eat. Then you end up having high blood pressure, diabetes, high stress .... You end up eating food with sugar and carbohydrates and end up obese. Right? And with obesity you have high blood pressure, heart disease, diabetes and other things .... So it all comes back to the stress ... to under employed and health problems. (FG no. 2)

Another participant foregrounds the endless maze of programs that await them as they adjust to the migration experience, having concluded that the answer requires attention at the structural and policy levels.

All settlement workers have problem with clients who have stress and unemployment. If the government solved employment and education ... the mental health problem will be solved .... Focus group is not needed .... Very frustration [*sic*] for me. I have master degree, ten years experience. I did immigrant women integration program and every time I finish one course I do another one .... They say I need confidence. Not that I am shy or lack confidence .... I go to interview. For some reason they do not want to accept high qualified people .... What can I do? The main issue of mental health for immigrant is employment program. (FG no. 2)

These women's narratives thus address structural barriers to access to housing, education, employment, and information about available services as determinants of their own mental well-being and also with implications for their families and cultural communities and neighbourhoods. In the following example, a participant attributes the recent onset of mental and physical ill health in part to poor housing conditions that focuses on her individual experience, but shows how she, as others have in earlier examples, takes action to improve her situation, showing how they are resourceful and become resilient in the face of adversity.

My immune system start going down especially in the last two years .... I got depression and lots of physical problems I never had in my life and I ... look on internet and trying to get better you know? .... I do not like to take a lot of medications so I am with a naturopathic so I feel much better. (FG no. 4)

In contrast, women who came from war zones talked about the similarity of marginalized neighbourhoods in Toronto to the war zones they came from. Having knowledge of someone who has lost a child to guns in marginalized neighbourhoods or losing their children to the justice system makes them feel unsafe and violated all over again. They discussed community members who are struggling with access to safe housing, appropriate services, and dealing with the financial burden that will affect their communities for years to come.

In this paper, we foreground empowerment in terms of the content and process of a study whose findings illustrate how immigrant women in this large Canadian urban metropolis experienced and understood their settlement and its relationship to their well-being. The chosen grounded theory methodology and lens of analysis show how this strengths-based approach offers insight into empowering dynamics that foster understanding of mental well-being as women themselves articulate this, processes that can contribute to resilience that is often identified in strengths-based studies with immigrant women [7, 12]. Such dynamics are congruent with a notion of resilience as described by Joubert and Raeburn [28], the capacity to "cope with, and bounce back after, the ongoing demands and challenges of life, and to learn from them in a positive way."

In contrast to dominant deficit-based discourses about immigrant women, these findings illustrate how immigrant women are knowledgeable and articulate and critically conscious who implicitly and explicitly point out the links between their individual experiences and larger family, community, and social structures. Consistent with Guruge and Khanlou [29], even when participants are identifying individual-level practices, they are often referring to dynamics that require attention at the family, community, or structural level, as these authors use an ecosystemic framework. Processes which promote mental health can also promote resilience and vice versa; these require attention to multiple dynamics of well-being that include individuals, families, communities, and societies and the ways they interact [30].

It is evident that these participants shared important aspects of their settlement processes that resonate with much of the literature on the challenges faced by immigrant and many refugee women. These findings support and extend studies with diverse Canadian immigrant women that identify settlement dynamics as contributors to mental health through acculturation processes, family upheaval, social support/isolation related to family, community, or other networks, and discriminatory processes (e.g., [7, 13, 17, 31–34]). In contrast to studies which focus specifically on one cultural group, this study brings together a diverse ethnoracial sample with a goal of understanding common processes and experiences.

The chosen methodology, with its principles of feminist health promotion, has potentially empowering impacts for the women themselves. The study foregrounds the strengths that the women themselves bring, as well as the processes that can enhance their well-being. Their enthusiasm for participating in collective story telling and sharing reflects earlier research with marginalized women, such as immigrants, for whom focus groups can be a vehicle for social support, fostering community ties for isolated women [4]. Describing individual stories in a collective space can validate women's perceptions and understandings of their lives and knowledge that are often discounted or rendered invisible in relation to dominant views, especially for racialized women [35].

These narratives reflect a variety of understandings of health and mental health that reflect philosophies that are informed by biomedical, behavioural, and socioenvironmental lenses, each of which demands a set of different strategies for health promotion and thus mental health promotion [36]. For the most part, an explicit focus on mental illness was limited in these narratives. With few exceptions, participants used the term "stress." For some, mention of depression or anxiety was also linked to their search for relevant health services that would provide treatment for mental illness. Although this biomedical lens with its focus on diagnosis and treatment is important, effective support for mental well-being requires a broader understanding that reflects a more holistic view of mental health [7, 14, 15]. Similarly, a view of mental health which aims to have individuals make changes in behaviour or attitudes, such as a focus on coping skills or reframing issues, puts the responsibility for well-being at the individual level. Consistent with Ahmed et al. [13], a number of

participants did find preventive practices at the individual level helpful, identifying the need to have positive attitudes, eat healthy food, exercise, and use effective coping skills, actions consistent with behavioural approaches to health promotion [36].

However, if strategies for change, that is, promoting mental health, are exclusively focused on biomedical and behavioural understandings of well-being, there is not only the possibility of blaming the victim, but also limiting effective solutions that address structural change. Certainly the issues identified by the Somali focus group suggest that little has changed for the better over the last decade [32, 37]. A socioenvironmental lens, which would include attention to both the processes and content of strategies such that communities themselves identify solutions and take leadership in creating strategies, offers the possibility of mental health promotion that can address inequities as well as foster conditions and processes that enhance the spiritual dimensions of immigrant women's lives [14, 38]. In these narratives, participants often situate individual immigrant women's well-being in the larger family, community, and structural contexts, naming social determinants of health as key to their lives and what Guruge and Khanlou [29] consider "intersectionalities of influence." Complex dynamics at the micro-, meso- and macrolevels shape diverse immigrant women's mental well-being in particular ways in relation to social, political, economic, historical, and cultural contexts [39].

#### 4. Conclusion

This study offers insight into the mental health promotion context of settlement issues for immigrant women in Canada whose voices are often unheard, including Somali women and a range of ethnically diverse women, for whom many languages other than English are their first language. It is clear through their narratives, however, that despite the multiple and often overwhelmingly deeply entrenched barriers to achieving wellness that they encounter in their everyday lives, they show resilience and strength as they interface with others at the individual, family, community, and system levels.

The findings support the creation of health promotion initiatives that are consistent with a population health promotion approach that is congruent with a socioenvironmental approach and takes into account empowerment processes and social determinants of health [4, 40]. Certainly, the current Canadian Community Health Nursing Standards of Practice with their focus on equity through relational practice and building of community capacity support nursing practice to promote populations and communities health [41, 42]. Given the predominance of medical and behavioural models that inform clinical practice in relation to mental health and illness, as well as health promotion practice for nurses and other health professionals, these findings support calls for attention to comprehensive approaches and upstream measures including policy that shape conditions which enhance immigrant women's and other communities' resilience [7, 12, 39, 42].



A focus on creating evidence for mental health promotion is timely, given the multiple factors and values that must be taken are relevant to the enterprise of evidence for policy making [43]. Findings from this study suggest that such mental health promotion strategies would (1) build on knowledges processes, and resources that immigrant women have created, (2) take account of the ways that knowledge about the mental health promotion of diverse populations is created, and (3) encompass comprehensive strategies such as creating supportive environments and enhancing participatory processes for policy changes that are needed to foster the mental health and well-being of diverse groups of immigrant women. There are implications for nursing and interdisciplinary researchers and practitioners to consider how they are implicated in promoting the mental health of the communities they serve.

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## Research Article

# Violence against Women: An Exploration of the Physical and Mental Health Trends among Immigrant and Refugee Women in Canada

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Violence against women is a serious health and social problem for women worldwide. Researchers have investigated the broad physical and mental health consequences of violence against women but few have focused on immigrant and refugee women. We assessed the history of violence and the impairment of physical and mental health among 60 women participants from the Iranian and Sri Lankan Tamil communities in Toronto, Canada. Our survey findings revealed that the participants had experienced various types of violence throughout their lifespan, with psychological abuse by a spouse/partner occurring most frequently in the past 12 months. Commonly reported types of abuse included insulting, criticizing, and intimidation by partner (psychological abuse); slapping, hitting, and shoving (physical abuse); and forced sexual intercourse and sexually degrading acts (sexual abuse) by a partner/spouse. We found that a substantial proportion of the participants also had experienced physical and mental health impairment, which could be a result of the various types of violence they had experienced throughout their lifespan. Research and practice implications are provided.

## 1. Introduction

Violence against women is a global phenomenon and involves a spectrum of physical, sexual, and psychological acts of control, threat, aggression, abuse, and assault. Violence against women takes many forms, such as female infanticide, (girl) child abuse, incest, rape, sexual harassment, intimate partner violence (IPV), and abuse and neglect of older women. Although health science researchers are increasingly focusing on violence against women at local, national, and international levels, few have investigated violence against women across the lifespan (i.e., violence experienced prior to, during, and after migration) in various immigrant communities. Given the increase in international migration over the past few decades, there is a greater need to examine the experiences and effects of violence among immigrant and refugee women. To date, no published studies have focused on the experiences of violence throughout the lifespan and the physical and mental health consequences

among immigrant and refugee women in Canada, even though more than 250,000 immigrants and refugees come to Canada annually, with a significant proportion arriving from the Middle East and Asia [1]. This paper presents the findings of a pilot study that examined women's experience of violence throughout the lifespan and the presence of physical and mental health symptoms in a sample of Iranian and Sri Lankan Tamil immigrants and refugee women in Canada.

## 2. Background

Studies have consistently demonstrated that women and girls worldwide experience various forms of violence [2, 3] by close and extended family members, neighbors, acquaintances, and by men in positions of power and authority such as police and soldiers. Women who are displaced within their own country and those who seek political asylum elsewhere often live in isolated or temporary accommodation

or institutional settings and may be particularly vulnerable to such violence, with few safe options [4]. Women who leave an abusive spouse may face additional social and legal consequences if they reveal their experiences or seek help, such as exclusion from their community or problems related to immigration and legal status [5].

Prevalence research about violence against women, on national and international levels, generally involves methodological challenges. Definitional issues are one problem: what constitutes violence in one setting may not be interpreted as such in another. Beliefs about gender roles and norms, and structural dimensions that may support violence against women (such as patriarchal systems and unequal power relations) vary cross-culturally. These inconsistencies may lead to underreporting of violence in some settings. Moreover, barriers to reporting (e.g., taboo, stigma) may significantly impede accurate collection of epidemiological data.

Nonetheless, previous research [6, 7] has demonstrated a pervasive trend of violence against women, both cross-culturally and cross-nationally. Violence against women has many physical and mental health consequences that can last long after the violence has ended, resulting in serious public health implications [6–9]. Physical health consequences may include injuries, chronic pain, fibromyalgia, headaches, gastrointestinal disorders, and sexually transmitted diseases [8, 10]. Psychological health consequences may include depression, anxiety, trauma symptoms and extreme stress reactions such as nightmares and sleep disorders, and suicidal ideation [11–13]. During the last few decades, many studies (e.g., [14–21]) have investigated the immediate and long-term health consequences of violence against women and girls, but few have focused on the experiences of violence against immigrant and refugee women and the related health consequences. The studies that do focus on these experiences generally examine premigration violence, postmigration violence, or violence encountered during border-crossing in isolation, rather than all three contexts in one study.

Women comprise approximately half of all international migrants [22]. Similar patterns are observed in Canada: approximately half of all asylum-seekers, refugees, and immigrants to Canada are women [1]. Researchers have recently begun to focus more on health issues such as mental health and trauma especially among refugees and asylum-seekers [23–25]. Premigration conflict and forced migration can result in various physical, mental, economic, and social consequences. Some of these are related to routine difficulties associated with poverty and deprivation, while others are related to more extreme problems such as war-related injuries, torture, and sexual violence [26, 27]. Immigrants may face a less chaotic journey as they travel to and settle in a new country, but they may also have left their home country because of political, social, and economic difficulties, which can have physical and mental health consequences.

Migration to a new country can contribute to an increased risk of intimate partner violence, which is one form of violence against women [28]. Emerging evidence suggests that the complex processes involved in migration and (re)settlement, which may include shifts in power

dynamics, may leave women especially vulnerable to partner violence [29, 30]. In the postmigration and (re)settlement context, the unanticipated social and economic barriers such as social isolation and un/underemployment encountered by women and their spouses contribute to stress, family conflict, and partner violence [30]. These barriers continue to affect couples even after the initial (re)settlement period [31].

Despite the substantial contribution of health science research to the field of violence and health, there are considerable gaps in our knowledge. For example, there is a significant gap in health science research on violence against immigrant and refugee women, particularly their exposure to different forms of violence across their lifespan, and the resulting physical and mental health problems. As noted earlier, most previous studies of violence against immigrant and/or refugee women have focused exclusively on the postmigration context or the premigration context. Together, information about violence before, during, and after migration can provide important insights to guide intervention efforts for immigrant and refugee women [32].

### 3. Study Purpose

The goal of our pilot study was to describe the trends in violence throughout the lifespans of women who came to Canada as immigrants or refugees and the resulting physical and mental health symptom patterns. We examined the topic in the Iranian and Sri Lankan Tamil communities in Toronto.

### 4. Communities of Focus

*4.1. Migration History of the Iranian Community in Toronto.* Iranians are one of the fast-growing and relatively new communities in Canada. Census records indicate a growth rate of 147% from 1996 to 2006 for this population [33]. The first real wave of Iranian immigrants to Canada arrived in the 1970s, when the number of immigrants increased from 100 to 600 per year by 1978 [34]. Following the Iranian Islamic revolution in 1978, the rate increased to several thousand per year, which continued throughout the Iran/Iraq war and into the 1990s [35]. Over the period of 1978–1990, the majority came to Canada for political reasons. In the period after 1990, most came to Canada for economic reasons [35]. Beyond Canada, annually, more than 100,000 educated Iranian professionals have also immigrated to Australia, United Arab Emirates, and Eastern Europe [36]. In Canada, Toronto has the largest concentration of Iranians [33].

*4.2. Migration History of the Sri Lankan Tamil Community in Toronto.* As a result of the civil war that ravaged Sri Lanka for 25 years, since 1983, almost 60,000 civilians have died, thousands of people have disappeared, and almost one million people have been internally displaced [37]. Many others have sought refugee status in countries like India, Norway, Germany, the UK, the USA, and Canada [38, 39]. Canada is the home to the largest Sri Lankan Tamil community outside Sri Lanka. The majority of the Tamils who came to Canada have settled in major cities. In

Toronto, the Sri Lankan Tamil community is estimated at more than 300,000, of which the majority arrived within the past 25 years. Before that, the number of Tamils in Toronto would have been in the low hundreds, and for the most part they would have been well-educated, professional, middle- and upper-class Tamils [40]. Post-1983 Tamil immigrants to Canada have come from a broad cross section of the Tamil population in Sri Lanka [37].

## 5. Methods

**5.1. Design.** This pilot study involved a cross-sectional survey of immigrant and refugee women from the Iranian and Sri Lankan Tamil communities in Toronto, Canada. It was based on an European study of women refugees and asylum-seekers in three countries: Scotland, Belgium, and Italy [41]. Researchers from the London School of Hygiene and Tropical Medicine, working with the Scottish Refugee Council and service providers working with refugees in Belgium and Italy, developed the survey for use in assessing women's experience of violence, physical and mental health, and the asylum process [42]. We used the survey to investigate women's experiences of violence throughout the migration process, and the presence of physical and mental health impairments in a Canadian sample. The physical health symptomatology sub scale was adapted from previous scales investigating physical health sequelae of violence amongst women who had experienced forced migration and/or human trafficking. The survey's mental health symptomatology subscale was derived from subscales of the Brief Symptom Inventory (BSI) [43] and the Harvard Trauma Questionnaire (HTQ) (Harvard Program in Refugee Health <http://hpri-cambridge.org/>). While the survey utilizes other instruments that have undergone psychometric assessment, and its current form has been screened by experts for face validity, further statistical assessments of its reliability and validity have not been performed.

**5.2. Setting, Sample, and Sampling.** A convenience sample of participants was recruited through key contacts within the Iranian and Sri Lankan communities. This strategy was useful in obtaining community-based samples that are not affiliated with clinical or social services settings. An advantage of this method lies in its ability to identify members of communities that may be hard to reach [44]. Inclusion criteria were that women had immigrated to Canada within the last 15 years from one of the two communities and were 18 years or older and living in the Greater Toronto Area at the time of the study. Because we were not aware of any studies to date exploring violence using a sample of Iranian and Sri Lankan women, we did not carry out a power analysis and sample size calculation. Instead, we used the general principles for sample size recommended for pilot studies, that is, 30 participants per group, for a total of 60 participants [45].

**5.3. Data Collection.** Under the supervision of the Principal Investigator (Guruge) and the Co-principal Investigator

(Roche), surveys were conducted by trained research assistants (RAs) who were immigrants themselves, had prior experience in immigration research, and were fluent in the languages spoken by participants. The RAs carried out surveys in each participant's own language and in places that were convenient for participants, and each survey took approximately 1.5 to 2 hours.

Before administering the survey, each participant read and signed a consent form written in her own language. The RAs informed each participant of her right to (a) refuse to participate in the study, (b) refuse to answer any specific questions, or request to switch to a different set of questions, or (c) to end the survey altogether at any time. An honorarium of \$30 was provided to each participant to cover the costs (travel, time, child/grandchild care) incurred by participation. Participants were offered a list of resources and services available in their first language and in English. The study was approved by the Ryerson University Research Ethics Board.

**5.4. Data Entry and Analysis.** Analyses were conducted using SPSS version 19. Data were entered by a trained RA, and a member of our research team (Catallo) conducted a review for accuracy. In keeping with our goal of elucidating the trends in violence and physical and mental health symptoms among our two sample groups, we carried out descriptive statistics. To test for possible relationships between violence and physical and mental health symptoms, we computed the total score for violence items and the total scores for the physical and mental health items, which were then analyzed for correlation (Pearson  $r$ ). The mean and standard deviation for the total scores were also calculated.

## 6. Results

This section presents our findings in the following order: (1) demographics, (2) experiences of violence, (3) physical health, (4) mental health, and (5) relationship(s) between violence and physical and mental health.

**6.1. Demographics.** As can be seen in Table 1, the majority of women from Iran were aged 31–40 years. In contrast, the ages of Sri Lankan Tamil women were evenly distributed across age groups; overall, they were older than the Iranian group. Both groups included women who were educated, highly literate in their first language, and comfortable speaking in English. Almost 75% ( $n = 22$ ) of the Iranian sample had college/university and/or postgraduate education, and a similar percentage (i.e., 77%;  $n = 23$ ) had been employed in their country of origin. Half of the Tamil sample had college/university and/or postgraduate education. A smaller percentage (27%;  $n = 8$ ) of Sri Lankan Tamil women had been employed prior to migration. The latter rates may be explained by the education and employment disruption experienced by Tamils in the war-torn Sri Lanka. Given the lengthy civil war that ravaged the country, it is not surprising that 60% ( $n = 18$ ) of Sri Lankan Tamil women reported having stayed at a transit location such as a refugee camp or a detention center. In both groups, 83% ( $n = 23$ ) women

TABLE 1: Demographics of study participants.

Demographic characteristics	Iranian group <i>N</i> = 30 <i>n</i> (%)	Sri Lankan group <i>N</i> = 30 <i>n</i> (%)
Age		
21–30 years	5 (16.7)	8 (26.7)
31–40 years	17 (56.7)	8 (26.7)
41–50 years	3 (10.0)	8 (26.7)
>50 years	4 (13.3)	6 (20.0)
Education		
Elementary school	1 (3.33)	1 (3.33)
High school	7 (23.3)	8 (26.7)
College/university	20 (66.7)	9 (30.0)
Postgraduate	2 (6.67)	6 (20.0)
Ability to read and write in mother tongue		
Can read but not write	1 (3.33)	1 (3.33)
Can read and write	29 (96.7)	29 (96.7)
Ability to speak in English		
None/poor	4 (13.3)	2 (6.67)
Good	18 (60.0)	17 (56.7)
Very good	8 (26.7)	7 (23.3)
Excellent	0	4 (13.3)
Past employment in home country		
Yes	23 (76.7)	8 (26.7)
No	7 (23.3)	22 (73.3)
Current marital status		
Never married	2 (6.67)	1 (3.33)
Married	25 (83.3)	25 (83.3)
Divorced/separated	2 (6.67)	0
Widowed	1 (3.33)	3 (10.0)
Location of current husband/partner		
Living together in new country	22 (73.3)	25 (83.3)
Living apart in new country	0	1 (3.33)
Living in another country	3 (10.0)	0
No response	5 (16.7)	4 (13.3)
Transit location after leaving home country		
No transit location	26 (86.7)	10 (33.3)
Transit location (e.g., refugee camp, detention centre, other country)	4 (13.3)	18 (60.0)
No response	0	2 (6.67)
Number of children		
No children	5 (16.7)	7 (23.3)
1–3 children	23 (76.7)	20 (66.7)
≥4 children	2 (6.67)	3 (10.0)



TABLE 2: Child witness of physical or sexual violence.

Child witness of physical or sexual violence	Iranian group N = 30 n (%)	Sri Lankan group N = 30 n (%)
Yes	6 (20.0)	1 (3.33)
No	4 (13.3)	16 (53.3)
No response	20 (66.7)	13 (43.3)

were married and more than 75% had children. Both groups included participants with a variety of immigration statuses, including those who came to Canada as landed immigrants, family members who were sponsored as immigrants, and individuals and families who came as refugees.

**6.2. Experiences of Violence.** Participants reported experiencing various forms of violence, including as a child witnessing physical or sexual violence (Table 2); experience of physical violence before the age of 15 (Table 3); experience of sexual violence before the age of 15 (Table 4); experience of physical violence after the age of 15 by someone other than an intimate partner (Table 5); experience of sexual violence after the age of 15 by someone other than an intimate partner (Table 6); and experience of intimate partner violence (Tables 7 and 8). The data pertaining to each form of violence are discussed next.

Of the Iranian participants, 20% ( $n = 6$ ) had witnessed physical or sexual violence as a child. We were surprised that only one Sri Lankan Tamil woman reported witnessing violence as a child (and that 53% ( $n = 16$ ) reported witnessing no violence as a child) given that almost half the samples were aged 15 or younger during the civil war, and that war-like situations generally tend to increase violence. Overall, 67% ( $n = 20$ ) of the Iranian group and the 43% ( $n = 13$ ) of the Sri Lankan Tamil group selected “no response.” While none of the items for the entire instrument had missing data, the selection of “no response” could have been deliberate and in keeping with the groups’ social norms, that is, that disclosing violence is not socially acceptable. It is also possible that women were unsure whether what they witnessed as a child was physical or sexual violence.

Of Iranian participants, 23% ( $n = 7$ ) reported experiencing physical violence by a family member. None of the Sri Lankan Tamil women reported experiencing physical violence before the age of 15 years. The latter rates may be underreported: while the rates of physical punishment of children in Sri Lanka have decreased substantially, they were higher in previous decades. The considerable number of Iranian women (i.e.,  $n = 3$ –10; 10–35%) who answered “no response” also requires more investigation; they may also have been uncomfortable acknowledging such experiences.

Only a small portion of the sample ( $n = 4$ , 13% in the Iranian sample; and  $n = 3$ , 10% in the Sri Lankan Tamil sample) acknowledged experiencing sexual violence before the age of 15 years. The “no response” rate for sexual violence before the age of 15 years was 7–17% ( $n = 2$ –5) in the Iranian community and 3–10% ( $n = 1$ –3) in the Sri

Lankan Tamil community. This appears to be the same group of participants who consistently reported “no response” except for the last item, where some of the women who had answered “no response” to previous items did acknowledge the violence they had experienced by a human trafficker. Given the civil war context in Sri Lanka over the last 25 years, it is possible that the rates are underreported in the Sri Lankan sample. Violence against girls and women (and sexual violence in particular) is known to increase in the context of war [46–48].

Approximately 30% ( $n = 9$ ) of the participants in the Iranian sample and about 36% ( $n = 11$ ) of the Sri Lankan sample acknowledged having experienced physical violence since the age of 15 years. “No response” rates ranged from 20 to 70% ( $n = 6$ –21) in the Iranian group and from 3 to 33% ( $n = 1$ –10) in the Sri Lankan Tamil group. The questions strived to capture a spectrum of experiences of violence in the lives of women: for example, violence perpetrated by a family member to violence in the context of conflict or political unrest, and violence related to participants’ experience of being a refugee. (Spouses/partners were not included as a category in this question. Information on violence by a partner/spouse is explored separately, in Tables 7 and 8.) We can speculate that experiences of violence at the hands of strangers (such as government officials, rebels, community officials, and refugee centre staff) hold particular meanings to victims. For this reason, it is possible that some participants chose “no response” rather than denying their experience altogether.

No women in either group reported experiencing sexual violence since the age of 15 years. In these communities, experiences of sexual violence can lead to considerable stigma and embarrassment, which may limit not only a victim’s opportunities for marriage but also those of her siblings and/or (future) children. For this reason, it is possible that at least some participants may have chosen to answer “no.”

Altogether, 43% ( $n = 13$ ) participants in the Iranian group and 63% ( $n = 19$ ) participants in the Sri Lankan Tamil group reported ever having experienced intimate partner violence. Table 8 provides a breakdown of the report of violence based on the timeline of the experience.

In the Iranian group, a maximum of 30% ( $n = 9$ ) reported psychological violence, 7% ( $n = 2$ ) physical violence, and 7% ( $n = 2$ ) sexual violence in the past 12 months. In comparison, a maximum of 27% ( $n = 8$ ) reported psychological violence, 10% ( $n = 3$ ) physical violence, and 17% ( $n = 5$ ) sexual violence before 12 months. Approximately 37% ( $n = 11$ ) reported psychological violence, 13% ( $n = 4$ ) physical violence, and 17% ( $n = 5$ ) sexual violence in the home country or during transit took place PRIOR to the past 12 months.

In the Sri Lankan Tamil group, 30% ( $n = 9$ ) reported psychological violence, 13% ( $n = 4$ ) reported physical violence, and none reported sexual violence, for the past 12 months. In comparison, 10% ( $n = 3$ ) reported experiencing psychological violence, 10% ( $n = 3$ ) reported physical violence, and none reported sexual violence before 12 months. Of this group, 27% ( $n = 8$ ) reported psychological



TABLE 3: Physical violence before the age of 15 years.

Physical violence before the age of 15 years	Iranian group N = 30				Sri Lankan group N = 30			
	Yes In the home country n (%)	Yes In Canada n (%)	No n (%)	No response n (%)	Yes In the home country n (%)	Yes In Canada n (%)	No n (%)	No response n (%)
By a family member	7 (23.3)	0	20 (66.7)	3 (10.0)	0	1 (3.33)	28 (93.3)	1 (3.33)
By a government official	0	0	20 (66.7)	10 (33.3)	0	0	28 (93.3)	2 (6.67)
By rebels/opposition forces	0	0	20 (66.7)	10 (33.3)	0	0	28 (93.3)	2 (6.67)
Community official	3 (10.0)	0	20 (66.7)	7 (23.3)	0	0	28 (93.3)	2 (6.67)
Refugee centre official	0	0	20 (66.7)	10 (33.3)	0	0	28 (93.3)	2 (6.67)
Human trafficker	0	0	20 (66.7)	10 (33.3)	0	0	28 (93.3)	2 (6.67)

TABLE 4: Sexual violence before the age of 15 years.

Sexual violence before the age of 15 years	Iranian group N = 30				Sri Lankan group N = 30			
	Yes In the home country n (%)	Yes In Canada n (%)	No n (%)	No response n (%)	Yes In the home country n (%)	Yes In Canada n (%)	No n (%)	No response n (%)
By a family member	1 (3.33)	0	25 (83.3)	4 (13.3)	1 (3.33)	1 (3.33)	27 (90.0)	1 (3.33)
By a government official	0	0	25 (83.3)	5 (16.7)	0	0	27 (90.0)	3 (10.0)
By rebels/ opposition forces	0	0	25 (83.3)	5 (16.7)	0	0	27 (90.0)	3 (10.0)
Community official	0	0	25 (83.3)	5 (16.7)	0	0	27 (90.0)	3 (10.0)
Refugee centre official	0	0	25 (83.3)	5 (16.7)	0	0	27 (90.0)	3 (10.0)
Human trafficker	3 (10.0)	0	25 (83.3)	2 (6.67)	1 (3.33)	0	27 (90.0)	2 (6.67)

TABLE 5: Physical violence since the age of 15 years.

Physical violence since the age of 15 years	Iranian group N = 30				Sri Lankan group N = 30			
	Yes In the home country n (%)	Yes In Canada n (%)	No n (%)	No response n (%)	Yes In the home country n (%)	Yes In Canada n (%)	No n (%)	No response n (%)
By a family member	5 (16.7)	0	21 (70.0)	4 (13.3)	8 (26.7)	1 (3.33)	20 (66.7)	1 (3.33)
By a government official	0	0	21 (70.0)	9 (30.0)	1 (3.33)	0	20 (66.7)	9 (30.0)
By rebels/opposition forces	0	0	21 (70.0)	9 (30.0)	0	0	20 (66.7)	10 (33.3)
Community official	1 (3.33)	0	21 (70.0)	8 (26.7)	2 (6.67)	0	20 (66.7)	8 (26.7)
Refugee centre official	0	0	21 (70.0)	9 (30.0)	0	0	20 (66.7)	10 (33.3)
Other individual	3 (10.0)	0	6 (20.0)	21 (70.0)	0	0	20 (66.7)	10 (33.3)

TABLE 6: Sexual violence since the age of 15 years.

Sexual violence since the age of 15 years	Iran (N = 30)				Sri Lanka (N = 30)			
	Yes In the home country n (%)	Yes In Canada n (%)	No n (%)	No response n (%)	Yes In the home country n (%)	Yes In Canada n (%)	No n (%)	No response n (%)
By a family member	0	0	29 (96.7)	1 (3.33)	0	0	28 (93.3)	2 (6.67)
By a government official	0	0	29 (96.7)	1 (3.33)	0	0	28 (93.3)	2 (6.67)
By rebels/opposition forces	0	0	29 (96.7)	1 (3.33)	0	0	28 (93.3)	2 (6.67)
Community official	0	0	29 (96.7)	1 (3.33)	0	0	28 (93.3)	2 (6.67)
Refugee centre official	0	0	29 (96.7)	1 (3.33)	0	0	28 (93.3)	2 (6.67)
Other individual	0	0	29 (96.7)	1 (3.33)	0	0	28 (93.3)	2 (6.67)

TABLE 7: Experience of violence by a partner/spouse during their lifetime.

	Iranian group N = 30 n (%)	Sri Lankan group N = 30 n (%)
Report of violence	13 (43.3%)	19 (63.3%)
No Report of violence	17 (56.7%)	11 (36.7%)

violence and 3% ( $n = 1$ ) experienced physical violence in the home country or during transit. None reported sexual violence during transit or in their home country.

These results may be related to the general perception that physical and sexual violence is considered more severe than psychological violence, or that sexual violence, in general, is not to be discussed with “outsiders” [49].

**6.3. Physical Health.** Table 9 provides overall ratings of physical health for the two groups. Interestingly, 93% ( $n = 28$ ) of Iranian participants and 60% ( $n = 18$ ) of Sri Lankan Tamil participants reported their overall health in the past four weeks as good to excellent even though 23% ( $n = 7$ ) of Iranian participants and 37% ( $n = 11$ ) of Sri Lankan Tamil participants reported physical problems limiting their activities and approximately 40% ( $n = 12-13$ ) of participants in both groups reported moderate to severe physical pain. Additionally, 57% ( $n = 17$ ) in the Iranian group and 60% ( $n = 18$ ) in the Tamil group reported none to very little physical energy in the past four weeks.

As can be seen in Table 10, both groups reported high rates of headache, trouble remembering things, back pain, and colds, infections, and flu in the past four weeks. All physical symptoms appeared more among Sri Lankan Tamil women than among Iranian women.

**6.4. Mental Health.** In both groups, one-third of participants reported mental health symptoms in all of the 28 measured symptoms during the past seven days (see Table 11). Iranian participants reported higher rates of mental health sequelae in the following areas: feeling detached or withdrawn, inability to feel emotional, inability to remember traumatic events, sudden emotional or physical reaction when reminded of trauma, feeling worthless, feeling hopeless, and feeling tense or keyed up. Sri Lankan Tamil participants reported higher rates of recurrent nightmares, feeling jumpy and startled, feeling scared, trouble sleeping, feeling fearful about things, and spells of terror or panic. One woman in each group had thought about committing suicide during the past seven days. One Iranian participant and three Sri Lankan Tamil participants reported attempting suicide in their lifetime.

**6.5. Relationships between Violence and Physical and Mental Health.** As can be seen in Table 12, the mean prevalence of violence was 16.75 with scores ranging from 0 to 144. The mean physical health symptom prevalence was 3.82 with scores ranging from 0 to 12, and the mean mental health symptom prevalence was 15.12 with scores ranging from 0 to 39.

No statistically significant associations were found between total scores for violence and total scores for physical and mental health symptoms (see Table 13).

**6.6. Study Limitations.** This pilot study included a convenience sample of immigrant and refugee women, which may have unintentionally excluded women with specific histories of violence. While we adhered to the norms of sample size for pilot studies, it is difficult to know whether or not the lack of correlation found between violence total scores and the physical and mental health total scores is due to the small sample size. It is also difficult to know whether the considerable number of “no responses” received was due to

TABLE 8: Experience of violence by a partner/spouse in the past 12 months, before 12 months, and in the home country or in transit.

Experience of violence	Iranian group <i>N</i> = 30			Sri Lankan group <i>N</i> = 30		
	In Canada		In home country or transit <i>n</i> (%)	In Canada		In home country or transit <i>n</i> (%)
	In the past 12 months <i>n</i> (%)	Before 12 months <i>n</i> (%)		In the past 12 months <i>n</i> (%)	Before 12 months <i>n</i> (%)	
Partner insulted and made to feel badly about self	9 (30.0)	8 (26.7)	11 (36.7)	8 (26.7)	3 (10.0)	8 (26.7)
Partner did things to scare and intimidate participant	4 (13.3)	8 (26.7)	9 (30.0)	9 (30.0)	4 (13.3)	5 (16.7)
Partner threatened to hurt participant or someone close	1 (3.33)	2 (6.67)	2 (6.67)	1 (3.33)	0	0
Partner slapped or threw something at participant	2 (6.67)	3 (10.0)	4 (13.3)	4 (13.3)	3 (10.0)	1 (3.33)
Partner pushed or shoved participant	2 (6.67)	3 (10.0)	4 (13.3)	0	0	0
Partner hit participant	2 (6.67)	3 (10.0)	4 (13.3)	0	0	0
Partner kicked, dragged, or beat participant	2 (6.67)	3 (10.0)	4 (13.3)	0	0	0
Partner threatened to use gun/knife/weapon	0	2 (6.67)	2 (6.67)	0	0	0
Partner forced participant to have sexual intercourse	2 (6.67)	5 (16.7)	5 (16.7)	0	0	0
Partner forced participant to do something sexually degrading	1 (3.33)	3 (10.0)	4 (13.3)	0	0	0
Participant had sexual intercourse out of fear	1 (3.33)	3 (10.0)	3 (10.0)	0	0	0
Participant injured badly with pain lasting > 1 day	2 (6.67)	4 (13.3)	5 (16.7)	0	0	0

TABLE 9: Rating of physical health in the past four weeks.

Physical health in the past four weeks	Iranian group <i>N</i> = 30 <i>n</i> (%)	Sri Lankan group <i>N</i> = 30 <i>n</i> (%)
Overall rating of health		
Poor	0	3 (10.0)
Fair	2 (6.67)	9 (30.0)
Good	17 (56.7)	14 (46.7)
Very good	6 (20.0)	1 (3.33)
Excellent	5 (16.7)	3 (10.0)
Overall rating of physical problems limiting activities		
None and Very Little	23 (76.7)	19 (63.3)
Moderate to Severe	7 (23.3)	11 (36.7)
Overall rating of physical pain		
None and Very Little	18 (60.0)	18 (60.0)
Moderate to Severe	12 (40.0)	12 (40.0)
Overall rating of physical energy		
None and Very Little	17 (56.7)	18 (60.0)
Good to Excellent	13 (43.3)	12 (40.0)

TABLE 10: Presence of physical symptoms in the past four weeks.

Presences of physical symptoms in the past four weeks	Iranian group <i>N</i> = 30 <i>n</i> (%)	Sri Lankan group <i>N</i> = 30 <i>n</i> (%)
Headaches		
Yes	30 (100)	30 (100)
No	0	0
Fainting/losing consciousness		
Yes	0	4 (13.3)
No	30 (100)	26 (86.7)
Dizzy spells		
Yes	3 (10.0)	6 (20.0)
No	27 (90.0)	24 (80.0)
Weight loss		
Yes	2 (6.67)	9 (30.0)
No	28 (93.3)	21 (70.0)
Trouble remembering things		
Yes	10 (33.3)	11 (36.7)
No	20 (66.7)	19 (63.3)
Dental pain		
Yes	4 (13.3)	9 (30.0)
No	26 (86.7)	21 (70.0)
Facial injuries		
Yes	0	1 (3.33)
No	30 (100)	29 (96.7)
Breathing problems		
Yes	1 (3.33)	10 (33.3)
No	29 (96.7)	20 (66.7)
Upset stomach and vomiting		
Yes	5 (16.7)	13 (43.3)
No	25 (83.3)	17 (56.7)
Back pain		
Yes	17 (56.7)	18 (60.0)
No	13 (43.3)	12 (40.0)
Colds, infections, and flu		
Yes	10 (33.3)	15 (50.0)
No	20 (66.7)	15 (50.0)
Painful urination		
Yes	0	1 (3.33)
No	30 (100)	29 (96.7)
Incontinence of bladder and bowel		
Yes	1 (3.33)	11 (36.7)
No	29 (96.7)	19 (63.3)
Unusual vaginal bleeding/discharge		
Yes	1 (3.33)	4 (13.3)
No	29 (96.7)	26 (86.7)
Excess vaginal bleeding/discharge		
Yes	0	1 (3.33)
No	30 (100)	29 (96.7)
Pelvic pain		
Yes	6 (20.0)	16 (53.3)
No	24 (80.0)	14 (46.7)

TABLE 11: Presence of mental health symptoms over the past seven days.

Presence of mental health symptoms over the past seven days	Iranian group $N = 30$ $n$ (%)	Sri Lankan group $N = 30$ $n$ (%)
Recurrent memories of most hurtful events		
Yes	18 (60.0)	18 (60.0)
No	12 (40.0)	12 (40.0)
Feeling as though frightening event is happening again		
Yes	15 (50.0)	16 (53.3)
No	15 (50.0)	14 (46.7)
Recurrent nightmares		
Yes	9 (30.0)	15 (50.0)
No	21 (70.0)	15 (50.0)
Feeling detached or withdrawn		
Yes	8 (26.7)	7 (23.3)
No	22 (73.3)	23 (76.7)
Inability to feel emotions		
Yes	6 (20.0)	4 (13.3)
No	24 (80.0)	26 (86.7)
Feeling jumpy, easily startled		
Yes	8 (26.7)	19 (63.3)
No	22 (73.3)	11 (36.7)
Difficulty concentrating		
Yes	16 (53.3)	15 (50.0)
No	14 (46.7)	15 (50.0)
Trouble sleeping		
Yes	15 (50.0)	19 (63.3)
No	15 (50.0)	11 (36.7)
Feeling on guard		
Yes	13 (43.3)	14 (46.7)
No	17 (56.7)	16 (53.3)
Feeling irritable or angry outburst		
Yes	19 (63.3)	20 (66.7)
No	11 (36.7)	10 (33.3)
Avoiding activities that trigger memories of trauma		
Yes	17 (56.7)	9 (30.0)
No	13 (43.3)	21 (70.0)
Inability to remember parts of traumatic events		
Yes	5 (16.6)	4 (13.3)
No	25 (83.3)	26 (86.7)
Less interest in daily activities		
Yes	16 (53.3)	10 (33.3)
No	14 (46.7)	20 (66.7)
Feeling there is no future		
Yes	10 (33.3)	4 (13.3)
No	20 (66.7)	26 (86.7)
Avoiding thoughts associated with past traumatic event		
Yes	17 (56.7)	8 (26.7)
No	13 (43.3)	22 (73.3)



TABLE 11: Continued.

Presence of mental health symptoms over the past seven days	Iranian group <i>N</i> = 30 <i>n</i> (%)	Sri Lankan group <i>N</i> = 30 <i>n</i> (%)
Sudden emotional or physical reaction when reminder of trauma		
Yes	20 (66.7)	7 (23.3)
No	10 (33.3)	23 (76.7)
Nervousness or shakiness feelings		
Yes	20 (66.7)	20 (66.7)
No	10 (33.3)	10 (33.3)
Feelings of worthlessness		
Yes	8 (26.7)	4 (13.3)
No	22 (73.3)	26 (86.7)
Suddenly scared		
Yes	7 (23.3)	16 (53.3)
No	23 (76.7)	14 (46.7)
Feeling lonely		
Yes	17 (56.7)	13 (43.3)
No	13 (43.3)	17 (56.7)
Feel blue/very sad		
Yes	18 (60.0)	13 (43.3)
No	12 (40.0)	17 (56.7)
Feeling no interest in things		
Yes	10 (33.3)	11 (36.7)
No	20 (66.7)	19 (63.3)
Feeling fearful about things		
Yes	11 (36.7)	17 (56.7)
No	19 (63.3)	13 (43.3)
Feeling hopeless about the future		
Yes	9 (30.0)	6 (20.0)
No	21 (70.0)	24 (80.0)
Feeling tense or keyed up		
Yes	18 (60.0)	13 (43.3)
No	12 (40.0)	17 (56.7)
Spells of terror or panic		
Yes	4 (13.3)	13 (43.3)
No	26 (86.7)	17 (56.7)
Feeling restless and could not sit still		
Yes	12 (40.0)	15 (50.0)
No	18 (60.0)	15 (50.0)
Thoughts of committing suicide		
Yes	1 (3.33)	1 (3.33)
No	29 (96.7)	29 (96.7)

TABLE 12: Mean and standard deviations for violence and physical and mental health symptoms.

Total score (Sum of scores for all participants)	<i>N</i>	Mean	Standard deviation	Minimum	Maximum
Violence	60	16.75	34.568	0	144
Physical health symptoms	60	3.82	3.000	0	12
Mental health symptoms	60	15.12	10.990	0	39

TABLE 13: Correlations between violence and the physical and mental health symptoms.

Total score (sum of scores for all participants)	Pearson <i>R</i> value	Approximate significance
Violence and physical health symptoms	0.140	0.285
Violence and mental health symptoms	0.240	0.064

errors within the instrument itself or related to the stigma and taboo associated with violence in these communities. Thus, in addition to conducting a psychometric evaluation of this instrument, future studies should consider a sensitivity analysis to assess the factors that may be contributing to the high rates of “no response.” Survey tools used to assess sensitive topics (including those used in our study) involve methodological limitations. For example, participants’ perceptions of “sexual violence” witnessed and/or experienced under the age of 15 years are shaped by a complex set of factors. Future research could therefore use a mixed-method design to allow for qualitative assessment of women’s experiences. Despite the above-noted limitations, this pilot study provides new and compelling evidence regarding the trends in violence and mental and physical health symptoms among immigrant and refugee women and highlights the pervasiveness of violence throughout their lifespans.

## 7. Discussion

This work contributes to a growing body of work that seeks to examine the impact of violence on women’s lives. Participants in both the Iranian and Sri Lankan Tamil groups reported psychological abuse most often, followed by physical and sexual abuse, during the past 12 months. The most commonly reported types of abuse were insulting, criticizing, and intimidation by partner (psychological abuse), slapping, hitting, and shoving (physical abuse), and forced sexual intercourse and being forced to partake in sexually-degrading acts (sexual abuse). These findings are similar to the rates identified in a recent study of Iranian women seeking primary care for exposure to violence from their spouses in the past 12 months [50]; the authors found that psychological abuse was most common, followed by sexual abuse and physical abuse. Similar to our study, the most commonly reported actions were insulting, criticizing, forced sexual intercourse, slapping, and pushing. Our findings are also similar to a recent Canadian qualitative study of Sri Lankan immigrant women who identified physical abuse as including hitting, beating, and throwing objects, and psychological abuse as including controlling behaviors, insulting, and criticizing [51]. Other studies in the Sri Lankan Tamil community (e.g., [49]) also noted that women were hesitant to report sexual violence, in particular. It is worth noting that despite the role of stigma and other barriers, the data indicate considerable rates of IPV, particularly during the most recent phases of their migration history. This speaks to

the immediacy of violence in women’s lives and the urgent need for further research towards intervention.

In studies of non-immigrant women, violence against women has been associated with poor physical and mental health outcomes [52–55]. We did not find any significant associations between violence and mental and physical health sequelae among the Iranian and Tamil women we surveyed. Nonetheless there is a strong presence of mental and physical health symptoms among this sample of women, many of whom have acknowledged exposure to multiple forms of physical and psychological violence during their lifetime (before-, during, and after migration). Many of the physical symptoms reported can be associated with psychological distress, such as headaches, difficulties with memory, breathing problems, dizzy spells and fainting. Similarly, the list of mental health symptoms suggest difficulties associated with traumatic stress, such as recurrent nightmares, emotional detachment, hyper vigilance, difficulty concentrating and sleeping. The trends observed in our data echo those observed with women refugees in the original European study [41]. Without additional data on the meaning of these symptoms, and the context surrounding their occurrence, we are limited in our ability to interpret their meaning and/or the relationships of these experiences to violence over the life course. The strong patterns of physical and mental health symptoms for this small sample of women suggest that there may be connections or relationships that are worthy of further investigation.

Moreover, while our sample was small, the results suggest that future research about violence against immigrant and refugee women should investigate a variety of demographic factors and their degree of association. For example, one recent study of Iranian women identified the correlates of violence against women to include an age of 20 years or younger, low income, and unemployment [50]. We found that women who were exposed to violence tended to be relatively older (31–40 years), skilled in speaking English, and currently married with 1–3 children. While our survey did not allow us to investigate associations at this level, a considerable proportion of our participants were highly educated, having completed college, university, and/or postgraduate education. The role of education as a protective factor [50] may warrant closer examination. In particular, additional descriptive data may be helpful in clarifying the complex role that education can play across different life circumstances. Furthermore, situations in countries of origin change over time. For example, early Sri Lankan Tamil immigrants to Canada were generally well-educated professionals, but more recent Sri Lankan immigrants have faced life disruption and limited access to education as a result of the civil war [56]. Thus, future research is needed to clarify the correlates of violence for immigrant and refugee women over time and in different geographical locations.

## 8. Implications

**8.1. Research Implications.** This study identified important aspects of immigrant and refugee women’s experiences of violence and the health issues that might emerge as a result.

Future research is needed to identify the prevalence, typology, and frequency of violence and the resulting physical and mental health impairment among immigrant and refugee women experiencing violence. Such research will need to draw on alternative methods: probability sampling with the goal of obtaining a more representative sample among immigrant and refugee communities could help verify the consistency of these preliminary findings and clarify important associations between health and exposure to different and multiples forms of violence during a woman's lifetime. The use of qualitative methods in conjunction with quantitative assessments may yield important insights into women's perceptions about different types and severities of violence, and what relationships they see (if any) between their physical and mental health symptoms and incidents of violence over their lifetime.

Individuals who routinely encounter violence may underreport particular experiences, remembering and confirming them only when prompted [57]. In-depth qualitative research may be required to clarify the range and depth of issues raised in this study, which to date have received relatively little attention: women's experiences of violence during transit, women's feelings of safety in the postmigration context, posttraumatic stress disorder due to pre-migration trauma, and the impact of asylum-seeking or immigration and (re)settlement on women's mental and physical health. Future research involving immigrant and refugee communities could also aim to develop a practical tool for use by asylum officials and settlement service providers to encourage early identification of women who may have been exposed to violence. Further research will need to clarify the patterns of violence disclosure and the reliability of these tools.

**8.2. Practice Implications.** Our results suggest that immigrant and refugee women exposed to violence may experience considerable symptoms of posttraumatic stress and depression. This finding has important clinical implications for healthcare providers with regard to screening immigrant and refugee women for mental and physical health symptoms. Clarification of whether or not mental health symptoms are linked with exposure to violence against immigrant women (as they are among non-immigrant women) is needed to ensure appropriate assessment and treatment of immigrant and refugee women who have been exposed to violence.

The health problem patterns we identified among our participants reveal that violence affects women in different ways. For example, our Sri Lankan participants reported more physical symptoms than emotional symptoms. Accordingly, if healthcare professionals assess only for mental health symptoms, they will fail to identify the violence and trauma experienced by some women or certain groups of women. Somatization, where an individual experiences physical health symptoms instead of psychological symptoms, figures prominently in cross-cultural research [58]. Healthcare professionals should therefore ask about violence routinely and take a holistic approach to health and violence that includes physical and mental health and illness. It is also important for settlement service providers to help women early in their

immigration and (re)settlement process. Settlement organizations are a critical resource for newcomers and are likely to function as points of first contact for new immigrants as they adjust to life in Canada. These agencies have the potential to operate as system facilitators, linking individuals with appropriate health care and support services. While often overlooked as a resource, such agencies are well positioned to offer timely and nonthreatening preventative services as well as interventions to ensure appropriate referrals for counseling, medical care, and other supports.

## Conflict of Interests

No conflict of interests has been declared by the authors.

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