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Pregnancy outcomes and migration in Switzerland: results from a focus group study

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Summary

Objectives: To explore the issues of pregnancy and delivery in migrant women in their interaction with the Swiss healthcare system.

Methods: Focus groups were conducted with women of the Turkish and Portuguese communities. Swiss women were included as the reference group. Interpreters were used when needed. Group discussions were recorded and transcribed; all communications were categorized by specific themes and subdivided as to content.

Results: Eight focus groups were held: there were a total of 40 participants including 14 Turkish, 17 Portuguese, 9 Swiss. The study revealed that migrant women in Switzerland face stressful situations, which may differ according to nationality and length of stay in the country. Main factors negatively affecting pregnancy were stress due to precarious living conditions, heavy work during pregnancy, inadequate communication with healthcare providers, and feelings of racism and discrimination in society.

Conclusions: Main findings of this qualitative study confirm that migrant communities need focused health attention because of numerous barriers to healthcare experienced in Switzerland. Improving the reproductive health of the migrant community is a priority that can be addressed by public health interventions, including integration of migrants into the society, strict observance of labor regulations, improved communication with healthcare providers, and better information targeting migrant communities.

Keywords: **Migration – Reproductive health – Switzerland – Qualitative study.**

Differences in pregnancy outcomes according to the mother's nationality have been noted in Switzerland for a long time. Lehmann (1990) reported that infant mortality in the early 1980s was higher for specific migrant groups than for Swiss nationals. In particular, nationals from Turkey and from "other groups", a category including Portuguese and Yugoslavs, had a much higher perinatal and infant mortality than Swiss nationals, while rates similar to those of the native population were reported for Spaniards, Italians and Northern Europeans. These differences were attributed to the recent immigration of the former groups which constituted a new industrial proletariat with more precarious working and living conditions, while the groups with a history of longer immigration as Spaniards and Italians had reached a better social situation. A recent analysis of the period 1987–2001 showed an overall trend towards the improvement of infant mortality indicators in Switzerland, while a gap still remained for specific nationalities. The analysis showed that Spanish, Portuguese and Yugoslav women have similar rates compared with Swiss nationals, while Turkish, Sri Lankan and African women fared worse than the native population; the rate for Italians was somewhat in between (Bollini & Wanner 2006).

The risk factors for poor pregnancy outcomes are multifactorial. They include biological factors (age, parity, maternal height and weight, maternal morbidity), behavioural factors (caloric intake, alcohol and cigarette smoking), socioeconomic status, and environmental variables (social support and stress) (Oakley 1985; Berkowitz & Papiernik 1993). In addition, access to effective health services and their appropriate utilization may affect pregnancy outcomes, especially concerning perinatal and neonatal mortality (Whitehead & Drever 1999). Migrant communities may be in the highest risk group – not only because they usually belong to the lowest socioeconomic strata of the receiving society, but also because of inadequate

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access to and utilization of healthcare; reasons for these shortcomings are linguistic and cultural as well as administrative and political problems linked to the issuance of the residence permit in the receiving country (Bollini 1995). In Switzerland, despite the large proportion of persons of foreign origin, (now almost 28 % of the population (Wanner 2004)), causes for the poorer reproductive health of selected migrant groups have not been elucidated, and no information is available on the antenatal care they receive (Bollini and Wanner 2006). In contrast, in other European countries, issues concerning maternal and child health status of foreign communities are more closely monitored (Oldenburg et al. 1997; Rasmussen et al. 1995; Davey Smith et al. 2000; Stoltenberg & Magnus 1995; van Enk et al. 1998; Balarajan & Botting 1989) Recently, problems of access to care have been identified especially for illegal migrants in Switzerland (Achermann & Chimienti, in press), and the responsibility for lowering cultural and linguistic barriers for pregnant women has been addressed by a large non-governmental organization, the International Association for Maternal and Neonatal Health, as well as by several groups in large towns and hospitals (International Association for Maternal and Neonatal Health IAMANEH 2004). Since no systematic information is yet available on these specific barriers to healthcare possibly experienced by migrant women in Switzerland, this qualitative study was set up to explore the interaction between migrant women and the healthcare system concerning reproductive health issues, in particular the pregnancy experience in Switzerland. The results of this qualitative research will provide useful insights to design further quantitative studies exploring access to care for migrant women.

Methods

Two migrant communities, Portuguese and Turkish, have been chosen because they are large in Switzerland, and according to the most recent analysis, they show different pregnancy outcomes, more favourable for the Portuguese community than the Turkish (Bollini & Wanner 2006; Wanner 2001). For two reasons we decided to look closely at, as a reference group, the experiences and beliefs of a group of Swiss women: for one, to better understand the cultural values and beliefs which have informed the development of reproductive health services in the country; and second, to clarify factors which are common to all women across nationalities.

The study was conducted employing the technique of focus groups, particularly valuable for understanding individuals' and groups' subjective experiences of health and disease and other sensitive issues (Fossey et al. 2002; Bender et al. 2001). We recruited a convenience sample of women from each nationality who had at least one pregnancy in Switzerland. To brighten the contrast between migrant and native groups, the latter consisted of Swiss nationals, excluding first generation migrants who obtained citizenship. For migrant communities, we excluded women born in Switzerland (second generation migrants), as well as those married to (or living with) a Swiss national, a condition that usually eases the access to and utilization of health services. We recruited the participants on the recommendation and advice of local associations, following the experience of previous studies.

Each focus group lasted about three hours and was conducted by two female researchers with previous experience of qualitative studies with migrant communities. Although we were aware of the multiple hypothetical risk factors for pregnant migrant women, for practical purposes we concentrated the discussion on their beliefs about factors influencing pregnancy, and on access to healthcare services. Three main aspects were covered:

- factors which influence pregnancy and the well-being of the mother and the baby, including cultural, environmental, family, lifestyle aspects and socio economic circumstances;
- access to, utilization of, and satisfaction with health services in Switzerland, both in the prenatal and postnatal periods; and
- suggestions for improvement of the present situation, if necessary, concerning healthcare delivery and other aspects that members of the groups considered relevant.

A short list of the themes to be discussed was provided to the participants at the beginning of each focus group (Appendix 1). Sessions with the Turkish women took place with the help of a female Turkish translator, while translation was not necessary for women from the Portuguese community, who generally spoke French fluently after some years of residence. Two groups met in French-speaking Switzerland (La Chaux-de-Fonds), 2 in German-speaking regions (Bern and Zurich), and 4 in a bilingual region (Fribourg), according to the pattern of Portuguese and Turkish migration to Switzerland. At the beginning of each focus group, we asked participants whether they agreed to tape record the session, ensuring full confidentiality of the results. Furthermore, we asked each participant anonymously to fill out a form, translated in the participant's mother tongue, with basic socio-demographic information. A small compensation was offered to all participants to cover transport expenses.

Discussions held during the groups were transcribed in full for detailed analysis. Field notes contributed to the interpretation of particular aspects of the discussion. After reading a number of transcripts, two of the authors identified and coded

Table 1 Main socio-demographic characteristics of the participants

	Switzerland	Turkey	Portugal
Age			
<30	–	2	1
31–50	9	9	15
>50	–	3	1
Education			
Primary school or less	–	6	4
Secondary school	1	3	9
Professional training	–	2	4
University or equivalent diploma	8	3	–
Current occupation			
Housewife	1	7	1
Unskilled manual work	–	5	13
Clerical work	–	1	3
Professionals	8	1	–
Marital status			
Single	3	1	–
Married	5	10	15
Separated/divorced	1	3	2
No. of children			
1	5	3	3
2	2	5	11
>2	2	6	3
Length of stay in Switzerland			
<5 years	–	2	–
5–14 years	–	6	3
>14 years	–	6	14
Type of residence permit			
Permanent resident	–	12	16
Yearly resident permit	–	1	1
Asylum seeker	–	1	–

each statement. Eleven specific themes were identified after considering and evaluating common statements:
1) Factors associated with a good pregnancy outcomes; 2) Risk factors for pregnancy outcomes; 3) Follow-up during pregnancy; 4) Experience with the healthcare system during delivery; 5) Follow-up in the first months after delivery; 6) Organisation of care; 7) Communication with health personnel; 8) Social, economic and administrative problems; 9) Suggestions to improve the current situation; 10) Comments about migrant women (only for Swiss participants); and 11) Comments about life in Switzerland (only for migrant women). Within each of the 11 themes, we identified and coded various contents. As an example, the theme "Communication with health personnel" encompassed the following content: lack of problems, presence of language barriers, inadequate understanding of details, translation by friends and acquaintances, etc.

Results

The 8 focus groups included the participation of 40 women: 14 Turkish, 17 Portuguese, and 9 Swiss. The main sociodemographic characteristics are summarized in Table 1. Compared to Swiss women, migrants were less educated, more frequently housewives (Turkish women) and held unskilled manual jobs. Turkish women tended to have the largest families of all. Most migrant women had been residing in Switzerland for a long time and were permanent residents. While 5 of the 14 Turkish women had entered Switzerland seeking asylum, only one remained an asylum seeker at the time of the focus group. We will report below the essential features of the group discussion by nationality.

Turkish women

Turkish women who participated in our groups believed that the most important factor leading to a good pregnancy outcome was the moral support of the family, followed by sharing of experience and receiving advice from many persons in the community. The latter factor correlated with the experience of loneliness in Switzerland, where the feeling of community seemed commonly lost. The themes of loneliness and nostalgia spontaneously arose during the group discussions:

"*Certainly we experience some problems during pregnancy and at delivery also in Turkey, but the intensity is different,*

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because in Turkey we are supported by other people and here we are alone."

The main risk factor for a poor pregnancy outcome was considered stress at work, or performing a job too burdensome for their condition, both outside and inside the home. Stresses at work included the decision to abort due to fear of losing one's job, or being fired when their pregnancy was found out by their employer.

"The thought of getting pregnant in Switzerland makes us tired, stressed and afraid, because since we are foreigners we are worried to announce it to our employer and to be fired. (…) When I got pregnant, after 2 months I was in a new job, and not having right to unemployment benefits, I aborted because I was afraid to lose my job. Now a Swiss friend of mine is pregnant, she announced it to her employer who congratulated her, but we foreigners are afraid to get pregnant. "

"Once I got pregnant, I was fired by my employer as soon as I announced it. (…) I do not accept to be fired because I am a foreigner and I am pregnant. We (foreigners) work more and for lower salaries, I would like to let people know."

In addition, some women reported problems obtaining appropriate medical leave from work.
In about half of the cases, Turkish women reported poor socioeconomic conditions, especially during their initial years in Switzerland, which also affected the ability to pay for health insurance. Furthermore, in two out of three focus groups, the women bitterly portrayed their experience of migration with descriptions of discrimination and racism within the Swiss society.

"I would like to stress that there is a certain discrimination between Swiss and foreign women, and that the latter do not get enough consideration. I would like that the Swiss Office of Public Health were informed. If Switzerland claims to be a democratic country, then it should treat people coming from different countries in the same way as Swiss people are treated."

"If a Swiss woman is in a difficult situation, her doctor makes a request for her to get help at home, but when a foreign woman is concerned, the doctor does not behave in the same way. We always feel we are foreigners in Switzerland, we are discriminated, also at work and because we are paid less. Therefore, being a foreigner in Switzerland is a risk factor."

The Swiss healthcare system, it is observed, has many positive aspects but also some inadequacies. Nearly all the women had affirmative opinions of the assistance they received during pregnancy and delivery, and in the neonatal period. Women reported they were treated with respect, consideration and encouragement, and that they did not feel discriminated against because of their nationality or language, a comment that already provides a vague clue to the discrimination experienced in the society. However, communication with health personnel presented many severe shortcomings. Of all comments concerning communication with healthcare personnel, the majority concerned negative experiences, including inadequate understanding, unsatisfactory translation by friends and acquaintances, and inadequate access to care due to language barriers.

"Of course I would have needed an interpreter! When I was pregnant I brought along (to the doctor's office) a friend to translate, but this didn't change much the situation even if she spoke German very well, because she did not know medical terminology."

Communication problems compounded, for some women, a situation already defined by isolation and paucity of information. Many women could but did not attend prenatal courses both because of language problems and lack of proper information; some were not aware of the need to regularly consult a gynecologist during pregnancy. Physical and mental problems were frequently reported, as well as problems with adequate nutrition.

"Since I did not know German, I have not seen a gynecologist for more than four years. I asked my husband, but he did not know anyone who could translate for me … and also you are ashamed to ask somebody to accompany your wife to the gynecologist."

One comment directly highlighted the need for follow-up and information about the care necessary for the newborn baby:

"I would like to address the issue of infant mortality. Traditionally in Turkey babies have to stay at home for 40 days after birth (…), and newborn babies are strictly tied up in a tissue to make their body straight. Children may die because of this dangerous practice. Swiss authorities should get information about this reality to decrease this kind of treatment of the newborn".

Finally, a number of suggestions to improve the current situation were advanced by the groups: the need for more infor-

mation in their own language, longer maternity leave, better socioeconomic follow-up, and more efforts made by the institutions themselves to improve communication. As one woman said:

"It is an important issue not only for newcomers, but also for those established since a long time who never learned the language. The institutions have to intervene concerning translation."

Portuguese women

Women in our sample believed that the main factors ensuring a good pregnancy outcome were family support, the desirability of the parents for the child, the psychological well-being of the mother as well as good physical health. The main risk factors mentioned were poor socioeconomic situations, stressful working conditions, and stress in daily life and within the family.

"It is difficult (to do a heavy job during pregnancy) but the employer tells you that pregnancy is not a disease, so we have to work and do the house chores on top of it, women always have the heaviest charge at home. There should be more assistance during pregnancy, or we should work a little less."

The negative impact of smoking and alcohol, as well as poor communication with the health personnel, were also mentioned as risk factors during pregnancy .
Overall, Portuguese women in our sample thought they received good care during pregnancy, and in the first months after delivery.

"At the CHUV[1], even after delivery the midwives are impeccable, they give you all the information you need (…)."

However, one third of the comments concerning delivery were negative, specifically regarding painful medical procedures and extended labor that in their opinion could have been avoided or considerably reduced.

Two of three comments concerning communication with the health personnel mentioned language barriers.

"I needed information concerning breastfeeding, but since I did not know the language I couldn't ask any question, so I called people in Portugal to ask what I should do."

"I understand French but I do not speak much because I am afraid to make mistakes, and that people laugh at me, so I do not ask any questions. I think that (health care providers) should speak more slowly to those who don't understand the language."

Portuguese women in our sample mentioned economic problems and also problems due to their illegal status in Switzerland at the beginning. (Most of these women followed their husbands who had received short-term permits which did not allow for family reunification). One woman who had been a clandestine migrant described her first pregnancy, as follows:

"I had my first daughter when I was illegal, it has been a terrible experience even though my sister helped me, I was always fearing that someone would knock at the door and would send us back to Portugal. (…) Even when I had contractions I was afraid to go to the hospital fearing to be sent back to Portugal. With my second child I already had a Permit B[2], it was an incredible feeling of well-being having a desired pregnancy and knowing I could have my child here."

Spontaneous comments were also made during the discussion concerning the migration experience, such as nostalgia and loneliness. Finally, discrimination experienced in Switzerland was reported:

"Of course there are language problems, but also work-related problems, because foreign women always do the most difficult tasks like holding heavy charges, working in restaurants and on top at home, having very long shifts."

Of all the suggestions made for improving the current situation, half involved the need for more information and for longer maternity leave. One Portuguese woman concluded the group discussion:

"Everybody says that there are not enough children in Switzerland, but we don't have the structural conditions to have them either!"

Swiss women

The Swiss women who participated in the two focus groups believed that the main factors associated with a good pregnancy outcome were family and moral support, adaptable

[1] CHUV stands for Centre Hospitalier Universitaire Vaudois, the University Hospital in Lausanne.

[2] Permit B is a one-year resident permit.

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working conditions, and good medical attention (including visiting a female gynecologist). Stress was considered the main risk factor affecting the pregnancy, but seldom did the women relate stress to inadequate working conditions. Rather, the majority sensed an understanding and support by their employers at work.

Medical follow-up during pregnancy was mostly considered very positive, including attending antenatal courses, while the negative comments related to an excessive medicalisation of pregnancy and the difficulty of making the medical system accommodate their wishes. Some women highlighted the lack of attention to the mother at the hospital just after delivery, a psychologically delicate period.

Continuity of care between pregnancy and delivery drew negative comments, because of problems with reimbursement by health insurance gynecologists who followed the women during pregnancy delivered babies only at private hospitals, and the expense without complementary health insurance was considerable. Problems with health insurance and access to follow-up services were the most frequent socioeconomic problems mentioned, followed by comments about how expensive it is to deliver at private hospitals; complaints about the lack of information on the right to free follow-up examination at home after delivery were also aired.

It is noteworthy that Swiss women, while mentioning their own problems with the medical system, displayed an understanding of and solidarity for the social situation of migrant women in Switzerland:

"I had a friend from Eritrea who worked as a cleaner at a supermarket, every morning at 5. She had to work until the end of her pregnancy, because if she missed one day of work it was very badly considered."

"For illegal migrants the lack of permit is a tremendous stress. They do not know if they will be reported to the police on admission to the hospital, and their pregnancy is not necessarily followed by a doctor."

"I think that people who don't speak the language are hardly posing any questions. (…) Access to interpreter services at the hospital would be precious."

A number of suggestions on how to improve the current situation were provided by the Swiss women in the groups: chiefly these included more information on legal rights, better social and psychological follow-up, and easier access to alternative places of delivery or follow-up at home.

Discussion

Using a qualitative technique we undertook this study to explore the encounter between pregnant migrant women and the healthcare system in Switzerland. Although we employed a convenience sample whose participants were recruited through local associations and networks – an established methodology in previous studies – it is worth noting that the socioeconomic characteristics of the migrant women attending our focus groups mirror the results of an analysis in the 2000 National Census, based on a sample of women between 15 and 49 years of age who had at least one child between 1987 and 1996 (Bollini & Wanner 2006). The results of that analysis showed that Turkish and Portuguese women in Switzerland had lower levels of education than Swiss women (88 % and 87 % of Portuguese and Turkish women, respectively, completed primary education as compared with 19 % of Swiss women), and most held unskilled jobs (75 % Portuguese, 70 % Turkish versus 11 % Swiss). Turkish women were more frequently housewives than Portuguese women (25 % versus 18 %), while Swiss women had a higher proportion (33 %). Finally, most of Portuguese and Turkish women in Switzerland held permanent residence permits. In summary, although the national sample was computed with attention to specific characteristics (specific age structure and delivery between 1987 and 1996), the main socioeconomic features of our sample of migrant women reflected the main characteristics of the national sample. In contrast, the group of Swiss women that we interviewed had higher education levels and were more frequently employed than the national sample.

The discussion during the focus groups highlighted that having a baby is a stressful event for almost every woman. Social, economic, and political forces play a crucial role in determining the subjective experiences of women, both native and migrants, in their contacts with the healthcare system (Anderson 1985). National data on infant mortality by nationality indicate that Portuguese women's pregnancy outcomes showed improvement in recent years (there is no separate data for Portuguese women in the early 1980s for reference) (Lehmann et al. 1990), approximating those of Swiss women in the late 1990s, following stabilization of Portuguese migration to Switzerland. The women in our groups mentioned frequently what they found to be an unsatisfactory socioeconomic framework upon their arrival in Switzerland: a precarious economic situation, illegal status in the country, enormous stress linked to precarious living and working conditions. In addition, access to healthcare was limited by the fear of being reported to the police, and also by lack of health insurance. While healthcare personnel in large hospitals were sympathetic and dedicated, in small towns there was insufficient attention, or indeed frank disbelief of the claims presented by the mother-to-be. While

Portuguese women in our groups spoke French fluently after some years of residence, language barriers were present obviously at the beginning, indicating the difficulties of communication and a distinct sense of discrimination. (*"At the hospital if you don't speak the language you count much less."*)

Epidemiological data show that the pregnancy outcome of women from the Turkish community remained unsatisfactory over the years, although a reduction in the gap with Swiss nationals has been observed in more recent times (Bollini & Wanner 2006). Language problems and the lack of available information on reproductive health issues experienced by some women, often in a framework of precarious living and working conditions, characterized the experience of the Turkish migrant community. This feeling was compounded by the profound sense of exploitation in the work place and discrimination in the Swiss society, and at times also in the encounter with the healthcare system, seen as less sensitive to the needs of foreign women as compared to their Swiss counterparts. The language barrier severely restricted access to healthcare even in the absence of obvious financial or administrative barriers. All women in fact had health insurance, and they were legally residing in Switzerland, either arriving as part of labour migration or in the framework of asylum. More frequently than the two other groups Turkish women mentioned the medical problems associated with pregnancy. Although the encounter with the Swiss healthcare system, especially at the moment of delivery, was considered very positive, many women reported tardy and inadequate antenatal care, as well as insufficient knowledge of the care to be provided to infants. Since these aspects may affect infant mortality, sensitive and effective solutions should be sought, emphasizing native childcare practices which protect babies, and providing antenatal care easily to all mothers-to-be (van Sleuwen et al. 2003).

The inclusion of Swiss women in our focus groups helped us to clarify the specific stresses linked to the pregnancy experiences of migrant women, and certainly the problems identified by native and migrant women were of a different nature. In summary, Swiss women in our groups complained about the complexity of the health insurance system, lack of information about their rights, economic barriers to continuity of care, and excessive medicalisation – *"an armada of investigations"*, as one woman expressed –, which contravened their desire for a more direct and private experience of pregnancy and delivery. It is worth noting here that Swiss women who participated in our focus groups were more educated and held professional positions more frequently than the national sample. However, previous analyses indicate that infant and perinatal mortality in Switzerland show only slight differences according to socioeconomic group (Lehmann et al. 1990). If we had recruited Swiss women from lower social strata, we would very likely have uncovered different sets of problems, perhaps similar to those socioeconomic difficulties reported by the migrant women

Poor communication with healthcare providers was reported by many migrant women in our groups, not only with the hospital but also with their doctors. One Turkish woman said that she could not tell her gynaecologist the exact date of her last menstruation: she nearly delivered her baby at work because the date of delivery was wrongly estimated. It is too easy to imagine how a "near miss" may degenerate into a fatality. Poor communication supplemented by inadequate knowledge of the need for regular checks during pregnancy, as well as poor follow-up after delivery, may be among the causes of the higher infant mortality rates reported in the Turkish community.

Finally, the stress linked to discrimination at work and frank racism is part of the specific experience of being a foreigner or belonging to a minority group (Davey Smith 2000). The association between feelings of discrimination and higher blood pressure and poor pregnancy outcome (low birth weight, premature delivery) has been documented in the black American community, which experiences the poorest pregnancy outcome in the United States, beyond what would be expected due to social class effect (Krieger 2000; Krieger 2003; Mustillo et al. 2004; Rich-Edwards et al. 2001). Undeniable racism and discrimination revealed by our study do not credit the Swiss society, and should be openly discussed and addressed at the society level.

The main findings of this qualitative study confirm that migrant communities need targeted health attention because of the numerous barriers to healthcare that they experience in Switzerland. These barriers may differ for different ethnic groups, and specific needs must be assessed in order to plan effective interventions. The first and most obvious need is for appropriately trained interpreters and a greater effort concerning health education and support tailored to specific communities is clearly mandated.

These interventions should be complemented by further research to quantify the needs of specific groups, supported by appropriate evaluation. In addition, since infant mortality reflects the net effect of many biologic and sociologic factors, interventions have to tackle multiple, interdisciplinary issues. Improved welcoming and integration of migrants into the society, strict observance of labour regulations for migrants as well as for natives, better information at all levels of society involving migrant communities, facilitation of networking among women, especially when (because of cultural factors) women take less part in public life, are ingredients of the active policies implemented to address the health needs of

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migrant communities (Sachs 1993; Bhagat et al. 2002; Gustafsson-Larsson & Hammarstrom 2000). In some immigration countries, both in Europe and outside, the adoption of complex but negotiable strategies has ensured similar pregnancy outcomes for both native and migrant communities, irrespective of country of origin (Bollini & Siem 1995; Iglesias et al. 2003; Doucet et al. 1992; Essen et al. 2000).

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References

Anderson JM (1985). Perspectives on the health of immigrant women: a feminist analysis. ANS Adv Nurs Sci *8*: 61–76.

Balarajan R, Botting B (1989). Perinatal mortality in England and Wales: variations by mother's country of birth (1982–1985). Health Trends *21*: 79–84.

Bender DE, Harbour C, Thorp J, Morris P (2001). Tell me what you mean by "si": perceptions of quality of prenatal care among immigrant Latina women. Qual Health Res *11*: 780–94.

Berkowitz G, Papiernik E (1993). Epidemiology of preterm birth. Epidemiol Rev *15*: 414–43.

Bhagat R, Johnson J, Grewal S, Pandher P, Quong E, Triolet K (2002). Mobilizing the community to address the prenatal health needs of Immigrant Punjabi women. Public Health Nurs *19*: 209–14.

Bollini P (1995). Migration and international health policies. Ann Ig *7*: 217–24.

Bollini P, Siem H (1995). No real progress towards equity: health of migrants and ethnic minorities on the eve of the year 2000. Soc Sci Med *41*: 819–28.

Bollini P, Wanner P (2006). Santé reproductive des collectivités migrantes. Disparités de risques et possibilités d'intervention. Berne: Office fédéral de la santé publique.

Davey Smith G (2000). Learning to live with complexity: ethnicity, socioeconomic position, and health in Britain and the United States. Am J Public Health *90*: 1694–8.

Davey Smith G, Chaturvedi N, Harding S, Nazroo JY, Williams R (2000). Ethnic inequalities in health: a review of UK epidemiological evidence. Critical Public Health *10*: 375–408.

Doucet H, Baumgarten M, Infante-Rivard C (1992). Risk of low birthweight and prematurity among foreign-born mothers. Can J Public Health *83*: 192–5.

Essen B, Hanson BS, Ostergren PO, Lindquist PG, Gudmundsson S (2000). Increased perinatal mortality among sub-Saharan immigrants in a city population in Sweden. Acta Obstet Gynecol Scand *79*: 737–43.

Fossey E, Harvey C, McDermott F, Davidson L (2002). Understanding and evaluating qualitative research. Aust N Z J of Psychiatry *36*: 717–32.

Gustafsson-Larsson S, Hammarstrom A (2000). Can women's network activities lead to improved health? Scand J Public Health *28*: 253–9.

International Association for Maternal and Neonatal Health IAMANEH (2004). Migration: en route vers le paradis? Basel: IAMANEH.

Iglesias E, Robertson E, Johansson SE, Engfeldt P, Sundquist J (2003). Women, international migration and self-reported health. A population-based study of women of reproductive age. Soc Sci Med *56*: 111–24.

Krieger N (2000). Epidemiology, racism, and health: the case of low birth weight. Epidemiology *11*: 237–9.

Krieger N (2003). Does racism harm health? Did child abuse exist before 1962? On explicit questions, critical science, and current controversies: an ecosocial perspective. Am J Public Health *93*: 194–9.

Lehmann Ph, Mamboury C, Minder C (1990). Health and social inequities in Switzerland. Soc Sci Med *31*: 369–86.

Mustillo S, Krieger N, Gunderson EP, Sidney S, McCreath H, Kiefe CI (2004). Self-reported experiences of racial discrimination and Black-White differences in preterm and low-birthweight deliveries: the CARDIA Study. Am J Public Health *94*: 2125–31.

Oakley A (1985). Social support in pregnancy: the "soft" way to increse birthweight? Soc Sci Med *21*: 1259–68.

Oldenburg CE, Rasmussen F, Cotten NU (1997). Ethnic differences in rates of infant mortality and sudden infant death in Sweden, 1978–1990. Eur J Public Health *7*: 88–94.

Rasmussen F, Oldenburg CE, Ericson A, Gunnarskog J (1995). Preterm birth and low birthweight among children of Swedish and immigrant women between 1978 and 1990. Paediatr Perinat Epidemiol *9*: 441–54.

Rich-Edwards J, Krieger N, Majzoub J, Zierler S, Lieberman E, Gillman M (2001). Maternal experiences of racism and violence as predictors of preterm birth: rationale and study design. Paediatr Perinat Epidemiol *15 Suppl 2*: 124–35.

Sachs L (1993). Evil Eye or Bacteria. Turkish Migrants and Swedish Health Care. Stockholm Studies in Social Anthropology, University of Stockholm: Stockholm.

Stoltenberg C, Magnus P (1995). Children with low birth weight and low gestational age in Oslo, Norway: immigration is not the cause of increasing proportions. J Epidemiol Community Health *49*: 588–93.

*van Enk A, Buitendijk SE, van der Pal KM, van Enk WJ, Schulpen TW (*1998). Perinatal death in ethnic minorities in The Netherlands. J Epidemiol Community Health *52*: 735–9.

van Sleuwen EB, L'Hoir MP, Engelberts AC, Westers P, Schulpen TWJ (2003). Infant care practices related to cot death in Turkish and Moroccan families in the Netherlands. Arch Dis Child *88*: 784–8.

Wanner P (2001). Analyse biographique des événements familiaux. Une application à partir de la statistique du mouvement naturel BEVNAT. *Démos, Office fédéral de la statistique, Neuchâtel.*

Wanner P (2004). Migration et Intégration. Populations étrangères en Suisse. *Office fédéral de la statistique: Neuchâtel.*

Whitehead M, Drever F (1999). Narrowing social inequalities in health? Analysis of trends in mortality among babies of lone mothers. BMJ *318*: 908–12.

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Appendix 1

Draft questions for the focus group discussion

We will explore during the next few hours together many different aspects that may affect pregnancy and the health of the mother and her newborn baby. The results of the discussion will be kept strictly confidential, and will help us understand and possibly improve the pregnancy experience in this country, with special attention to immigrant communities. We would like to thank you in advance for your participation.

The study team

1. What are, in your opinion, the most important factors for a good pregnancy and the well-being of the mother and the baby? Please consider any material factor, like nutrition, work, assistance and support from the family, economic situation, health care, etc., but also emotional factors like stress, loneliness, etc.

1 bis for immigrant women only
Is any of the factors you mentioned especially linked to the migration experience in Switzerland?

2. How was your experience with the health care system during the pregnancy? Did you face economic difficulties for doctor visits, exams, or hospitalisations? Please consider also contacts with doctors, nurses, and hospital staff. Do you feel you could easily communicate with them? Do you feel they provided enough information and reassurance? Did you attend antenatal classes?

3. How was your experience with the health care system during delivery?

4. How was your experience with the health care system during the first months after delivery?

5. Would you suggest any change to improve the current situation, including health care delivery or any other aspect that you may consider of relevance?