What about the health of migrant population groups?

The most important results of the "Monitoring on the migrant population's state of health in Switzerland"

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Preface

How healthy are migrants compared to the native population? How often do they visit a doctor or go to hospital? Do migrants have more mental problems than Swiss? And what factors affect the health situation of migrants? This publication takes a look at these and other questions.

The "Monitoring on the migrant population's state of health in Switzerland" was carried out in 2004 on the basis of the Swiss health survey. Migrants of various nationalities were questioned about their health situation and their health behaviours. The study also looked at aspects relating to their integration and their socio-economic situation. This publication is a summary of the results produced by the study.
The first part is a descriptive summary of the data generated by the study. It shows what percentage of the migrant groups involved in the study suffer from various health problems or take advantage of certain health services. The analysis shows that many migrant groups have a poorer health status and are at greater risk of health problems than the native Swiss population. It also shows, however, that certain groups are able to assess their health more accurately and behave in ways more likely to promote health.
The second part of the publication is an abbreviated version of an in-depth data analysis which seeks to identify the factors responsible for the migrants' frequently poorer health situation. Regression analysis is used to investigate the interactions between health on the one hand and migration, socio-cultural factors and various socio-economic and socio-demographic structures on the other.

The first and second parts of the publication are two different analyses of the same data, and for this reason some of the content overlaps.

I would like to take this opportunity of thanking the many people who helped to design, implement, evaluate and publish the Health Monitoring of the Swiss Migrant Population study. Their efforts have enabled us to reach a milestone in research into migration and health in our country. What remains now is to institutionalise this survey as far as possible and use the findings to design and implement appropriate measures.

Thomas Spang
Federal Office of Public Health

Introduction

The health of migrants is affected by a number of factors to which native Swiss people are not exposed in this form; they include the hopes and fears associated with migration, escape from a dissatisfying or traumatising situation in their country of origin, discrimination, and difficulty in understanding the new situation (language, behavioural norms etc.) (cf. Razum 2002). Exposure to violence, for example, can lead to somatic or emotional symptoms of illness in people from war-torn regions. Migrants, like other vulnerable groups, are also affected more severely by social problems such as poverty and unemployment. They are more likely than average to belong to socially disadvantaged strata in society, and this affects their health situation as much as structural factors. It has been shown, for example, that there is a correlation between health and integration or integration policy (cf. for example Bollini 2006). Equally, barriers to access or a lack of transcultural competence in the provision of healthcare and prevention not infrequently lead to migrants being disadvantaged compared with the native population.

In recent years a larger number of studies have focused on the health situation of migrants; they have produced the following important findings:

- The mental health of migrants is often poorer than that of Swiss people;
- Certain migrant groups have a higher prevalence of HIV/AIDS, tuberculosis, hepatitis, malaria and sexually transmitted diseases;
- Migrants are more likely to be affected by abortions, inadequate contraception and female genital mutilation;
- The dental health of children and adolescents from migrant families is often poorer;
- Certain migrant groups are more likely than average to develop certain types of cancer (stomach cancer in people from southern Europe, nasopharyngeal cancer in people from China, liver cancer in people from Africa and Asia);
- Some migrant groups display comparatively high-risk behaviour with respect to smoking, physical activity and diet

(cf. Dahinden 2006)

Migrants differ from the native population in terms of both their health status and the degree to which they use the health system. Migrants are less likely, for example, to receive in-patient treatment for mental disorders (cf. Frick 2004); they make different use of the emergency services offered by public hospitals (cf. Borde 2003); and they do not make use of the antenatal care usually provided for Swiss women (Weiss 2003).

Although some important research has been carried out into migration and health, information about the health situation of migrants in Switzerland is patchy. Few representative conclusions have been drawn, and then only in specific areas. The national health-reporting system in Switzerland (Swiss health survey, SHS) has also not produced much conclusive information about the health situation and behaviour of migrants to date.

In many surveys, the definition of "migrant population" is based on the nationality claimed by respondents. In the past the SHS has not recorded any information relating to participants' migration background (such as residence status, reason for migration, degree of integration, language skills). This information is important, however, if we are to identify correlations between health status and migration background. The 2007 health survey includes some additional questions for migrants, but it will still fail to provide many specific items of information.
Because of the way the random sample is generated, the individual groups of migrants are also too small to enable specific conclusions to be drawn for these groups. It is of course possible to compare all migrants with the native Swiss population (irrespective of their nationality, for example), but this type of analysis does not adequately take into account the heterogeneity of the foreigners living in Switzerland. Another problem is that the SHS is carried out in the country's three official languages. People whose command of these languages is inadequate are not included in the survey.

It was this unsatisfactory situation with regard to the data being generated that led the Federal Office of Public Health to commission the Health Monitoring of the Swiss Migrant Population study (HMM) as part of its strategy on migration and health. The study recorded data on risk and prevention behaviour, on the use made of health services, and on various aspects of physical and mental health as assessed by the migrants themselves. The telephone interviews were held in the respondent's mother tongue where necessary in order to make the survey as representative as possible.
We now have a body of data that provides information on the health situation and behaviour of migrants in Switzerland. The inclusion in the study of a large number of variables relating to migration enables correlations between the health situation and the migration situation to be analysed. It can be ascertained, for example, how great an influence language skills, discrimination or residence status have on an individual's health situation.
At the same time, however, the limitations of the study must be borne in mind when considering the results. The data consist of information provided by the respondents in the survey. The methodology chosen for the survey cannot make allowance for differences in perception, different ways of explaining the situation or other factors associated with participants' responses. Owing to a lack of resources it was also not possible to include the entire migrant population of Switzerland in the survey. It only covered people originating from certain countries (France, Germany, Austria, Italy, Portugal, Turkey, former Yugoslavia, Sri Lanka). The results are representative for these groups, but they can only be generalised to a limited extent for other migrant groups.

The HMM and the analyses summarised in this publication provide a good insight into the health situation and health behaviours of Switzerland's migrant population. Many of the assumptions that have been made in the past can now be underpin-

ned with figures. However, there are still significant gaps in our knowledge. The goal must now be to undertake further analysis of the HMM data and to continue generating new data in the future. This is the only way to refine our knowledge of the situation and identify emerging trends. We need to pursue this goal because it will enable us to design projects so that they are specific for the target groups and truly meet the needs of these groups. In this way, the results of this research will help to enhance the efficiency and effectiveness of projects focusing on migration and health. This will bring us one step closer to the goal of equality of opportunity for migrants in the health service.

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Federal Office of Public Health

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Health situation and health behaviours of migrant population groups

Summary of the final technical report on „Monitoring on the migrant population's state of health in Switzerland"

A study carried out by the Wissenschaftliches Institut der Ärzte Deutschlands (WIAD)[1] gem. e.V.
Summary by Irène Dietschi, Klaffke & Dietschi's, Hägendorf

1 Introduction

The Federal Office of Public Health started its „Monitoring on the migrant population's state of health in Switzerland" (GMM) programme at the end of 2003. This programme is a core element of the „Migration and health 2002-2007" strategy, the primary aim of which is to create equal health opportunities for all: people from all groups in society should have access to the Swiss health system and be able to claim appropriate benefits. The federal government's aim in monitoring the migrant population is to create a basis for improving the situation of migrants with respect to healthcare provision, health behaviours and prevention. The broader objective is to achieve better integration of foreigners. The figures more than amply demonstrate the justification for this approach. Since the mid-1990s, non-Swiss nationals have accounted for over 20 percent of the population resident in Switzerland. At the end of 2003, when the GMM study was launched, there were 1.47 million non-Swiss nationals (workers and their dependants) and nearly 65,000 asylum seekers living in Switzerland.

Final technical report

The final technical report on the GMM appeared in May 2006; this document summarises the major findings. The report was written by Alexander Rommel, Caren Weilandt and Josef Eckert from the Scientific Institute of the German Medical Association (WIAD)[1], the body which carried out the study. The Swiss LINK Institute of Market and Social Research was also involved.

The GMM focused not only on the health status of the migrant population in Switzerland but also on their health behaviours. What effect do underprivileged conditions have on foreigners' mental and physical wellbeing? Do they consult a doctor or go to hospital more often than the native population? Do migrants look after their health, for example by taking exercise or not smoking? These and similar questions were studied and answered by the GMM.

What the final technical report does not do, on the other hand, is interpret the results. It does not identify or discuss causal connections. This means that if, for

[1] Scientific Institute of the German Medical Association; Caren Weilandt, Alexander Rommel, Josef Eckert

example, a certain group of foreigners repeatedly shows „poorer" results for questions relating to health behaviours, the report does not seek to identify the reasons; there is no attempt to ascertain whether the factors underlying these results derive from differences in the foreigners' country of origin, or whether they are due to the fact that migrants from that country tend to have a low social status in Switzerland. The intention is to use the extensive data generated by the GMM for further explanatory analysis.

Based on the Swiss health survey

Publicly funded health research has neglected the migrant population in the past. The Swiss health survey, which has been carried out every five years since 1992, has regularly included migrants of both sexes, but only those who had sufficient command of one of Switzerland's official languages. This selection produced a distorted picture. Moreover, the number of migrants included in the survey was never large enough to permit detailed conclusions to be drawn about them.

The GMM programme to monitor the health of the migrant population in Switzerland fills this gap. It documents and describes the health status of the migrant population using the methods that have proven effective in the Swiss health survey. In addition, it asks migration-specific questions, for example about migrants' social status (integration, background to migration) or problems which can affect foreigners specifically, such as language barriers. The Swiss health survey combines telephone surveying with written questionnaires; the GMM used only interviews conducted by telephone.

The GMM had to meet certain conditions. Firstly, it had to include as broad a cross-section of the migrant population in Switzerland as possible by questioning various important migrant groups. Secondly, it had to produce data which would enable conclusions to be drawn which would go beyond a comparison of the Swiss and non-Swiss population, allowing comparisons to be made between various groups of foreigners. This meant that it had to use random samples in which the major groups of foreigners in Switzerland were adequately represented. Thirdly, it also had to include migrants whose linguistic integration into Swiss society is poor. This meant that the questionnaires had to be translated into the mother tongues of the groups and that native speakers of these languages had to be employed to carry out the interviews.

Methodology

The population from which the cohort used in the GMM was taken comprised Swiss nationals and non-Swiss nationals between the ages of 15 and 74. The GMM consisted of three „modules": Module I took over data from the Swiss health survey 2002 for Swiss nationals and migrants from Italy, Germany, Austria and France; Module II recorded data for permanent residents originating from former Yugoslavia, Portugal, Turkey and Sri Lanka (individuals who live in Switzerland all year round or who have a residence permit valid for at least twelve months); Module III recorded data for asylum seekers from Sri Lanka and Kosovo.

The interviews in Module II were carried out using a random sample taken from the central register of aliens. The aim was to interview a total of 2,500 people: 1,000 from former Yugoslavia and 500 each from Portugal, Turkey and Sri Lanka. Each of these random samples was stratified evenly into five age groups (15 to 26, 27 to 38, 39 to 50, 51 to 62, 63 to 74) and contained equal numbers of men and women. The sample of migrants from former Yugoslavia was twice as large as the others because this group comprises nationals from several countries. People from Croatia, Serbia-Montenegro, Bosnia-Herzegovina and the other parts of former Yugoslavia were interviewed in the GMM study.
When the data were evaluated, the investigators used the same proportions of individual ethnicities that are found in the Swiss population. In other words, the results for individual groups were calculated to reflect the correct proportions. A Portuguese person of a certain age and gender, for example, was weighted in the analysis to reflect the proportion of Portuguese of the same age and gender in the population as a whole.
A random sample of 500 people was drawn from the Federal Migration Register for module III, although this sample was not stratified for age and gender. Asylum seekers from Kosovo and Sri Lanka were selected for the study. There were two main reasons for this. Firstly, Kosovo Albanians and Tamils have long been the major categories of asylum seekers in Switzerland. Secondly, the aim was to make direct comparisons between permanent residents – the Tamils and Kosovans included in Module II – and asylum seekers.

A total of 3,024 interviews was carried out. One of the objectives was to record an accurate picture of the conditions in which the migrant population lives. The investigators placed special emphasis on the structure of the questionnaire, the translation process, the interview technique and the way the interviews were organised. For example, the quality of the translations was checked by back-translating the questionnaires from the interview languages (French, Serbo-Croatian, Albanian, Portuguese, Turkish and Tamil) into German. This process enabled problematic turns of phrase and questions that were not clear enough to be identified.
Before the interviews were carried out, the people who had been selected were sent a letter describing the purpose of the study. The interviewers were specially trained for their task and were supervised throughout the interview phase. The interviews were carried out from the telephone laboratories run by the LINK Institute in Zurich, Lucerne and Lausanne. The languages used were German, French, Serbo-Croatian, Albanian, Portuguese, Turkish and Tamil.

The GMM study is the first project in European health research and reporting to use this methodology – the sampling design described above combined with migration-specific questions and interviewing tools in the respondents' native languages. The GMM has thus played a pioneering role in this field of research.

2 Social situation and sociodemography

Gender and age

There are slightly more women than men in the Swiss population; the ratio is 51 to 49 percent. However, the opposite is true of the migrant population surveyed in the GMM study, at least with respect to those who have a permanent residence in Switzerland. There is a consistent excess of men in this population which generally ranges between 55 and 52 percent and is particularly marked in the Italian subpopulation at 59 percent. The converse is true among asylum seekers, a subpopulation in which women dominate. Women account for 56 percent of the group from Kosovo and as much as 64 percent of the group from Sri Lanka. However, this result could be an artefact of the (unweighted) sampling process.

As far as the age structure is concerned, the Swiss and Italian subpopulations are the most similar. Elderly people account for a large proportion of both groups, while the 15 to 38 age band is relatively sparse. Younger people predominate significantly more in all the other groups.

Most of the migrants interviewed are married and have children. The average total fertility rate is 1.9 children for foreign women and 1.3 for Swiss women.

Educational background, employment, income

The level of education among migrants – with the exception of those originating from Germany, France and Austria – tends to be low overall. Most migrants went to school outside Switzerland. About 50 to 65 percent of them completed some form of schooling. Very few received vocational training or studied outside Switzerland. Women – with the exception of Tamils resident in Switzerland – tend to be less well educated than men when they arrive in Switzerland.

Some migrants go to school or receive vocational training after they arrive in Switzerland. This applies to about 20 percent of resident migrants from former Yugoslavia, Portugal or Turkey. These figures do not include respondents who are still in training; they should accordingly be regarded more as trends than as absolute findings. It can be said in general that the educational levels in the migrant population are considerably lower overall than those found in the Swiss population. The following figures highlight the discrepancies. A good five-sixths of the Swiss population state that they have completed one of the three forms of vocational training that exist/existed in Switzerland. Around one-seventh have a high-school leaving certificate, almost one-twelfth have completed university or another form of tertiary education. Overall, about 12 percent of Swiss people have a higher educational qualification. The proportion is higher among migrants from Germany, France and Austria, almost 30 percent of whom have a higher qualification.

With the exception of asylum seekers, most migrants in Switzerland, i.e. about two-thirds to three-quarters, are in gainful employment, a significant majority of them as salaried workers. The groups from Italy, former Yugoslavia and Turkey are employed predominantly in industry, in construction and in other trades. Albanian

and Portuguese respondents and both Tamil groups are more commonly employed in the hotel and restaurant industry or provide domestic or consumer-oriented services. Less than 10 percent of all groups was accounted for by managerial staff. Thirty-two percent of Swiss salaried employees have some form of managerial position; the figure is 36 percent among migrants from Germany, France and Austria. The figures for people in vocational training are similar in all three modules. A striking feature is the high proportion of Albanian asylum seekers who are in vocational training: 19 percent compared with 5 percent in the Swiss population, for example. Migrants earn considerably less than Swiss nationals, whose average income is about CHF 4,300. Italians, for example, earn almost CHF 1,000 less, and the monthly income of migrants from Portugal, former Yugoslavia and Turkey is below CHF 3,000. Albanian asylum seekers are the lowest earners, with an average of CHF 1,160, followed by the Tamil groups with CHF 2,100 and 1,780 respectively. In a nutshell, the social status of the migrant population in Switzerland tends to one of two extremes. People originally from Germany, Austria and France are even more likely than native Swiss to belong to a privileged class. Two-thirds of them can be found in the upper or upper-middle socioeconomic categories.
The opposite is true of all other migrants, most of whom form part of the lower social categories. The Italians are in the best position overall: 40 percent belong to the lowest social stratum, but 10 percent belong to the most privileged circles. In the Turkish and Portuguese groups, almost two-thirds of those interviewed belong to the lower classes. At the bottom of the ranking, almost three-quarters of asylum seekers belong to the lowest social stratum.

Migration background

The data on the respondents' migration background and how long they have been in Switzerland show that the migrant population in this country is very heterogeneous. The longest-established group are the Italians, many of whom were born in Switzerland, with the second and in some cases third generations strongly represented. A similar pattern is found in the groups from Turkey, Portugal and former Yugoslavia. The German, French and Austrian groups are also well-established in Switzerland, although the first generation accounts for the majority of this category. In other words, migration in this category is made up mainly of adults coming to live in the country. The Tamils and Kosovo Albanians have been in Switzerland for a far shorter time, and very few of them were born here. Most were driven out of their countries of birth by war or political persecution – motives that were also mentioned by some of the respondents from former Yugoslavia. Most of the other migrants came to Switzerland for economic or personal reasons. Most of the migrants in Modules II and III speak one of Switzerland's official languages; the most common is German, although most of the migrants of Portuguese origin speak French. Most of the people interviewed said that they understand the language better than they speak it. About two-thirds of the people in the European groups said that they have a good to very good active command of the language. Asylum seekers tend to have poor language skills in general.

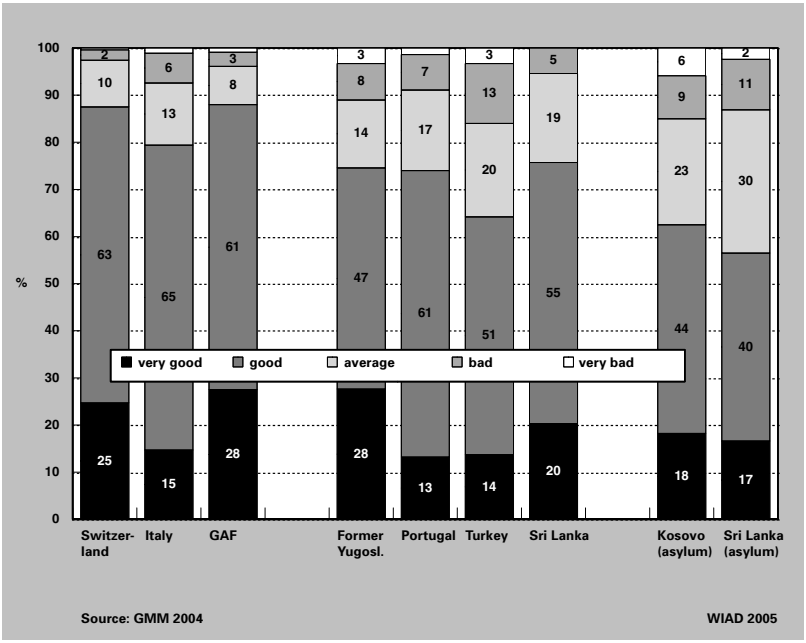
3 Health status

Perceived state of health

When asked „How is your health?“, migrants consistently give less positive answers than native Swiss. Eighty-eight percent of Swiss feel that their health is currently good or very good, with just 3 percent saying that it is poor or very poor. Respondents from Germany, Italy and Austria give practically the same answers. In contrast, the respondents in Module II said that their health is far worse. Eleven percent of respondents from former Yugoslavia said that their health is poor or very poor. Nine percent of the Portuguese gave the same answer. Turkish migrants feel that they are even less healthy, with 16 percent saying that their health is very poor. The proportion of Turks who feel that their health is good (51 percent) or very good (14 percent) is correspondingly low.

The asylum seekers are again at the bottom of the list. They perceive themselves as far less healthy than all the other respondents. For example, just 63 percent of asylum seekers from Kosovo say that their health is good or very good, and the figure drops to 57 percent among the Tamils. It is noticeable that Tamils who are resident in Switzerland feel much healthier than those who are seeking asylum. Three-quarters say that their health is good or very good, and only 5 percent feel their health is poor.

Perceived state of health



Women generally feel slightly less healthy than men. The difference in the Turkish group is striking: 70 percent of men but just 57 percent of women feel that their health is good to very good. The difference is equally marked among resident Tamils: 83 percent of the men but only 68 percent of the women said that their health is good to very good.

Supplementary information was obtained by asking the people interviewed about their mental wellbeing. The results were similar to those obtained for perceived state of health. The vast majority of Swiss nationals feel mentally balanced (80 percent), with similar figures being recorded for migrants from Germany, Austria and France (GAF) (76 percent) and Italy (72). People from Portugal and former Yugoslavia also feel relatively well balanced, with 61 and 54 percent respectively saying that their level of mental wellbeing is good to moderate.
Turkish migrants score particularly poorly in this respect. Sixty percent of them say that their mental wellbeing is poor, with just 19 percent saying that it is good; this result is in keeping with the subjective state of health described by the Turks. The mental state of Turkish women is extremely negative, with this category recording the lowest values across the board. The number of Turkish women who seek treatment for psychological problems is also higher than in any other group, totalling 23 percent of those resident in Switzerland. The rate among Albanian women from Kosovo is also very high at 21 percent, although the men in this group also have a very high rate of therapy for psychiatric problems (17 percent).
The difference between Tamils who live in Switzerland and Tamil asylum seekers is also striking. Almost half of the second group feel they are suffering mentally, while the figure for resident Tamils is only one-third or so. However, neither of these groups seek treatment.

It is interesting to consider health and mental wellbeing in terms of age. The older the respondents, the more the figures recorded for Swiss nationals deviate from those recorded for non-Swiss nationals. Whereas only 5 percent of Swiss nationals in the 51 to 62 age group feel that their health is poor or very poor, the corresponding proportion is 14 percent for people from Italy and between 30 and 40 percent for people from former Yugoslavia, Portugal and Turkey. In the 63 to 74 age bracket, just 4 percent of Swiss nationals describe their health as poor to very poor, while the corresponding figure for the foreign population is around 25 percent on average.
There is a similar trend in the results for mental health. Swiss nationals and people from Germany, France, Austria and Italy tend to feel more mentally balanced the older they get. In the other migrant groups, the level of mental wellbeing is not only lower in general, it also develops negatively as people age. Their mental state does not become less tense until they retire. This positive development is absent among women from Sri Lanka, who exhibit a persistent negative trend that starts half-way through their working lives. A striking feature in men and women from former Yugoslavia is the marked downward trend in middle age.

Impaired health and inability to work

In addition to recording the respondents' general state of health, selected individuals were asked whether they had any physical or mental problems that impaired their everyday activities. The picture that emerged was similar to that obtained for respondents' subjective state of health. Sixteen percent of respondents from Switzerland and Italy stated that they had problems of this kind; the figure was just 11 percent for people from Germany, France and Austria living in Switzerland. There were considerably more people among the other migrant groups who felt that their performance was impaired by health problems. The proportion was particularly high in the Turkish group (30 percent) and among asylum seekers from Kosovo (26 percent).

The study looked at both impaired health and inability to work. The questions were: „On how many days in the past 4 weeks did you have health problems that stopped you from doing everything as normal?" and „On how many days in the past 4 weeks were you unable to go to work or unfit for work?" The results of this subjective assessment show firstly that women fare considerably worse than men in all groups. For example, 30 percent of female Tamil asylum seekers said that their „performance was impaired", while only 15 percent of the men in this group gave this answer; 36 percent of Turkish women but only 23 percent of Turkish men said that they had not been well enough to go to work. In the Italian group, 22 percent of women and 16 percent of men claimed „impaired performance" due to poor health.

The second striking feature highlighted by this study is that the Swiss are unfit for work less often than most groups of foreigners. In the 4 weeks before the interviews were carried out, 13 percent of Swiss men and 9 percent of Swiss women were unfit for work at some point. The only group with lower figures in this category were Tamil asylum seekers; 11 percent of women and 8 percent of men did not go to work because they did not feel fit enough.

Medication

The migrants were also asked about the medications they were using. The general question was „Have you used any medicines in the last 7 days?". They were also asked specifically about sleeping tablets, pain-killers and tranquillisers. They had to state whether the medicines had been obtained on prescription or over the counter. In terms of medication in general, there is very little difference between people from Switzerland, Italy, former Yugoslavia, Germany, Austria and France. About 40 percent had used some form of medication during the week preceding the survey. The Turkish group was again an outlier, with over 50 percent having used some form of medication. In contrast, the Portuguese and Tamil groups used only half as much medication.

Women generally use more medicinal products than men, although this could be accounted for by contraceptive pills. Of all the groups, Turkish women had the highest rate of medication at 60 percent, with Turkish men at 46 percent. In contrast,

there was virtually no difference between Yugoslavian men and women at 39 and 43 percent respectively.
If the use of medication is subdivided into therapeutic categories, several striking facts emerge. Asylum seekers from Kosovo and migrants from Turkey have a comparatively high rate of tranquilliser use. Almost one in ten in the Turkish groups takes a tranquilliser every day, and the figure for Kosovo Albanians is as much as one in eight. Asylum seekers from Kosovo also have a strikingly high rate of sleeping tablet use, with more than one in ten using them daily. Practically all of these products are obtained on prescription.
Certain migrant groups use pain-killers even more frequently than sleeping tablets or tranquillisers. Almost one-fifth of the Turkish group uses analgesic medication daily; the figure is the same among asylum seekers from Kosovo. More than half of all pain-killers are obtained without a prescription.
Consumption of medications stratified according to age largely correlates with the picture that emerged for perceived state of health. Swiss nationals deviate increasingly from non-Swiss nationals with increasing age. Swiss people and Germans, French and Austrians living in Switzerland consume slightly more medicinal products as they get older, but the upward trend is far steeper in all the other migrant groups. Use of medication peaks in Modules I, II and III between 51 and 62 years of age, with Turkish women reaching extremely high levels. Turkish men in this age category also use massive amounts of medication, although the figure for men from former Yugoslavia is even higher.

Obesity
In medical circles, the individual's body weight is considered to be an important factor in determining his or her health. A person who is underweight is at risk for various medical problems and may not have enough reserves if he or she becomes ill. In our society, however, not only being underweight but also being overweight is a health problem because it is a risk factor in a number of medical conditions. These include diabetes, hypertension and cardiovascular problems.
Nowadays the most widely used parameter for obesity is the body mass index (BMI). The BMI shows the ratio of body weight to height and is calculated using the following formula: BMI equals body weight divided by the square of the individual's height. The World Health Organisation has classified BMI in terms of the associated mortality rate. The normal BMI is the range associated with the lowest relative risk of dying. The BMI is classified as follows:

- under 18.5 - underweight
- 18.5 to 25 – normal weight
- 25 to 30 – overweight
- over 30 – obese

According to this classification, the migrant population is more severely affected by obesity than the native population.
In Switzerland 51 percent of the population are thought to be of normal weight; 35 percent are overweight; and more than one in ten people – 12 percent – are

considered obese. The only groups that score better than the Swiss are migrants from Germany, France and Austria – 57 percent normal weight and „only" 10 percent obese – and asylum seekers from Sri Lanka – 58 percent normal weight and only 7 percent obese. Four percent of the asylum seekers from Sri Lanka who were included in the study are below normal weight.
The figures for all the other migrant groups are considerably less favourable, and the proportion of overweight/obese people is higher in all groups than the proportion of people with a normal weight. The biggest group of obese people is found among asylum seekers from Kosovo, 21 percent of whom – or one in five respondents – have a BMI over 30. Overall, 62 percent of Kosovo Albanians are overweight, the same proportion as among Italians resident in Switzerland. The differences between the two groups from Sri Lanka are striking. Only 38 percent of the asylum seekers are overweight, while the figure for the resident population is over half (55 percent). The GMM investigators conclude that „living in Switzerland and, presumably, adapting to local eating habits, is associated with a shift in BMI categories towards less favourable values".
This theory is confirmed if we look at the development of BMI in the migrant population by age group. Age and weight or BMI correlate in very general terms to the extent that people tend to weigh more as they get older. However, there is an above-average shift in BMI values among migrants in the older age categories. The proportion of overweight Turks is extremely high at 90 percent in the 51 to 60 age group. The BMI values for migrants from former Yugoslavia, Italy and Portugal are also very unfavourable, with about 80 percent of the people in this age group being overweight or obese.

The burden of symptoms of poor health

Following the pattern of the Swiss health survey, the GMM also asked about specific physical problems. The categories included were: back or lower-back pain; general debility, tiredness or lack of energy; pain or pressure in the stomach; diarrhoea, constipation or both; sleep disorders; head or facial pain; a pounding, racing or irregular heartbeat; pain or pressure in the chest. These symptoms may also be due to psychological factors and can occur in response to a high level of psychosocial stress.
The results reveal a fairly consistent picture. All these symptoms occur less frequently in Swiss nationals and German, French and Austrian migrants living in Switzerland than in the migrant population surveyed in Modules II and III. The most commonly cited health problems are back pain and lack of energy. The results recorded for Turks resident in Switzerland are again striking, with symptoms occurring consistently more frequently than in other migrant populations. But asylum seekers also have a marked tendency to suffer from the symptoms included in the study. The high proportions recorded for back pain, sleep disorders and headache are striking. More than one-fifth to one-quarter of the asylum seekers questioned in the study said that they had experienced these symptoms severely at least once in the 4 weeks preceding the study. These results are in some cases consistent

with the recorded use of medication. Twenty-eight percent of asylum seekers from Kosovo and 18 percent of asylum seekers from Sri Lanka use a pain-killer daily or several times a week.
The connection between sleep disorders and the use of sleeping tablets is not quite as clear. Although 19 percent of all Turkish migrants have trouble falling or staying asleep, for example, only a fraction of them use sleeping tablets regularly. This discrepancy is even more marked among asylum seekers from Sri Lanka, one-fifth of whom have sleep disorders but almost none of whom medicate to relieve this problem.
If we summarise the results for the eight individual symptoms described above into an index and stratify the results by age and gender, one particularly marked finding emerges: in all age and nationality groups, women are more troubled by symptoms than men. In contrast to Swiss women and women from Germany, France and Austria, whose burden of symptoms remains fairly constant over the years, migrants from Portugal, former Yugoslavia and Turkey tend to suffer more as they get older. Their burden of symptoms does not start to decline until they reach retirement age. Turkish women in the 51 to 62 age group have the highest burden of symptoms. The pattern is similar for men, but at a lower intensity; once again, Yugoslavian men, the leaders in terms of medication use, suffer the most from symptoms. The „age gap" between the Swiss and non-Swiss population, which was evident in terms of general health and medication use, appears again when specific symptoms of impaired health are studied.

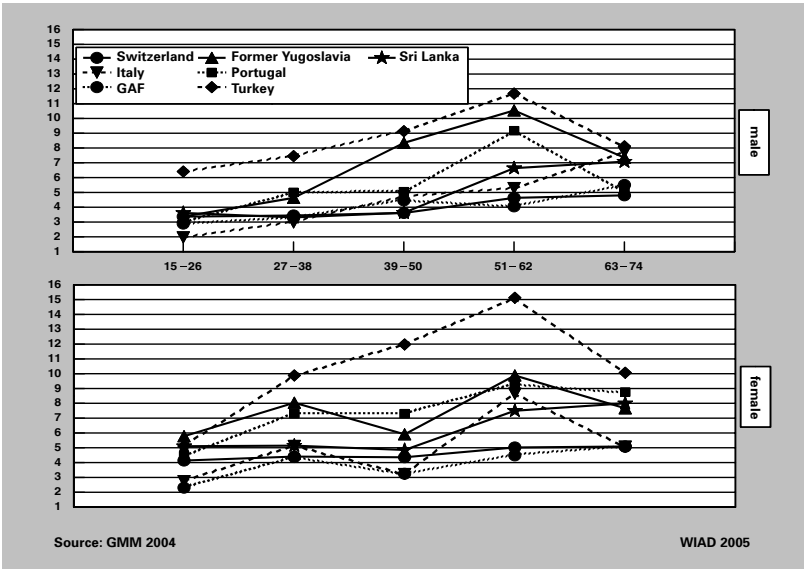
4 Health behaviours

Visits to doctors and hospitals
Migrants tend to have a regular family doctor more frequently than Swiss nationals. The only groups who are even less likely than the Swiss to use the same family doctor are the Germans, Austrians and French. Ninety-six percent of resident Turks and 97 percent of the Tamil groups always use the same family doctor.
The results of the GMM show that the migrant population tends to consult a doctor more frequently on average than the Swiss population, women slightly more often than men, and older people more often than young ones. Asylum seekers from Kosovo top the list in terms of the number of visits to the doctor per year; they see their doctors an average of 9.6 times in 12 months, followed by the Turks with an average of 8.9 visits. Swiss nationals and people from Germany, France and Austria consult a doctor only half as often. Respondents from Italy, Portugal and former Yugoslavia consult a doctor more often than Swiss nationals. Migration research has shown in the past that migrants consult doctors more frequently than non-migrants. It is assumed that this is due to problems with linguistic and sociocultural comprehension, but it may also reflect incorrect treatment which may happen in parallel. No particular pattern emerges for Italians.

On the other hand, the relatively low number of visits to a doctor that both groups of Tamils make is surprising. They don't consult doctors much more often than Swiss nationals. If the results are stratified by age, it is noticeable that people in the 15 to 26 age group tend to consult doctors with about the same average frequency in all the modules studied; people from Germany, France, Austria and Italy visit a doctor even less frequently than Swiss nationals. The difference in the average number of visits to a doctor does not become more marked between Swiss and non-Swiss nationals until we reach the older age groups, and is most pronounced in the 51 to 62 category. Once again, Turks and women from former Yugoslavia head the list. With 15 visits in 12 months, Turkish women in the 51 to 62 age bracket consult a doctor three times more often than Swiss women of the same age. The figure for Turkish men is 11 visits. After this age, the number of visits declines again. The GMM authors conclude that the 51 to 62 age bracket „is particularly important in terms of health-policy relevance" because this group had much higher figures than other age groups for other parameters as well (general state of health, health problems and medication).

The figures for hospitalisation are largely congruent with those for medical consultations. Migrants go to hospital more often than Swiss nationals, and they are especially likely to use outpatient services at hospitals. However, the picture is the opposite for the average number of days spent in hospital. Migrants spend less time in hospital than Swiss nationals.

Average number of visits to the doctor by age and sex



Source: GMM 2004 WIAD 2005

Health screening

It is said that migrants have a lower awareness of the need for preventive health screening than the native population of a country despite the fact that they consult doctors more often. Information barriers mean that foreign population groups are not knowledgeable enough about access to and the need for screening procedures such as cancer smears or prostate examinations.

The GMM has only confirmed this theory to a certain extent. Respondents were first questioned about blood pressure, cholesterol and blood glucose measurements that had been carried out in the 12 months preceding the study. It emerged that far more people in the Swiss, Italian, German, Austrian and French groups had had these measurements taken than people in the other groups. However, the picture changes with increasing age. The attitude towards preventive healthcare in the migrant population changes sharply in the older age groups, and from the 51 to 62 age category migrants' behaviour was similar to that in all the other groups. In the 63 to 74 age group, the proportion of people who had their blood pressure, cholesterol and blood glucose measured was around 90 percent in both the foreign and Swiss groups. There are no differences between men and women in this area.

Cancer screening is another important aspect. The main form of screening for women is the cervical smear; the main form for men is examination of the prostate. No consistent picture emerges here. A good half of Swiss women and women in other migrant groups visit a gynaecologist regularly to have a smear taken and their breasts examined. The proportion is just one-quarter or so among Tamil and Kosovo Albanian women. Yugoslavian and Turkish women are also reticent about cancer screening. Few migrants are shown by their gynaecologist how to self-examine their breasts. The GMM has identified a low level of competence in personal screening.

About 25 percent of men in nearly all the groups studied have a prostate examination carried out by their doctor; the proportions are considerably lower for men from former Yugoslavia (17 percent) and resident Tamils, less than 10 percent of whom have their prostate examined.

The GMM report concludes that, where cancer screening is concerned, Tamils in particular but other migrant groups as well are not receiving an adequate level of care. The authors point out that „cancer screening often involves unpleasant interventions that can violate the individual's modesty". The GMM investigators believe that more information and education campaigns need to be directed at the under-served groups in particular so that more of them take part in screening programmes.

HIV tests are not carried out very commonly among the migrant population. Once again, Tamil respondents exhibit the lowest rate, with only 3 percent or so ever having had an HIV test, and very few of them in the 12 months prior to the study.

Migration-specific aspects of seeking healthcare services

One aspect that has a decisive impact on the provision of healthcare services to migrants and on their behaviour is language difficulties. Because of their poor language skills, a fair number of foreigners are often not in a position to explain their concerns and problems adequately to doctors or nursing staff. At the same time, there are very few doctors who are native speakers of the migrants' languages and who could relieve this problem.

The study shows that a large proportion of the foreigners questioned in Modules II and III can talk to their doctors in one of Switzerland's official languages. The proportion is over 80 percent in all groups in Module II, although it is slightly less for asylum seekers. But only between 20 and 65 percent of those surveyed said that they speak one of Switzerland's official languages well. It can be concluded from this that many migrants have difficulty coping linguistically with a visit to their doctor.

Stratification of the results for doctor-patient communication by gender reveals certain patterns. Women are far more likely to ask someone to interpret for them than men are, particularly among asylum seekers. Many female migrants, and more particularly women who have left their home country to join family members in Switzerland, have a considerably weaker command of an official Swiss language than men. For example, 45 percent of Turkish women said that they sometimes take someone with them to the doctor to interpret; the figure for Turkish men is just 27 percent. This discrepancy is even greater in the Tamil population, where 63 percent of women have had help with the language when talking to their doctor compared with 19 percent of men.

It is generally friends and relatives who help migrants with an inadequate command of an official language. The most frequent helpers are the patient's spouse or partner or, depending on the group, their children. The GMM authors pointed to the problem of women very often choosing male relatives to take them to the doctor. This means that the woman is likely to feel embarrassed or inhibited, which may have a negative impact on the relationship between doctor and patient. The most extreme example can be found among the Tamil population. Ninety percent of Tamil women rely on a male relative to communicate with the doctor; in contrast, only 22 percent of Tamil men seek language assistance from female relatives. The gap is also wide among Turkish migrants (80 versus 56 percent). Foreign women rarely take female friends or acquaintances with them. Among Tamil women, in particular, health issues tend to stay „in the family" and are more likely to be shared with male relatives than with outsiders.

To summarise, the GMM authors state that communication between migrants and doctors is indeed restricted in many cases. At the same time, however, they believe that the involvement of relatives (of the opposite sex) to help with the language is not a satisfactory state of affairs. They conclude: „It is therefore of central importance to teach migrants the national language and to establish neutral and professional structures for assisting with language within the health service if

the level of healthcare provision is to be improved and intact relationships between doctors and patients are to be ensured."

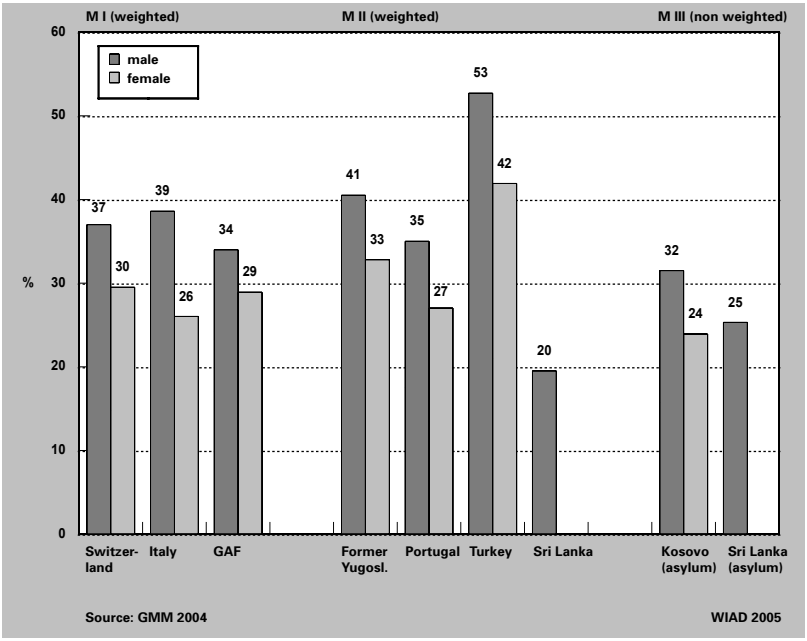
This conclusion is supported by the responses to questions that asked migrants directly about improved healthcare structures. Interviewees were given a list of elements and had to say whether they had ever wished they existed or thought they were important in general.
The results show clearly that there is greatest interest in being able to use a professional interpreting service, and that this need even ranks before treatment by a doctor from the same ethnic group. There was also great interest in information material in the migrants' native languages, with between one-quarter and half of respondents saying that they had already felt a specific lack of such information. The main types of information mentioned concerned structures within the health insurance organisations, medical treatments and screening programmes. Migrants also feel that advice centres are important, but they are less concerned about the availability of special nursing services or self-help groups.
When asked whether they used sources of information about health issues, a majority of migrants said that they obtained information from newspapers and magazines, television, their family doctor, friends and relatives. The Internet and information brochures appear to be far less important, and recourse to self-help groups or direct counselling is negligible. The GMM authors conclude that advice centres are one area which could certainly be expanded in line with the needs expressed by the people questioned in the study. In addition, the Internet and brochures need to be publicised more specifically because these media allow comprehensive information to be presented in a differentiated manner.

Smoking, alcohol, drugs and exercise
In terms of smoking habits in the individual migrant groups, Turks and Sri Lankans are at the two extremes. The proportion of smokers is by far the highest among Turks at 48 percent, while the proportion of former smokers is the lowest of all at 14 percent. At the other end of the spectrum, almost no Tamils smoke. The vast majority, about 90 percent, said that they had never smoked.
The proportions in the other migrant groups are similar to those for Swiss nationals. Thirty-three percent of the Swiss population say that they smoke, and 20 percent used to smoke. Men tend to smoke more than women. If the results are stratified by gender, the Tamils and Turks come to the fore again. Smoking is practically unheard-of among Tamil women; practically 100 percent of both the resident population and the asylum seekers said they had never smoked. At the other end of the spectrum are the Turks, with the highest proportion of female smokers at 42 percent. A majority of Turkish men (53 percent) smoke.
The overall picture for alcohol consumption is clear. The proportion of people who do not drink alcohol at all is higher in all migrant groups than in the Swiss population. There are, however, major differences between the groups of foreigners. The principal investigators in the GMM believe that it is more important to focus on the

differences between migrant groups than on the difference between the Swiss and the non-Swiss population.
The results for the Portuguese and Italian groups, for example, are striking. At over 30 percent, the proportion of people in these groups who never drink alcohol is considerably higher than in the Swiss population, for example, where only 19 percent are teetotallers. On the other hand, there is a relatively large number of Portuguese and Italians who drink alcohol once or several times a day: around 18 percent in the first group and 25 in the second, i.e. one in four people.
As mentioned before, one thing that really stands out is how many of the people in the other migrant groups do not drink alcohol at all: almost half of those from former Yugoslavia, 58 percent of Turks and 70 percent of resident Tamils. The highest abstinence rates are found among asylum seekers, with 87 percent for people from Kosovo and 88 percent for those from Sri Lanka. Women generally drink less alcohol than men.

Where drugs are concerned, the GMM shows that Swiss people consume far more cannabis and other narcotic substances than migrants. However, this is not true of migrants from Germany, Austria and France, who consume even more of these substances than the Swiss.

Tobacco use by sex



Over 20 percent of Swiss nationals say that they have used cannabis and/or other drugs at least once in their lives; between 4 and 5 percent were consuming drugs regularly at the time the study was carried out. The corresponding proportion is 2 percent at most in the groups from former Yugoslavia, Portugal and Turkey; between 6 and 10 percent of the people in these groups had used drugs at some point in their lives. The available data show that the use of drugs is negligible in the asylum setting. However, the GMM authors do concede that the data on drug use may not be reliable in all respects.

Exercise is an important part of many Swiss people's lives, but it seems to have fewer adherents among the migrant population. Some migrants take some form of exercise once or twice a week, but many do no physical exercise at all. The proportion of people who follow a „no sports" lifestyle is consistently higher in migrant groups than among Swiss nationals, with particularly high percentages among the Italians (61 percent) and Tamils (67 percent).
A more differentiated picture emerges if the results are stratified by gender. Men from former Yugoslavia and Turkey in fact take some form of exercise more often than the Swiss. This applies particularly to younger age groups. However, men who are not Swiss nationals rapidly lose their interest in physical exercise as they grow older, and the proportions are ultimately inverted. The Tamil men are the most atypical in this respect, with well over half in both the resident group and the asylum group saying that they engage in no physical exercise.
Roughly equal proportions of Swiss men and women are active, with 57 percent of each doing some form of exercise. In contrast, women in the migrant population are far less likely to engage in sport than men. The least active are Tamil women, 74 percent of whom pursue no physical exercise at all.

5 Outlook

The Health Monitoring of the Swiss Migrant Population study generated comprehensive data on the state of health and health behaviours of migrant groups and their use of medical services. It also recorded a lot of information about the social situation and migration background of the people interviewed.
These data are simply described in the final technical report of the GMM, arranged by nationality, age and gender. The task in future will be to analyse this mass of data in more detail to throw light on a variety of issues. For example, can the often worse state of migrants' health or their different health behaviours be explained by the fact that they are more likely than average to belong to the lower strata of society? Or are these differences due to factors specifically related to their migration to Switzerland? The intention is to carry out in-depth analysis of these and other hypotheses.

It will also be determined how best to transfer the GMM approach to a regular and recurring survey. Regular health monitoring would be desirable in order to improve the equality of the migrant population in terms of access to healthcare, health behaviours and prevention.

Influential factors on the health of migrant population groups

Interactions between sociodemographic and migratory profile and health: an analysis[1] of the data from the GMM survey – Summary of the findings

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Translated from French: Joan Reilly

Introduction

The health of the migrant population in Switzerland has been the object of studies and a source of concern particularly since the 1990s. Until now, however, the data needed for drawing an overall picture of the health status of the different migrant groups have been largely lacking. Often, nationality is the only variable included in the available statistical data, and this gives only a very incomplete picture of the varied migratory profiles of the persons who make up the foreign population. Enquiries based on telephone sampling, such as the Swiss health survey, also have difficulty reaching certain groups of foreigners, especially those who do not speak any of the national languages, and the asylum seekers. Moreover, these surveys ask few, if any questions on integration and on the path of migration, factors which can be associated with health problems.

Against this background, the Federal Office of Public Health (FOPH) decided to carry out a survey entitled, "Monitoring on the migrant population's state of health in Switzerland". This survey is an important constituent of the strategy paper, "Migration and Public Health 2002 – 2007" adopted by the Swiss Federal Council in July 2002, and is one of the axes of research and monitoring in the field of migration. This was supervised by WIAD[2], a German medical institute, and the telephone interviews were conducted by the LINK Institute. The survey "Monitoring on the migrant population's state of health in Switzerland" (GMM) focussed on a limited number of groups, by means of questionnaires translated into the languages of the persons interviewed. The questionnaire included questions on their health, but also on their migration history and integration.

This survey led to a first report[3] that provides basic data on the state of health, risk-related behaviours and the prevalence of certain illnesses. However, these

[1] Study financed by the Federal Office of Public Health as part of the Confederation's "Migration and Public Health Strategy, 2002-2007". FOPH Contract no. 06.001660 / 704.0001-19.

[2] Wissenschaftliches Institut der Ärzte Deutschlands – Scientific Institute of German Medical Association

[3] Rommel, Alexander, Caren Weiland and Josef Eckert (2006). Gesundheitsmonitoring der schweizerischen Migrationsbevölkerung – Endbericht. Bonn: Wissenschaftliches Institut der Ärzte Deutschlands (WIAD) gem. e.V. (Monitoring on the migrant population's state of health in Switzerland – Final Report)

descriptive results do not take into account certain essential factors that might help to explain the differences observed between different national groups. It is known, in particular, that the socio-economic situation in Switzerland differs considerably according to nationality. Many national and international studies have shown the impact this can have on the state of health and health-related behaviour. Numerous studies in various countries have also shown that the differences between the migrants and the native population in this respect were due at least in part to the disadvantaged socio-economic situation often observed for certain groups of foreigners.

The FOPH mandated the Swiss Forum for Migration and Population Studies (SFM) to carry out a statistical analysis of the GMM survey, with the aim of identifying the role of different factors in the health status, behaviours and risk factors and the use of the health services by the population covered by the survey. These factors include the socio-economic situation, socio-demographic profile (age, sex, situation in life, place of residence), migratory profile (age on arrival in Switzerland, reason for migration) and the level of integration (command of one of the national languages, perception of possible instances of discrimination). The study also sets out to observe the similarities and differences between Swiss and foreigners once these factors have been taken into account. This paper presents a summary of the main findings of this analysis; a complete version of the study is published by SFM.

1 Data, statistical models and choice of variables

1.1 Data

The survey "Monitoring the migrant population's state of health in Switzerland" (GMM)[4] comprises three modules that result from three different samples. Module I is based on the data from the "Enquête Suisse sur la Santé" (ESS – Swiss Health Survey) carried out in 2002 and targeted at the population residing in Switzerland in a private household, and aged 15 or over. The ESS data used in the GMM concern only persons of Swiss, Italian, French, German and Austrian nationality,[5] aged from 15 to 74.

Modules II and III come from a survey carried out in 2004, specifically targeted at the foreign population aged from 15 to 74, and using a questionnaire based on that used by ESS, translated into the respective languages of the migrant population. Module II is directed at the resident foreign population of Portuguese, Turkish, Sri Lankan nationality or from one of the countries of former Yugoslavia.[6] Accordingly, the target population includes neither asylum seekers, nor persons with a short-term residence permit (less than 12 months, L permit), nor international officials or members of their families. The basis of the survey is the Central Register of Foreigners. The target population of Module III comprises asylum seekers from Kosovo and Sri Lanka who have been in Switzerland for at least 12 months. Here, the basis of the survey is the Register of Asylum Seekers (Auper). The number and proportions of persons interviewed for each nationality or group of nationalities are shown in Table 1.

Table 1: Modules of the GMM survey and number of persons interviewed

Nationality	Module	Number of Interviews	%
Switzerland	1	15'579	78.7
Italy	1	692	3.5
Germany, Austria, France	1	502	2.5
Former Yugoslavia	2	1'043	5.3
Portugal	2	511	2.6
Turkey	2	525	2.7
Sri Lanka	2	439	2.2
Kosovo	3	253	1.3
Sri Lanka	3	253	1.3
Total		**19'797**	**100**

[4] The abbreviation of the German title of the programme "Gesundheitsmonitoring der schweizerischen Migrationsbevölkerung" (GMM) will be used to refer to the survey.

[5] i.e. foreigners whose mother tongue is one of Switzerland's national languages.

[6] Serbia-Montenegro, Croatia, Bosnia Herzegovina, Yugoslavia.

1.2 Methods

The analysis was made using two models of logistical regression. This statistical technique models the influence of factors (known as independent variables) on a binary dependent variable (presence/absence of a state or behaviour). The health indicators used therefore have to be coded in this way. For each of the variables introduced into the model, the impact (increase or reduction in the risk studied) is measured in relation to a category of reference. To take the case of age, for example, the persons aged from 15 to 26 form the reference category.

The first model (Model A) is intended mainly to identify any differences in the state of health and behaviours between persons of Swiss nationality and foreigners (classed by nationality), after examination of the different "control" or "confounding" variables. The latter chiefly reflect the socio-economic and demographic situation. Men and women of Swiss nationality form the category of reference.

The second model (Model B) is designed to analyse the variables that might explain the differences in health status and behaviour among the different foreign populations interviewed in Modules II and III of the GMM survey. For nationality, men and women belonging to one of the countries of former Yugoslavia form the reference category. The control variables in this second model include the specific dimensions of the GMM questionnaire concerning integration and discrimination.

This report presents the results of the two models applied to a selection of indicators relative to different dimensions of health (health status, behaviours, use of health services, use of medicines, prevention and screening). The list of explanatory variables therefore remains the same whatever the indicator analysed. Since, in many areas, the frequency of the phenomena observed as well as the influence of the control variables are likely to differ according to sex, the models used are applied to each sex separately.

The choice of the control variables was made so as to allow for a broad spectrum of factors that may be linked to the variations in the health indicators analysed. These include first and foremost the variables related to demographic and socio-economic characteristics: age, socio-economic situation, life situation (presence of children and number of adults in the household, civil status), region of residence. The variables taken into account concerning nationality, migratory profile and level of integration are: nationality, age on arrival in Switzerland, command of one of the national languages, feeling of being the victim of discrimination and no longer belonging to any country.[7]

[7] A detailed description of the factors chosen can be found in the complete version of this report, published by the Swiss Forum for Migration and Population Studies.

2 Main Findings

The indicators analysed fall into six categories: health status, behaviour and risk factors, use of the health services, consumption of medicines, screening and prevention, and questions specific to foreigners and their experiences when they try to use the health services.[8]

Table 2: Health Status – Results for demographic and socio-economic profile – Swiss and foreigners

	Self-reported poor health		Long-term functional incapacity		Poor mental health		Serious physical problems		Usual occupation or activities impossible	
	M	F	M	F	M	F	M	F	M	F
15–26 years										
27–38 years	+	+	+	+			+	+	+	+
39–50 years	+	+	+	+		-	+	+	+	+
51–62 years	+	+	+	+		-	+	+	+	+
63–74 years	+	+	+	+	-	-	+	+		
Low socio-economic Stratum										
Lower middle stratum	-	-	-	-	-	-	-	-	-	
Upper middle stratum	-	-	-	-	-	-	-	-	-	-
Upper stratum	-	-	-	-	-	-	-	-	-	-
Lake Geneva Region										
Central Plateau (Mittelland)					+					
North-west Switzerland				+	+	+				
Zurich				+	+				-	-
Eastern Switzerland					+	+				-
Central Switzerland		-						-	-	-
Ticino			-	-						
Single										
Married				-	-	-				-
Widowed/divorced/separated	+				-			+	-	
No child under 15 in the household										
Presence of a child under 15	-	-	-	-			-	-	-	-
One person over 15 in the household										
At least two persons over 15 in the household	-	-	-				-			

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

[8] These indicators are derived from spontaneous statements by the persons interviewed; as in any investigation of this kind, this inevitably raises questions about the reliability of the information gathered. Detailed information on the exact wording of the questions asked and the construction of the indicators can be found in the complete version of this study.

2.1 Health Status

The health status indicators adopted concern a self-reported (subjective) poor state of health, any possible long-term functional incapacities, poor state of mental health, major psychiatric problems and any disabilities preventing a person from exercising their normal occupation or activities.

Age obviously has a strong influence on a person's state of health. As regards the self-rated state of health, long-term functional incapacities and psychological problems, we noted an increase in the risk with age for both sexes, albeit with a less marked increase for persons who had reached retirement age (Table 2). With regard to mental state, the situation was more homogeneous with the men; only those aged from 63 to 74 stood out as being in a better situation than younger groups. By contrast, the situation seems to be worse for younger women, with an improvement starting with the 39-50 age group. For both sexes, retirement marks an improvement in mental health.

The socio-economic situation can likewise be seen as a particularly important variable. There is a regular and systematic improvement in these indicators that correlates with improving social status. The presence of a child under the age of 15 in the household is also systematically linked to a reduction of risk, except for

Table 3: Health Status – Results for nationality and migratory profile – Swiss and foreigners

	Self-reported poor health		Long-term functional incapacity		Poor mental health		Serious physical problems		Usual occupation or activities impossible	
	M	F	M	F	M	F	M	F	M	F
Switzerland (Mod. I)										
Italy (Mod. I)		+	-			+		+		+
Germany, Austria, France (Mod. I)	+			-				-		
Former-Yugoslavia (Mod. II)	+	+	+		+	+	+		+	+
Portugal (Mod. II)	+	+			+	+		+		
Turkey (Mod. II)	+	+	+	+	+	+	+	+	+	+
Sri Lanka (Mod. II)			-	-			-			-
Kosovo (Albanians, Mod. III)	+	+	+		+	+		-	+	+
Sri Lanka (Tamils, Mod. III)	+	+		-	+	+				
Born in Switzerland, arrived before age 15										
Arrived aged 15 or over		+			+	+		+		
Not knowing any of the national languages well or very well										
Knowing one of the national languages well or very well	-	-	-	-	-	-	-		-	-

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

mental health. This finding may be linked to several factors, notably the effect of selection, given that men and women with a child under 15 years of age are generally relatively young and in good health. The part played by civil status is more difficult to pin down, but it was noted that for both men and women the fact of being married improved mental health, whereas the fact of being widowed, separated or divorced had a negative effect on the self-reported state of health among men and the psychological problems among women.
After allowing for the above factors, nationality often remains a significant marker of health status. The situation is divergent among migrants of Italian origin, since only the women differ from the Swiss women, more frequently reporting themselves to be in a worse state of health, with psychological or physical problems that prevent them from exercising their usual occupation or activities (Table 3). Italian men and those belonging to the German/Austrian/French group, on the other hand, differ very little from the Swiss.

Table 4: Health Status – Results for nationality and migratory profile – Foreigners only

	Self-reported poor health		Long-term functional incapacity		Poor mental health		Serious physical problems		Usual occupation or activities impossible	
	M	F	M	F	M	F	M	F	M	F
Former-Yugoslavia (Mod. II)										
Portugal (Mod. II)					-					
Turkey (Mod. II)	-	+		+		+		+		
Sri Lanka (Mod. II)	-	-	-	-	-	-	-		-	-
Kosovo (Albanians, Mod. III)					+	+		-		
Sri Lanka (Tamils, Mod. III)			-	-		-			-	-
Not a victim of repression or violence										
Victim of political repression or violence			+		+	+			+	
Not a victim of discrimination										
Victim of discrimination	+		+	+	+		+	+		
Not experiencing the feeling of no longer having a homeland										
Feeling of no longer having a homeland		+		+	+	+	+	+		+

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

By contrast, whatever the indicator, the situation is unfavourable for the citizens of the countries of former Yugoslavia, and still more so of Turkey. With a few exceptions, this is also true of asylum seekers from Kosovo and to a lesser degree, Tamils. The likelihood of a self-rated poor state of physical and mental health is also higher among Portuguese men and women than among the Swiss. The profile of the Sri Lankan population, men and women, on the other hand, is not unfavourable for any of the indicators, and is even better than that of the Swiss for long-term functional incapacities, psychological problems (men only) and difficulties preventing them from exercising their normal occupation or activities (women only).

The model looking only at foreigners shows that Sri Lankan men and women present a better situation than those from former Yugoslavia for all the indicators, while on the other hand Turkish women present an almost systematic increase in risk (Table 4). Moreover, Kosovar and Tamil asylum seekers, both men and women, are marked out by their mental health, which is often poor. By contrast, when compared to people coming from countries of former Yugoslavia and not the Swiss, Tamil asylum seekers of both sexes show a lesser risk of incapacity.

Several integration indicators are also associated with variations in health status. The fact of arriving in Switzerland after the age of 14 is linked to a worse subjective state of physical health (women) and mental health (men and women) than those of the Swiss, and to more frequent psychological problems (women). Almost systematically, the fact of not knowing any of Switzerland's national languages is linked with an increase in risk. This could have to do with the fact that the people who are least integrated are often those who live in the most uncertain situation and are likely to be doing particularly arduous jobs. People of both sexes who have suffered political repression or violence in their country of origin present a relatively poor state of mental health, with incapacities or disabilities occurring more frequently among men. Those who feel they are victims of discrimination show an increased risk for the majority of indicators, as do those who feel they no longer have a homeland.

Considerable variations in health status thus exist according to nationality, even after allowing for important variables such as age, socio-economic level, life situation or region of residence. As the information used was obtained from statements made by the persons interviewed themselves, the possibility of cultural variations in the perception of symptoms and illness cannot be excluded. However, many studies have shown that a person's own assessment of their state of health was a reliable indicator of morbidity or risk of death.

2.2 Health behaviours and risk factors

Health-related behaviours and risk factors are approached by way of six indicators: consumption of alcohol at least once a day, consumption of a large quantity of alcohol (6 glasses for females and 8 for males) at least once a month, present tobacco use, use of illegal drugs at least once in their lifetime, obesity and engaging in some form of sporting activity.

The role of age varies according to the indicator. There is a strong progression in the probability of daily consumption of alcohol and of obesity with age, as opposed to the monthly consumption of a large quantity of alcohol, the use of drugs once in life and the practice of some form of sporting activity (Table 5). The socio-economic situation does not play such a systematic role as in the health status. Behaviours such as drinking large quantities of alcohol at one time or taking drugs are less

Table 5: Behaviours and risk factors – Results for demographic and socio-economic profile – Swiss and foreigners

	Consumption of alcohol once a day		Eight glasses of alcohol at least once a month		Current tobacco use		Drug-use at least once in life		Obesity (BMI >= 25)		Engagement in physical activity	
	M	F	M	F	M	F	M	F	M	F	M	F
15–26 years												
27–38 years	+	+	-				-		+	+	-	-
39–50 years	+	+	-	-		+	-	-	+	+	-	-
51–62 years	+	+	-	-		-	-	-	+	+	-	-
63–74 years	+	+	-	-	-	-	-	-	+	+	-	-
Low socio-economic Stratum												
Lower middle stratum		+	+				+	+		-		+
Upper middle stratum		+	+				+	+		-	+	+
Upper stratum		+	+				+	+	-	-	+	+
Lake Geneva Region												
Central Plateau (Mittelland)	-	-	-				-	-		+	+	+
North-west Switzerland	-	-	-			+	-				+	+
Zurich	-	-	-		+						+	+
Eastern Switzerland	-	-	-				-	-			+	+
Central Switzerland	-	-	-			-	-	-			+	+
Ticino	+	+	-	-			-	-		-		
Single												
Married	+		-	-		-	-	-	+	+	-	
Widowed/divorced/separated	+				+	+			+			-
No child under 15 in the household												
Presence of a child under 15		-		-		-		+	-	-		+
One person over 15 in the household												
At least two persons over 15 in the household		+	-		-		-	-		-	+	

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

frequent among people classed in the lower social stratum, as is engaging in some form of sporting activity. For women, daily consumption of alcohol also increases with their position in the social strata. By contrast, the risk of obesity is higher for the women in the lowest social stratum. The presence of a child under 15 in the household has a "positive" effect on behaviour for women (reducing the probability of alcohol or tobacco consumption and obesity). The fact of being married on the other hand is associated with an increased risk of obesity (as is being widowed, divorced or separated for men).

Behaviour also varies regionally, with more frequent daily drinking of alcohol in the Lake Geneva region and the Ticino, more frequent drinking of 6 to 8 glasses of alcohol in the Lake Geneva region, more taking of drugs at some point in life in the Zurich region, and lower involvement in sporting activities in the Lake Geneva region.

The results by nationality focus attention on the cultural aspect of behaviours. In comparison to the Swiss, the Italians (men and women), German, Austrian and French women and Portuguese men more often drink alcohol every day, unlike men and women from former Yugoslavia, Turkey, Sri Lanka and Kosovo (Table 6). Tobacco use is particularly frequent among Turkish men and women, and infrequent among Sri Lankans. Drug taking at least once in their lives is observed most

Table 6: Behaviours and risk factors – Results for nationality and migratory profile – Swiss and foreigners

	Consumption of alcohol once a day		Eight glasses of alcohol at least once a month		Current tobacco use		Drug-use at least once in life		Obesity (BMI >= 25)		Engagement in physical activity	
	M	F	M	F	M	F	M	F	M	F	M	F
Switzerland (Mod. I)												
Italy (Mod. I)	+	+	-					-	+	+	-	-
Germany, Austria, France (Mod. I)		+					+		-			
Former-Yugoslavia (Mod. II)	-	-	-	-			-	-	+	+	+	-
Portugal (Mod. II)	+					-		-			+	
Turkey (Mod. II)	-	-	-	-	+	+		-	+	+	+	
Sri Lanka (Mod. II)	-		-		-		-					-
Kosovo (Albanians, Mod. III)	-						-	-	+	+	+	
Sri Lanka (Tamils, Mod. III)			-		-		-			-		-
Born in Switzerland, arrived before age 15												
Arrived aged 15 or over	+						-	-		+		
Not knowing any of the national languages well or very well												
Knowing one of the national languages well or very well	+		-	-		+	+			-	+	+

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

frequently among the Swiss, and among German, Austrian and French males. Obesity is most frequent for Italians, male and female, and citizens of the countries of former Yugoslavia, Turkey and the Kosovar asylum seekers, male and female. Similarities in risks according to sex may be noted here for each of the nationalities concerned.

In comparison with Swiss men, the probability of regularly engaging in some form of sporting activity increases for men from former Yugoslavia, Portugal, Turkey and the male Kosovar asylum seekers, perhaps reflecting the importance of sport in the community, but also the fact that it is chiefly practised by young people for whom it is a vector of integration. As for women, no nationality is associated with an increase in sporting activity. On the contrary, the probability is lower for Italian, former Yugoslavian and Sri Lankan women.

The command of one of the national languages is associated with an increase in the probability of certain behaviours, notably participation in sport for men and women, tobacco use for women and drug taking for men. This suggests that these behaviours are more widespread among the Swiss, and that they are adopted by

Table 7: Behaviours and risk factors – Results for nationality and migratory profile – Foreigners only

	Consumption of alcohol once a day		Eight glasses of alcohol at least once a month		Current tobacco use		Drug-use at least once in life		Obesity (BMI >= 25)		Engagement in physical activity	
	M	F	M	F	M	F	M	F	M	F	M	F
Former-Yugoslavia (Mod. II)												
Portugal (Mod. II)	+	+	+	+		-	+		-			
Turkey (Mod. II)	-					+						+
Sri Lanka (Mod. II)			-		-		-		-	-		-
Kosovo (Albanians, Mod. III)	-				-	-	-					+
Sri Lanka (Tamils, Mod. III)					-				-	-		-
Not a victim of repression or violence												
Victim of political repression or violence						+						
Not a victim of discrimination												
Victim of discrimination				+						+		
Not experiencing the feeling of no longer having a homeland												
Feeling of no longer having a homeland								+		+	-	

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

the most integrated of the foreigners. In the case of physical exercise, it should also be noted that the migrants who are least integrated are most likely to be doing physically demanding manual jobs, which discourages them from engaging in a sporting activity outside work. It was likewise noted that women who feel themselves victims of discrimination or who feel they no longer have a homeland are more likely to be overweight than Swiss women.
The results translate the persistence of values and behaviour patterns that belong to the culture of origin, particularly among the least integrated groups. One may think in particular of representations of the body (a less negative perception of excess weight, for example) and tobacco use, still relatively restricted in some countries, especially among women. Engaging in a sporting activity in one's free time is also uncommon in certain cultures.

2.3 Use of Health Services

Use of health services is analysed by means of four indicators: consulting a doctor during the past twelve months, having a family doctor, treatment for a mental health problem in the past year, use of outpatient services.
In regard to the indicators for the use of the health services, the first thing to be noted is the very high proportion of people who state that they have their own doctor. This result seems surprising since at least nine out of ten people replied in the affirmative, and for all nationalities, with the exception of the group made up of Germans, Austrians and French. Caution is therefore called for regarding the respondents' interpretation of this question.
The likelihood of having consulted a doctor during the past 12 months decreases for the central age groups (27-28 and 39-50) and is highest for the youngest (15-26) and the oldest (51-62) age groups, both male and female (Table 8). The marked prevalence of medical consultations among young women can probably be explained by pregnancies and gynaecological visits (the question was asked in such a way that these are not excluded). The frequency of having one's own doctor also increases after the age of 50. On the other hand, the probability of having sought treatment for mental health problems increases in the intermediate age groups (from 27 to 62). As regards outpatient treatment, only men aged from 63 to 74 show a significant increase.
Medical consultations decrease for men in the middle and upper socio-economic strata, but not for the women, which probably has to do with preventive care: women of a higher socio-economic level more frequently undergo preventive examinations. By contrast, treatments for problems of mental health decrease with a higher socio-economic level for both sexes. The same is true for the existence of a personal doctor (women) and use of outpatient services (men). Overall, the indicators analysed show that persons classed in the lower socio-economic stratum make more frequent use of the health services. Some differences can be observed depending on the region of residence, particularly in regard to having one's own doctor (less frequent in the Lake Geneva area), and treatment of psychiatric

problems (most frequent in the Lake Geneva area, the Central Plateau and eastern Switzerland).
Introducing the above factors into the models does not eliminate all the differences observed by nationality. Turkish men and women are once again distinguished by an increase in probability for all the indicators, except consulting a doctor for the men (Table 9). Kosovar asylum seekers, male and female, are more often treated for problems of mental health, but this result is not found for Tamil asylum seekers, male or female. By contrast, the likelihood of using outpatient services increases for all asylum seekers of both sexes be they Kosovar or Tamil, and for Portuguese men and women. Notable also is that Sri Lankan residents of both sexes less

Table 8: Use of health services – Results for demographic and socio-economic profile – Swiss and foreigners

	Consulted a doctor in the past 12 months		Own doctor		Treated for mental health problem in the past 12 months		Out-patient treatment in the past 12 months	
	M	F	M	F	M	F	M	F
15–26 years								
27–38 years	-				+	+		
39–50 years	-	-			+	+		
51–62 years			+	+	+	+		
63–74 years	+		+	+		-	+	
Low socio-economic Stratum								
Lower middle stratum	-				-			
Upper middle stratum	-			-	-	-	-	
Upper stratum	-		-	-	-	-	-	
Lake Geneva Region								
Central Plateau (Mittelland)			+	+				
North-west Switzerland			+	+	-			
Zurich			+		-			
Eastern Switzerland			+	+		-	-	
Central Switzerland		-	+	+	-	-		
Ticino				+	-	-		
Single								
Married			+			-		
Widowed/divorced/separated	+	+		+				
No child under 15 in the household								
Presence of a child under 15	-					-		
One person over 15 in the household								
At least two persons over 15 in the household			+		-	-		

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

frequently report having been treated for a mental health problem in the past 12 months. The behaviour of Italian, German, Austrian, French and former Yugoslavian nationals differs very little from that of the Swiss, though with a marked reduction in the probability of being treated for mental health problems for Italian men and German, Austrian and French women. Model B, focussing on foreigners, only shows that the probability of having consulted a doctor and of having a personal doctor is lower for people from former Yugoslavia in comparison to Portuguese and Turkish men and women, and only in the case of men, to Sri Lankan residents. Although difficulty in communicating in one of the national languages is commonly seen as hindering access to the health services, here it has no influence on the different indicators of the use of health services except, in the case of males, the fact of having their own doctor, and for women, the use of outpatient services. As far as women are concerned, the inclusion in the analysis of the question concerning the

Table 9: Use of health services – Results for nationality and migratory profile – Swiss and foreigners

	Consulted a doctor in the past 12 months		Own doctor		Treated for mental health problem in the past 12 months		Out-patient treatment in the past 12 months	
	M	F	M	F	M	F	M	F
Switzerland (Mod. I)								
Italy (Mod. I)				+	-			
Germany, Austria, France (Mod. I)			-			-		
Former-Yugoslavia (Mod. II)		-		+				
Portugal (Mod. II)			+	+			+	+
Turkey (Mod. II)		+	+	+	+	+	+	+
Sri Lanka (Mod. II)	+		+	+	-	-		+
Kosovo (Albanians, Mod. III)				+	+	+	+	+
Sri Lanka (Tamils, Mod. III)						-	+	+
Born in Switzerland, arrived before age 15								
Arrived aged 15 or over			-			+		+
Not knowing any of the national languages well or very well								
Knowing one of the national languages well or very well								-

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

acts of repression they may have been subjected to in their own country is significant in relation to visits to doctors and treatment for mental health problems (Table 10). Moreover, women who feel that they no longer have a homeland are more frequently treated for mental health problems and use outpatient services more often. An increase in the probability of treatment for mental health problems is also noted among men and women who feel themselves victims of discrimination.

2.4 Consumption of medicines

Three indicators were chosen for the consumption of medicines: taking medication of any kind in the course of the past 7 days, pain-killing drugs and the use of sedatives and tranquillisers.

The consumption of medicines, and of sedatives and tranquillisers increases steadily with age (Table 11). By contrast, the only significant increase in the use of painkillers is for men over 50, whereas for women, only the 39-50 age group shows

Table 10: Use of health services – Results for nationality and migratory profile – Foreigners only

	Consulted a doctor in the past 12 months		Own doctor		Treated for mental health problem in the past 12 months		Out-patient treatment in the past 12 months	
	M	F	M	F	M	F	M	F
Former-Yugoslavia (Mod. II)								
Portugal (Mod. II)	+	+	+	+				+
Turkey (Mod. II)	+	+	+	+		+	+	+
Sri Lanka (Mod. II)	+		+		-	-		
Kosovo (Albanians, Mod. III)		+	+		+	+	+	+
Sri Lanka (Tamils, Mod. III)						-	+	+
Not a victim of repression or violence								
Victim of political repression or violence		+				+		
Not a victim of discrimination								
Victim of discrimination					+	+	+	-
Not experiencing the feeling of no longer having a homeland								
Feeling of no longer having a homeland						+		+

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

a significantly higher level of use than the reference category (15-26 years). The presence in the household of a child under 15 is also associated with a reduction in consumption for women. For whatever type of drug, persons classed in the lower stratum are the largest consumers, with the probability decreasing as the socio-economic level rises. The Lake Geneva region emerges as the region with the highest consumption of medication, along with the Central Plateau in the case of pain-killing drugs, and the Ticino, in the case of tranquillisers and sedatives.
The likelihood of having taken medication of some kind in the past seven days is systematically higher for citizens of countries of the former Yugoslavia and Turkey, male and female, and for Kosovar asylum seekers of both sexes (Table 12). In cont-

Table 11: Consumption of medicines – Results for demographic and socio-economic profile – Swiss and foreigners

	Use of medication in the past 7 days		Use of analgesics in the past 7 days		Use of sedatives and tranquillisers in the past 7 days	
	M	F	M	F	M	F
15–26 years						
27–38 years	+	+			+	+
39–50 years	+	+		+	+	+
51–62 years	+	+	+		+	+
63–74 years	+	+	+		+	+
Low socio-economic Stratum						
Lower middle stratum	-		-	-	-	-
Upper middle stratum	-	-	-	-	-	-
Upper stratum	-	-	-	-	-	-
Lake Geneva Region						
Central Plateau (Mittelland)	-	-			-	-
North-west Switzerland	-	-		-	-	-
Zurich	-	-		-	-	-
Eastern Switzerland	-	-	-	-	-	-
Central Switzerland	-	-	-	-	-	-
Ticino	-	-		-		
Single						
Married				-		
Widowed/divorced/separated						
No child under 15 in the household						
Presence of a child under 15		-		-	-	-
One person over 15 in the household						
At least two persons over 15 in the household						

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

rast, in relation to the Swiss, the Italian men, Portuguese men and women, and Sri Lankan men are less likely to have taken medication. The analysis looking only at foreigners confirms these results: in relation to men and women from former Yugoslavia, those from Portugal and Sri Lanka have a lower intake. Again, one notes an increase in the probability of tranquilliser use among Kosovar asylum seekers of both sexes.
The model looking only at foreigners also highlights the fact that the use of medication is higher among women who have been victims of repression or violence (medicines in general, pain-killers and tranquillisers) and those who are or have been victims of discrimination (medicines in general and pain-killers) (Table 13).

Table 12: Consumption of medicines – Results for nationality and migratory profile – Swiss and foreigners

	Use of medication in the past 7 days		Use of analgesics in the past 7 days		Use of sedatives and tranquillisers in the past 7 days	
	M	F	M	F	M	F
Switzerland (Mod. I)						
Italy (Mod. I)	-			+		
Germany, Austria, France (Mod. I)						-
Former-Yugoslavia (Mod. II)	+	+	+	+	+	+
Portugal (Mod. II)	-	-		-		
Turkey (Mod. II)	+	+	+	+	+	+
Sri Lanka (Mod. II)	-			-		-
Kosovo (Albanians, Mod. III)		+	+	+	+	+
Sri Lanka (Tamils, Mod. III)	+		+	-		
Born in Switzerland, arrived before age 15						
Arrived aged 15 or over	+					+
Not knowing any of the national languages well or very well						
Knowing one of the national languages well or very well			-	-		

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

Lastly, in a number of cases, the probability increases among persons who experience the feeling of not belonging anywhere. For women, the fact of having arrived in Switzerland aged 15 or over (i.e. having spent their childhood in their country of origin) likewise increases the likelihood of having taken tranquillisers or sedatives in the past seven days.

Table 13: Use of medication – Results for nationality and migratory profile – Foreigners only

	Use of medication in the past 7 days		Use of analgesics in the past 7 days		Use of sedatives and tranquillisers in the past 7 days	
	M	F	M	F	M	F
Former-Yugoslavia (Mod. II)						
Portugal (Mod. II)	-	-	-	-	-	
Turkey (Mod. II)		+		+		+
Sri Lanka (Mod. II)	-	-	-	-	-	-
Kosovo (Albanians, Mod. III)					+	+
Sri Lanka (Tamils, Mod. III)		-		-		-
Not a victim of repression or violence						
Victim of political repression or violence		+		+		+
Not a victim of discrimination						
Victim of discrimination		+		+		
Not experiencing the feeling of no longer having a homeland						
Feeling of no longer having a homeland	+		+	+		+

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

2.5 Screening and prevention

The indicators analysed for screening and prevention are: the recorded levels of cholesterol and glucose, screening for breast and uterine cancer, and screening for HIV.

The probability of being tested for cholesterol and glucose levels increases with age, with a marked gradient. By contrast, screening for uterus and breast cancer is more prevalent among women under 50 (Table 14). This result is in contrast with the official recommendations that foresee regular screening from the age of 40-50. The probability of having undergone a screening test for HIV/AIDS at least once also increases for men and women in the intermediate age groups (27-38 and 39-50). This reflects a generation effect, since these are the age groups most exposed to the risk of infection.

Table 14: Screening and prevention – Results for demographic and socio-economic profile – Swiss and foreigners

	Test for cholesterol levels		Test for glucose levels		Screening for cancer of the uterus		Medical examination of breasts		HIV test	
	M	F	M	F	M	F	M	F	M	F
15-26 years										
27-38 years	+	+	+	+				+	+	+
39-50 years	+	+	+	+					+	+
51-62 years	+	+	+	+		-		-		-
63-74 years	+	+	+	+		-		-	-	-
Low socio-economic Stratum										
Lower middle stratum						+			+	+
Upper middle stratum		-				+		+	+	+
Upper stratum		-	-			+		+	+	+
Lake Geneva Region										
Central Plateau (Mittelland)	-		-	+				-	-	-
North-west Switzerland	-	-		+		+		-	-	-
Zurich	-		-	+		+		-	-	-
Eastern Switzerland	-	-	-					-	-	-
Central Switzerland	-	-	-					-	-	-
Ticino		+		+				-		
Single										
Married	+			+		+		+	-	-
Widowed/divorced/separated	+	+	+	+		+		+	+	+
No child under 15 in the household										
Presence of a child under 15	-	-	-	-		+				+
One person over 15 in the household										
At least two persons over 15 in the household	+		+						-	-

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

While few variations by socio-economic situation are observed with regard to tests for cholesterol and diabetes (apart from a reduced probability of cholesterol checks for women in the upper categories, perhaps because obesity is less prevalent), the frequency of screening tests for the cancers and HIV increases steadily in the upper strata. Civil status and the presence of a child under 15 do have an influence on behaviour, which probably has to do with the age of the people concerned. Screening tests are more frequent among those who are or have been married, except in the case of HIV, for which the probability of having undergone a test is lower among married men and women in comparison to single people, but higher among men and women who are widowed, divorced or separated. The presence in the household of a child under 15, on the other hand, is associated with a fall in tests for cholesterol and glucose levels for both sexes, and a rise in screening tests for cancer of the uterus and HIV. The probability of checks on cholesterol and glucose levels (men), and screening for HIV (women and men) emerges as highest in the Lake Geneva region and the Ticino. Breast examinations by a physician are also more frequent in the Lake Geneva region, where screening programmes are more systematic.

Table 15: Screening and prevention – Results for nationality and migratory profile – Swiss and foreigners

	Test for cholesterol levels		Test for glucose levels		Screening for cancer of the uterus		Medical examination of breasts		HIV test	
	M	F	M	F	M	F	M	F	M	F
Switzerland (Mod. I)										
Italy (Mod. I)		+		+					+	-
Germany, Austria, France (Mod. I)	-									+
Former-Yugoslavia (Mod. II)	-	-	-	-		-			-	-
Portugal (Mod. II)								+	+	
Turkey (Mod. II)	-							+		-
Sri Lanka (Mod. II)						-		-	-	-
Kosovo (Albanians, Mod. III)	-	-	-	-		-		-	-	-
Sri Lanka (Tamils, Mod. III)	-	-	-	-		-		-	-	-
Born in Switzerland, arrived before age 15										
Arrived aged 15 or over	+	+		+						
Not knowing any of the national languages well or very well										
Knowing one of the national languages well or very well			-			+		+		+

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

After allowing for these factors, noticeable differences still appear according to nationality (Table 15). Only the Italian women show a higher level of screening for cholesterol and glucose levels than the Swiss women. This may be attributed to the frequency of obesity in this category, already noted above. By contrast, the probability of such tests among citizens from countries of former Yugoslavia is lower than that observed for the Swiss, male and female. A lower level of screening and prevention is also noted for all indicators among Kosovar and Tamil asylum seekers of both sexes. Screening for cancer and HIV is also less frequent among the Sri Lankan residents. In contrast, the probability of a prostate examination and a screening test for HIV for men, and examination of the breasts by a physician for women, is higher among the Portuguese in relation to the Swiss. The analysis looking only at foreigners confirms the results noted above, with higher levels of screening and prevention for Portuguese, Turkish and, as far as cholesterol and glucose levels are concerned, for Sri Lankan men and women, than those recorded for citizens of the former Yugoslavia. On the other hand, compared to people from former Yugoslavia, the Sri Lankans again stand out with a lower rate of screening for cancers and HIV.

Table 16: Screening and prevention – Results for nationality and migratory profile – Foreigners only

	Test for cholesterol levels		Test for glucose levels		Screening for cancer of the uterus		Medical examination of breasts		HIV test	
	M	F	M	F	M	F	M	F	M	F
Former-Yugoslavia (Mod. II)										
Portugal (Mod. II)	+	+	+	+		+		+	+	+
Turkey (Mod. II)	+	+	+	+		+		+	+	
Sri Lanka (Mod. II)	+	+	+	+		-		-	-	-
Kosovo (Albanians, Mod. III)						-				
Sri Lanka (Tamils, Mod. III)	+							-		-
Not a victim of repression or violence										
Victim of political repression or violence		+								
Not a victim of discrimination										
Victim of discrimination										+
Not experiencing the feeling of no longer having a homeland										
Feeling of no longer having a homeland		-								

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

The fact of arriving in Switzerland after the age of 14 is linked to a greater probability of testing for cholesterol levels (for both sexes) and glucose levels (women). Since, according to observations, this variable also affects the risk of obesity, this may be seen as an effect of the behaviour (with regard to diet and physical activity) of some less integrated individuals or communities. It is assumed that the people liable to present high levels of cholesterol are those who are most frequently tested. We note also that the probability of having undergone a screening test for cancer of the breasts or uterus, or for HIV infection, declines significantly among women who do not speak one of the national languages. Where HIV is concerned, sexual behaviour has a significant influence on whether or not a test is taken. Consequently, this may possibly translate a difference in sexual behaviour on the part of women who are better integrated, but prudence is required in analysing the results produced by questions of this kind, which can be extremely sensitive for certain communities. In the case of the two types of cancer, on the other hand, the result could suggest a lack of access to screening.

2.6 Migrants' experiences with the health services

In the GMM questionnaire destined specifically for foreigners, respondents were asked to give their opinion on a series of statements concerning their experience with the health services. Five indicators were established, relating to respect for requirements linked to culture or religion, equality of treatment with local people, visits to a doctor with the presence of a third person and the importance of professional interpreters in improving immigrants' relations with the health services.

In these questions, age does not play such an important part as previously. It may be noted however that, when asked about their experience with the health services, the younger women (15-26 years) more often say that they "did not receive the same treatment as the local people" (Table 17). It is also women in the two lower age groups (15-26 and 27-38 years) who refer most often to the importance of professional interpreters (perhaps referring to consultations for their children). The socio-economic situation likewise has little influence on the indicators analysed, though it may be noted that women classed in the middle and upper strata are less likely to have sought the assistance of a third person for a visit to a doctor. The importance of having professional interpreters available to facilitate relations between immigrants and the health services is also mentioned less often by men classed in these strata.

Compared to men and women from Former Yugoslavia, the Turks, both male and female, show a higher frequency of people who consider that requirements relating to their culture and religion have not been adequately respected and of people who have gone to a traditional healer, as well as a higher probability of having been assisted by a third person on their visits to a doctor (Table 18). Turkish men are also more likely than men from former Yugoslavia to think that the treatment they received in the health services was not the same as that given to locals. In contrast, Turkish men and women both say less frequently that having professional interpreters available would be an important measure.

Respect for the requirements of culture and religion and the presence of professional interpreters are also seen as important for Sri Lankans, both residents and asylum seekers. Resident Sri Lankan males are more likely than Former Yugoslavians to say that they are not treated in the same way as the local population by the health services, but the opposite is noted for the women. Portuguese men and women show a higher probability of seeking the services of a traditional healer. A higher frequency of visits to the doctor accompanied by a third person is also evident for Kosovar and Tamil asylum seekers, both male and female.
The indicators for integration are often significant here. First, as might be expected, the probability of seeking the help of a third person for a visit to a doctor, and considering the presence of professional interpreters as an important measure increases among the foreign population of both sexes who do not speak one of the national languages. The men thought to be the least integrated also say more frequently that the treatment they receive in the health services is not the same as that given to the local population. Persons who arrived after the age of 14 and people who feel themselves victims of discrimination are those who say most often that

Table 17: Migrants' experience with the health services – Results for demographic and socio-economic profile – Foreigners only

	Requirements relating to culture and religion not adequately respected		Same treatment as local population		Use of a traditional healer		Visit to a doctor with the presence of a third person		Importance of professional interpreters	
	M	F	M	F	M	F	M	F	M	F
15–26 years										
27–38 years				-		+		-		
39–50 years				-		+				-
51–62 years				-						-
63–74 years	-			-	-	-				-
Low socio-economic Stratum										
Middle and upper socio-economic stratum								-	-	
German-speaking Switzerland										
French-speaking Switzerland										
Ticino						-	+			-
Single										
Married		+				-		+		
Widowed/divorced/separated								+		
No child under 15 in the household										
Presence of a child under 15										
One person over 15 in the household										
At least two persons over 15 in the household										

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

requirements of culture and religion have not been adequately respected, and that they did not receive the same treatment as the local people. Women who arrived after the age of 14 were those most often accompanied by a third person when visiting a doctor and who most often stress the importance of having professional interpreters. The same applies to men and women who feel themselves victims of discrimination and those who feel they no longer have a homeland.

Table 18: Migrants' experience with the health services – Results for nationality and migratory profile – Foreigners only

	Requirements relating to culture and religion not adequately respected		Same treatment as local population		Use of a traditional healer		Visit to a doctor with the presence of a third person		Importance of professional interpreters	
	M	F	M	F	M	F	M	F	M	F
Former-Yugoslavia (Mod. II)										
Portugal (Mod. II)					+	+		-	+	
Turkey (Mod. II)	+	+	+		+	+	+	+	-	-
Sri Lanka (Mod. II)	+		+	-	-	-		+	+	+
Kosovo (Albanians, Mod. III)				-			+	+		
Sri Lanka (Tamils, Mod. III)	+	+				-	+	+	+	+
Born in Switzerland, arrived before age 15										
Arrived aged 15 or over	+		+	+				+		+
Not knowing any of the national languages well or very well										
Knowing one of the national languages well or very well			-				-	-	-	-
Not a victim of repression or violence										
Victim of political repression or violence						+			+	-
Not a victim of discrimination										
Victim of discrimination	+	+	+	+		+			+	+
Not experiencing the feeling of no longer having a homeland										
Feeling of no longer having a homeland	+	+							+	+

+ / -: significant increase/decrease in probability in relation to the reference category (light-blue)

3 Conclusions

Taken together, the analyses contained in this report present an overview of the behaviours and health status of several migrant communities. As might be expected, the age and socio-economic situation emerge as highly significant factors in most of the analyses made. Differences in structure by age and socio-economic level play a part in the differences in the health status and behaviour between migrant communities and the Swiss population.

Almost systematically, the fact of belonging to the lower social strata can be seen as an unfavourable factor with regard to state of health, and this corresponds to an increased use of the health services, except for prevention and early screening for certain diseases. A high proportion of foreigners have a low socio-economic level, with the exception of German, Austrian and French and, to a lesser degree, Italian citizens. The general state of health and the frequency of using the health services by most of migrant groups are thus "aggravated" by an unfavourable socio-economic situation. The effect of the socio-economic situation differs as far as behaviours are concerned, with a drop in frequency in the lower socio-economic strata for regular alcohol consumption (women), use of drugs at some point in their lives and engaging in a sporting activity.

In most cases, age is linked to a deterioration in the state of health and, consequently, increased use of the health services and screening tests, even though the state of health in general, and of mental health in particular, improves slightly for those reaching retirement age. As the migrant groups tend to be young compared to the age structure of the Swiss population - again with the exception of the Germans, Austrians, French and Italians - this factor seems to have the inverse effect to that of socio-economic level, operating largely "to the advantage" of most of the foreign communities.

By taking account of these essential confounding factors, as well as life situation and region of residence, we have been able to identify the role of nationality and migratory profile. Considerable variations exist and profiles by nationality can be drawn for all the indicators used. The group made up of German, Austrian and French men and women shows a state of health and health-related behaviours close to that of the Swiss national population. This group comprises people in a favourable socio-economic situation, for whom integration is made easier by the fact that the language of their country of origin is one of Switzerland's national languages. It should be noted, however, that this group - comprising in all 500 persons interviewed - is made up of three nationalities, each of which is likely to behave differently. The state of health of Italian men and women is likewise close to that of the Swiss, albeit with a situation that appears less positive for women in regard to mental health and disabilities preventing them from exercising their usual activities and/or occupation. Behaviours are different, however, notably concerning the daily consumption of alcohol and dietary habits, with a higher risk of obesity than for the Swiss for both men and women. The high frequency of testing for cholesterol and glucose levels noted for Italian women reflects this state of affairs.

The situation of men and women from Turkey and former Yugoslavia, by contrast, emerges as considerably worse than that of the Swiss, to judge by health status and use of medication. The level of use of the health services (particularly treatment for mental health problems and out-patient care) also ranks as high for the Turks. As regards screening tests and prevention, persons from former Yugoslavia display a much lower level than persons of Swiss nationality. The indicators relating to self-reported health status and mental health also emerge as relatively poor for the Portuguese, but their consumption of medicines is fairly low.

As regards the Turkish community, this health situation can also be observed in other countries for which comparable data are available (Sweden, Netherlands). From the point of view of migratory profile, the situation does not a priori seem any more "unfavourable" than for other migrant communities: one of the highest proportions of persons born or arriving in Switzerland before the age of 15, moderate proportion (compared to the Sri Lankans or Kosovars) of persons having been subjected to repression or violence. It is noteworthy that Turkish men and women are those who most often state that they feel themselves victims of discrimination, although the existence, and the significance, of the relation between health status and discrimination are difficult to establish. The frequency of risk behaviours may partially explain this unfavourable situation: tobacco use and obesity in particular figure frequently for both sexes (though with low alcohol consumption and a relatively high frequency of sporting activity for the men). However, as most of these indicators are based on self-reporting, the possibility that the explanation may lay in cultural differences in perceptions of health and symptoms of illness cannot be excluded.

By contrast, the situation of Sri Lankan men and women resident in Switzerland appears as similar to, or better than that of the Swiss for several of the indicators analysed. This is also the case for Tamil asylum seekers with regard to long-term functional incapacities and disabilities that limit normal activities, but not for self-rated health status and mental health. This may be found surprising in view of the migratory profile of the Sri Lankans: a high proportion of people who arrived in Switzerland after the age of 14, and of people who have been subjected to political repression or violence in their country of origin, as well as of people who do not speak any of the national languages. Part of the explanation lies in the overall behaviour of the Sri Lankans: low consumption of alcohol and tobacco, proportion of obesity similar to or lower than the Swiss. However, the picture is much less favourable when it comes to prevention (screening for cancer).

Regardless of nationality, the insecure situation of asylum seekers also emerges in the indicators analysed: notably poor self-rated health and mental balance, frequent use of outpatient services, treatments for mental health problems and frequent use of sedatives and tranquillisers (among Kosovars), with a deficiency in the areas of screening and prevention.

Finally, the indicators of integration used proved significant for several of the health dimensions analysed. This is true for command of a national language. Apart from the language barrier and the problems it poses in access to health care and ser-

vices, this variable is without doubt the sign of the people who are least integrated and who are in a particularly unfavourable socio-economic situation. The fact of suffering or having suffered discrimination, the feeling of no longer belonging to any home country and the fact of having been subjected to political repression or violence in the country of origin are also significant for several indicators. Care should be taken in interpreting these findings, however, because they do not point to a relation of cause and effect but rather translate the complex interplay of many factors influencing the state of health and mental balance. It does seem clear, however, that the people who are least integrated, or who feel themselves to be so, are the ones who most often say that, in their experience with the health services, requirements connected with their culture or their religion have not been properly respected. They are also the ones who say most often that the availability of professional interpreters would be a concrete measure to facilitate relations between immigrants and the health services.

The interpretation of the many findings obtained from this analysis calls for further in-depth studies. Again, it should be stressed that health status has been approached solely by way of "subjective" information, i.e. the respondents' own assessment of their health. Cultural factors influencing assessment of health and perceptions of symptoms may explain some of the differences observed. However, the "nationality" variable also potentially concentrates the effect of other factors that have not been directly taken into account in the statistical models. These include in particular the role of the support given by the social network and the community, the influence of religion on behaviours, exposure to occupational hazards (depending on occupation) and environmental factors connected with the place of residence.