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Specialty Public Health

Assessment of the socioeconomic status, other health related factors, and the subjective state of health of elderly people with a Russian migration background in Hamburg

Masterthesis

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Statutory Declaration

I hereby declare that I am the author of the thesis presented. I have written the thesis as applied for previously unassisted by others, using only the sources and references stated in the text.

Signed by

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Hamburg, 07.11.2013

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I devote my master thesis to my parents Kira and Oleg Kuznetsov, and to my sister Victoria. I am grateful to my family for their unconditional love and support. My deep heartfelt gratitude goes to my friends Gisela and Dr. Rolf Schroeder for their infallible care, help and understanding.

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Content

1 Abstract

People with a migration background account for about a fifth of the German population. The number of elderly migrants in Germany and their share in the total German population grow constantly. Although the people with a Russian background are the second largest group of migrants in Germany, there is a lack of relevant knowledge about their health and its determinants, particularly of the older ones.

Altogether 100 elderly men and women with Russian migration background from Hamburg/Germany were interviewed based on a standardized questionnaire in Russian about their subjective state of health, socioeconomic status, and other determinants of health. This cross-sectional study was done in context of the Sağlik project. It gave a possibility to compare the results with the data obtained from the other Sağlik participants (elderly with Turkish or Polish background and the German control group). For analysis, descriptive, bivariate, and multifactorial methods were used.

The results show, that the men and women with the Russian background rate their subjective current state of health as relatively poor. This is possible cause by the following health related factors. Firstly, an internal social discrepancy was found between components of socioeconomic status (high educational level, but low professional level, and low individual income). Secondly, insufficient use of social resources was found (partly poor social networking). Thirdly, a risky health behavior was observed: high smoking rate, particularly by the Russian men, probably insufficient level of physical activity with low attention to sufficient physical activity, unhealthy nutrition (low fruit and vegetable consumption, high meat consumption, rare consumption of low fat or fat free food, low attention to healthy nutrition), and as a result a high prevalence of overweight and obesity. Fourthly, these findings were accompanied by an inhomogeneous use of health services.

In spite of some limitations, this study supplies a valuable data base about health and certain health related factors of the elderly of the second largest population of people with migration background in Germany. These results, as well as the comparison between the four ethnic groups, can be used to develop corresponding complex health promotion programs, not only for the elderly people with a Russian background, but also for the other migrants, in order to improve their state of health and strengthen their social networking.

2 List of abbreviations

ANOVA	Analysis of variance
BMFSFJ	Bundesministerium fuer Familie Senioren Frauen und Jugend
BMI	Body Mass Index
CDC	Centers for Disease Control and Prevention
DEGS	Studie „Gesundheit Erwachsener in Deutschland“ (German Health Interview and Examination Survey for Adults)
DGE	Deutsche Gesellschaft für Ernährung (German Nutrition Society)
GEDA	Studie „Gesundheit in Deutschland aktuell“ (German Health Survey actual)
GSE	General self-efficacy
GNHIES	German National Health Interview and Examination Survey
GP	General practitioner
HAG	Hamburgische Arbeitsgemeinschaft für Gesundheitsförderung e.V.
NVS	Nationale Verzehrsstudie (National Consum Survey)
RKI	Robert Koch Institut
SBOEWG	Sedentary Behaviour and Obesity Expert Working Group
SD	Standard deviation
SES	Socioeconomic status
SPSS	Superior Performing Software Systems
WHO	World Health Organization

3 Introduction

People with a migration background in Germany account for about a fifth of the German population. The number of elderly people with a migration background in Germany and their share in the total German population grow constantly. Currently the proportion of people with a migration background in Hamburg is still significantly greater in younger age groups than in older ones, but already in the near future the proportion of elderly people with a migration background will be notably higher than today.

The process of ageing is naturally associated with the appearance of health problems, for some people less, for some people more. And so the need for support, acute, long-term health care, and social care for elderly people with a migration background in the near future will increase. Maintaining physical and mental health of the elderly and using their potential should have a high priority in social politics. The WHO has adopted the term “active ageing” to promote the process of enhancing the quality of life of ageing people with a special focus of their health (WHO 2002). According to the Advisory Council on the Assessment of Developments in the Health Care System, health promotion and prevention of diseases for elderly people has a high priority (Advisory Council on the Assessment of Developments in the Health Care System, 2009).

In the research literature, the combination of migration, age, and health is rarely investigated. The majority of available studies focuses either on the topic “health and age” or on the topic “migration and health”. Although the people with a Russian migration background are the second largest group of people with a migration background in Germany after the group of people with a Turkish migration background, there is a lack of relevant knowledge about the health and its determinants of people with a Russian migration background, particularly of the older ones of them. Although there are some studies which investigated the objective state of health of the Russian migrants, but they did not differentiate by age. Some other studies investigated the subjective state of health and a narrow range of determinants of health of the elderly Russian migrants, but only via qualitative analysis. That is why the elderly people with a Russian migration background were chosen as a target group for this study. Their subjective state of health and broad spectrum of health determinants were in this study quantitative analysed.

The study "Assessment of the socioeconomic status, other health related factors, and the subjective health status of the elderly[1] people with a Russian migration background in Hamburg" is part of the interdisciplinary Sağlik project run by the researchers of the Department of Social Work and Health Sciences of the Hamburg University of Applied Sciences in cooperation with local authorities and organisations.

The structure of the master thesis is the following: at first, a brief description of the Sağlik project is given. Then the theoretical part provides information about migration and people with migration background. It also supplies information and the relevant scientific knowledge about health and determinants of health of people with migration background. Certain determinants of health (socioeconomic status (SES), health related resources, and health behaviour, such as tobacco and alcohol consumption, physical activity and healthy nutrition, as well as use of health services) are described more precisely because they are relevant to this study. The available relevant data about people with Russian background are given separately.

After that the objectives and hypotheses are stated. The preparation of the study/sampling, data collection/interview of the participants and kinds of data analysis are described in the methodical section.

The findings of the study are described precisely in a separate section. The results show the demographic characteristics, components of SES, certain health factors and behaviour, use of health services, and subjective state of health, as well as associations between them of the elderly people with Russian background in Hamburg. In the following section the finding are summarized and discussed. Additionally, limitations and advantages of the study are identified. At the end recommendations for the future are given.

[1] "elderly person" in the study means a person aged 60 years or older

4 Brief description of the Sağlik project

The study "Assessment of the socioeconomic status, other health related factors, and the subjective health status of the elderly people with a Russian migration background in Hamburg" is a part of the interdisciplinary Sağlik project run by the researchers of the Department of Social Work and Health Sciences of the Hamburg University of Applied Sciences in cooperation with local authorities and organisations (Hamburgische Arbeitsgemeinschaft für Gesundheitsförderung e.V. (HAG), Fachamt Kommunales Gesundheitsförderungsmanagement des Bezirks Hamburg Altona, das Fachamt Sozialraummanagement des Bezirks Hamburg Mitte, MiMi – Mit Migranten für Migranten[2]. The precise information can be found on the website of the Sağlik project[3].

The Sağlik project "Promotion of healthy nutrition, physical activity, and social participation in the community: community based health promotion for the elderly man and women with Turkish background in Hamburg" started in May 2010, funded by the Federal Ministry of Education and Research, and it will finish in December 2013. The main aim of this project is the development and implementation of intercultural and interdisciplinary health programs promoting healthy nutrition, physical activity, and social participation in the community for the target group of the elderly men and women with a Turkish background. The project serves to improve the quality of life and the resources for the target group. In order to achieve sustainability and empower the elderly for healthy behavior, the micro- and meso-social networks are built and strengthened with the support of key persons (multiplicators, medical doctors etc.).

Through qualitative and quantitative methods this project collected and analyzed empirically

- how the elderly with a Turkish migration background perceive their health status, including their quality of life and social participation,
- which barriers exist for the use of health promotion offers and for the improvement of health and of quality of life, and

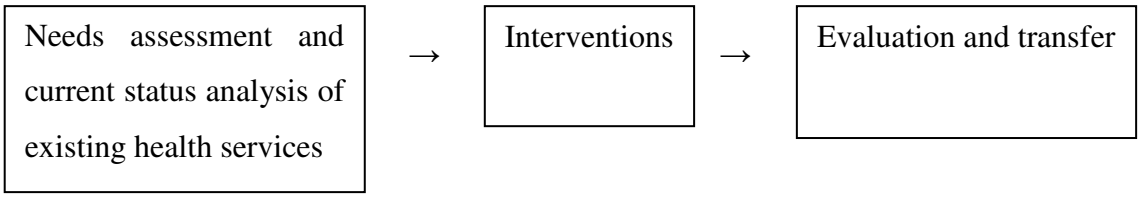
[2] http://www.mimi-hamburg.de/

[3] http://www.westenhoefer.de/forschung/projekte/saglik/

- which resources are available to strengthen health promoting behavior and improve the use of health promotion services.

Based on these analyses, an intervention program was developed, which was adapted to the needs and demands of the target group of the elderly people with a Turkish background. It is now being implemented.

The basic structure of the Sağlik-project is the following:



The objective of the needs assessment is to list the existing and the necessary resources for improvement of the quality of life with a focus on health and social participation of the target group and for strengthening their social networks and support structures.

The objective of the current status analysis of existing health services is to obtain an overview of existing health promoting offers related to healthy nutrition, physical activity and social participation in the selected communities including structural data of these offers, their accessibility, and their extent of use.

The main objective of the intervention is to improve the participation in health promotion programs of the elderly with a Turkish migration background by two strategies:

- improvement of the structure of the existing offers and services, and
- preparation, development and implementation the new health programs.

The aim of evaluation and transfer is

- to review the implemented processes for optimization, and - if necessary – to optimized them;
- to develop recommendations for transference of the project results to other regions of Germany or to other Hamburg regions where less people with Turkish background live, and
- to help to transfer the project results by comprehensive publications

For the need assessment were selected two groups of the men and women with Turkish migration background: the first group included only persons 60 years and older and the

second group - over 50 years as potential future multiplicators in intervention programs. In January - August 2011 100 persons of the first group who were not in care, were chosen from four selected quarters[4] of Hamburg (Altona-Nord, Altona-Altstadt, Billstedt, Wilhelmsburg). They were questioned based on a standardized interview guided in Turkish. These quarters were selected because of the high density of people with a Turkish migration background (Statistikamt Nord 2012). The interviews were carried out by trained native speakers. The potential participants were recruited by an active approach on the streets, at mosques, and in cafés, and also by use of the snowball method. There was also a control group consisting of 100 persons without migration background and with the same inclusion criteria.

The questionnaire covered various health related topics like general health (e.g. primary care, disabilities, subjective state of health, health related quality of live, physical and mental limitations etc.), physical activity, tobacco and alcohol consumption, nutrition and eating behavior (e.g. regularity, consumption of fruit and vegetables, consumption of meat, attitude to the healthy diet, drinks, cooking and shopping), height and weight, self-efficacy, deprivation and satisfaction in Germany, social networking (contacts, support, leisure) and care of relatives. Furthermore, sociodemographic and socioeconomic data were collected. The statistical evaluation of the data was carried out with Superior Performing Software Systems (SPSS) Version 19 by t-test and analysis of variance (ANOVA).

The results of the survey provide evidence that the men and women with Turkish background have a low income level, unfavorable housing conditions, as well as a low level of education (Buchcik J. et al 2012). Among the women with Turkish background was found a high prevalence of overweight and obesity. There was a significant correlation between lower income and greater BMI. The Turkish participants consumed significantly low amounts of fruit and vegetables, compared to the German national recommendations (Deutsche Gesellschaft für Ernährung (DGE) 2012), this consumption increases with higher incomes however (Buchcik J. et al 2012). These findings could suggest the lack of information about healthy nutrition or the wrong understanding of healthy diet which could lead to appearance of health problems. This assumption is reflected in the self assessment of the health status: two thirds of the Turkish men and women rated their health last year as fair or poor. Only a

[4] = Stadtteil

small percentage of the Turkish group participated in health promotion programs (Beyer A., Buchcik J. 2011). Further results have not been published yet.

The current status analysis of existing services shows that there are a lot of offers for elderly people in the chosen quarters concerning nutrition, physical activity and social participation, which are open for all people. However, these offers have met little response from the target group. One of the reasons may be that the programs are often conducted in German, but many of the Turkish people do not understand German. Another reason probably is that a lot of these offers can be found only in the Internet, which is rarely used by the target group. These facts show that existing facilities should by modified to the needs of the target group (Beyer A., Buchcik J. 2011)

After the need assessment and the current status analysis an intervention program with health courses was developed. The content of the courses and more detailed information is given on the website of the Sağlik project[5].

Until now, the health courses for elderly people with Turkish background with an average of eleven participants were conducted in three quarters of Hamburg (Hamburg Altona-Nord, Altona-Altstadt und Billstedt). A fourth health course will be conducted in Wilhelmsburg.

In 2012 additionally 100 people with Polish background were questioned with the same inclusion criteria (age over 60, without care level, from the same four quarters of Hamburg) in order to extend the knowledge about people with migration background in Hamburg and to assess the need for the future intervention for another focus groups.

[5] http://www.westenhoefer.de/forschung/projekte/saglik/interventionengesundheitskurse/

5 Theoretical background

5.1 Migration

There is no internationally agreed definition of a migrant. The term “migrant” can be interpreted in many ways. According to the definition of the German Federal Office for Migration and Refugees “migration occurs when a person changes the location of their usual place of residence. International migration occurs when this movement crosses national boundaries” (Bundesamt für Migration und Flüchtlinge 2006). According to The Council of Europe (Europarat 2005), “a migrant is any person, who lives temporarily or permanently in a country where he or she was not born, and has acquired some significant social ties to this country.” In recent years the term “people with a migration background” has been commonly used in Germany as a collective term for the heterogeneous group of immigrants and their descendants. The Federal Statistical Office has used this definition since the Mikrozensus 2005. According to the Mikrozensus, the population with a migration background in Germany consists of all German residents who “have immigrated into the territory of today’s Federal Republic of Germany after 1949, and of all foreigners born in Germany and all persons born in Germany who have at least one parent who immigrated into the country or was born as a foreigner in Germany” (Statistisches Bundesamt 2012). This study uses the term “persons with a migration background” according to the definition the Mikrozensus, for short sometimes the term “migrant” is used instead of the term“persons with a migration background”.

The profiles of migrants are very diverse: migrants represent different categories of people in terms of origin, socioeconomic status, culture, religion, and reasons for migrating. Reasons for migration can be divided into the following groups: push factors like war, poverty, hunger etc drive the individual out of the country of origin, and pull factors like unfavourable employment opportunities and political and religious freedom attract the individual towards the recipient country.

There are a lot of different migrant groups, such as refugees and asylum seekers, long term labour migrants, family reunification migrants, return migrants, Aussiedlers[6], irregular or undocumented migrants, internationally displaced persons, trafficked people etc. (Nygren-Krug 2003, Padilla and Pereira Miguel 2007; Mladovsky 2007). All of these groups have different migration biographies: some migrants may not encounter radical changes, but others may face many challenges. After their arrival, a lot of migrants experience new environments conditions, such as language, culture, legal systems, working conditions, weather, eating habits etc., while they also bring with them their own habits, traditions, beliefs and practices (Padilla and Pereira Miguel, 2007).

5.2 People with migration background in Germany and in Hamburg

People with a migration background in Germany account for about fifth of the German population. According to statistical data from Mikrozensus 2011, 81.75 million people live in Germany and 15.96 million are people with a migration background. The main countries of origin are Turkey (18.5%), the former Soviet Union (14.5%) and Poland (9.2%) (Statistisches Bundesamt 2012[7]). The majority of persons, who came from Turkey, came to Germany between 1960 and 1970 as labour workers because of acute labor shortage. The majority of the Russian people from the former USSR (ethnic Germans or "Aussiedlers") came to Germany after the collapse of the Soviet Union in 1991.

By the end of January 2012 around 513 000 people with a migration background lived in Hamburg, that is 29.2 percent of all Hamburg inhabitants. The largest group of people with a migration background in Hamburg is the Turkish group (18.1%), the second one is the Russian (14.0%), and the third one is the Polish group (13.1%) (Statistikamt Nord 2012).

Picture 1 shows the density of the population with a migration background in Hamburg by the end of January 2012. The quarters[8] with the highest density (48% and more) are the following: Billstedt, Billbrook, Rothenburgsort, Hammerbrook, Veddel, Wilhelmsburg, Kleiner Grasbrook in the borough[9] of Hamburg-Mitte, Jenfeld in the borough of Wandsbek,

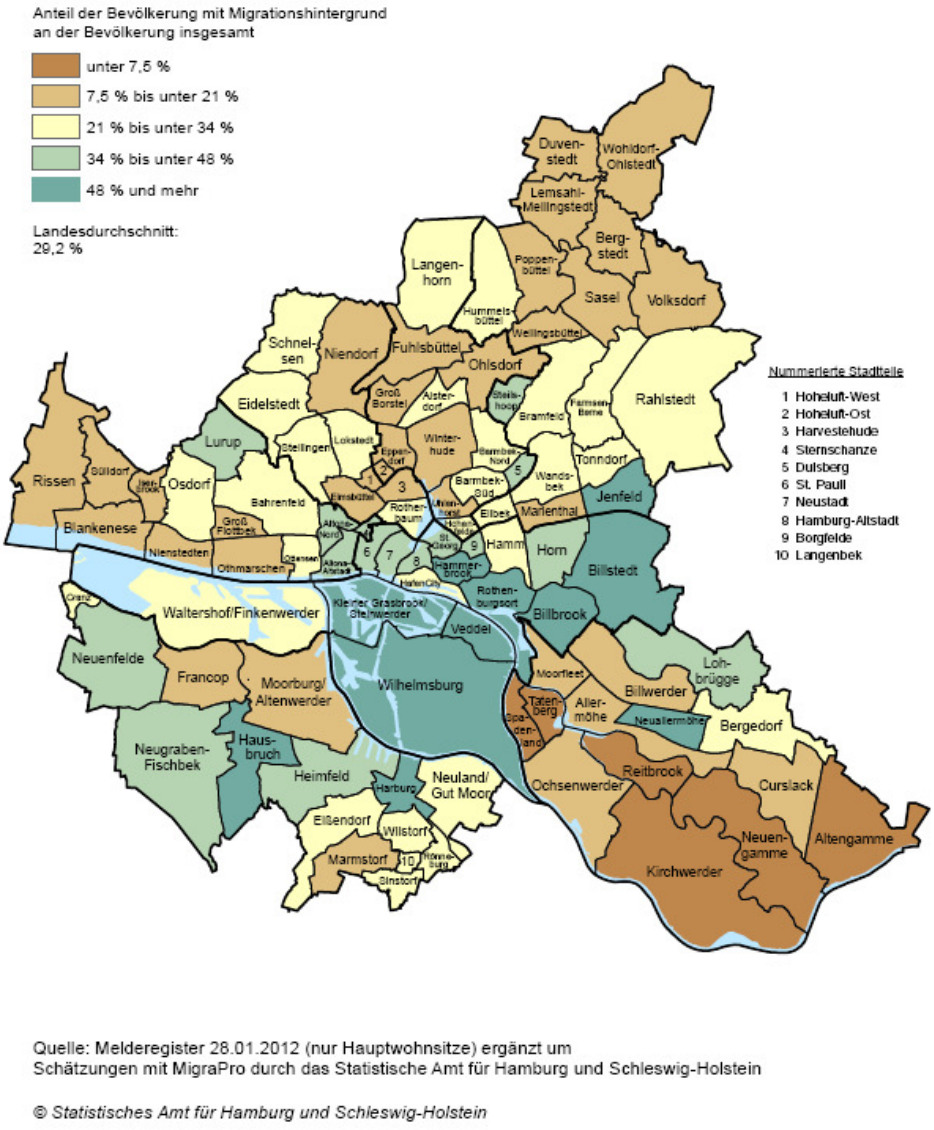
[6] Ethnic Germans as immigrants from Eastern Europe and the former Soviet Union

[7] here and further: data from Statistikamt Nord before the correction from 2. Juli 2013 http://www.statistik-nord.de/uploads/tx_standocuments/SI13_117.pdf

[8] = Stadtteil

[9] = Bezirk

Hausbruch and Harburg in the borough of Harburg, Neuallermöhe in the borough of Bergedorf.



Quelle: Melderegister 28.01.2012 (nur Hauptwohnsitze) ergänzt um
Schätzungen mit MigraPro durch das Statistische Amt für Hamburg und Schleswig-Holstein

Picture 1. *Population with a migration background in Hamburg 28.01.2012 (Source: Statistisches Amt für Hamburg and Schleswig-Holstein, 2012)*

People with a migration background are usually very young. Studies in Hamburg show that 45% of people under 18 years have migration background, as compared to only 14% of people older than 65 with migration background (Statistikamt Nord 2012). These figures suppose that the proportion of the elderly people with migration background in Hamburg will rise in the near future.

5.3 Health, its determinants and migration

The World Health Organization defines health as a state of complete physical, mental, and social well-being and not merely as the absence of diseases and infirmities (WHO Constitution, 1948). The Ottawa Charter for Health Promotion states, that "health is not just a state, but also a resource for everyday life, and not just the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities" (WHO 1998).

Several indicators have been used to evaluate the general health status of people. These indicators include, but are not limited to: the morbidity rate, mortality rate, and life expectancy. Subjective lay concepts of health are based on interactions between health perceptions of lay people and of professionals. Surveys of population health show that health is most commonly associated with (Herzlich 1991, Schulze/Welters 1991, Faltermaier 1994):

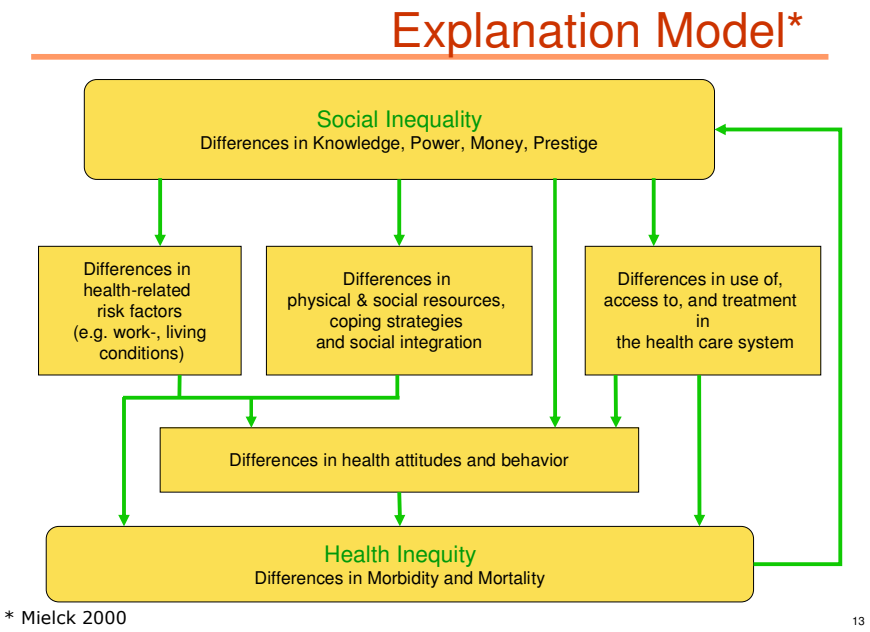
- absence of illness, pain and discomfort,
- general well-being,
- general capacity to fulfil everyday tasks.

There is evidence, that self reported health (subjective state of health) is a powerful predictor of future mortality and morbidity (Idler/Benyamini 1997, Bailis at al. 2003). That is why subjective state of health is widely used for the measuring of perceived current health status of the population (Fylkesnes/Forde 1992, Krause/Jay 1994, Farmer/Ferraro 1997, Idler/Benyamini 1997).

The state of health deteriorates with age (e.g., Jette 1996; Steinhagen-Thiessen & Borchelt 1999).The subjective state of health is closely linked to the state of health measured by more objective indicators (Pinquart, 2001). The link between objective and subjective state of health tends to weaken with advancing age (Rodin/McAvay 1992, Hoeymans at al. 1999). The widening gap between the state of health that is obviously worsening as the self evaluation that describes the state of health as more or less stable, is seen in the literature as a health satisfaction paradox (Brandtstädter/Greve 1994, Borchelt et al. 1999).

Health depends on a combination of factors known as the determinants of health, such as constitutional factors, social and community networks, living and working conditions, environmental circumstances, socioeconomic and physical factors, individual behavior and

life style, and health care systems (Padilla and Pereira Miguel, 2007). The following scheme of social inequality and as a result health inequity from Mielck below (picture 2) shows the relationships between social factors, health resources and risk factors, health behavior, use of health care system and health.



Picture 2. *Explanation model of health inequity, according to Mielck, 2000*

Mielck distinguishes two types of social inequality: vertical and horizontal. Vertical inequality is defined by inequality in components of socioeconomic status: education, professional level and income. Vertical inequality has an especially large impact on population health (Richter/Hurrelmann 2006, S. 14). Horizontal social inequality can be described by variety of characteristics such as age, gender, nationality, marital status, number of children etc. (Mielck 2005, S. 8). Risk factors in the aforementioned scheme may be unhealthy work- and living conditions, passive smoking. Resources may be social networking, participation, high self efficacy. Risky behavior may be smoking, alcohol consumption, social exclusion, unhealthy nutrition (Rosenbrock 2004). Health inequity can be measured by the differences in morbidity and mortality as an objective parameter, and by differences in subjective state of health as a subjective once. This scheme shows that social factors such as knowledge, power, money and prestige have no direct impact on health inequity (Mielk 2000).

The next section treats the relationship between migration and health in general. The following section describes in more detail those of health determinants, that are possible to be evaluated based on the given questionnaire, namely:

- for social inequality: SES
- for social resources, coping strategies and social integration (in the following, the short form “social resources” will be used of this long description): social networking, self efficacy
- for health attitudes and behavior (in the following, the short form “health behavior” will be used of this long description): smoking and alcohol consumption, physical activity, eating behavior, Body Mass Index
- for use of, access to and treatment in the health care system (in the following, the short form “use of health services” will be used of this long description): visits of general practitioner, participation in health promotion programs
- for health inequity: subjective state of health

5.3.1 Migration and health

Caring for health of migrants is, in the first place, a matter of human rights and of tackling unacceptable inequalities in health and health care (Mielck 2000, 2005). Social inequality and health inequity and the interactions between them are important public health issue. The different living conditions and circumstances in the host country influence the health of migrants: they become exposed to new diseases and may carry some others illnesses that are foreign to the host country. During their childhood in the country of origin migrants often have been exposed to different health related factors. This can lead to different patterns in the occurrence of chronic diseases in comparison to non-migrant majority population. In 1999 Marmot noted the importance of social determinants of health in vulnerable groups, such as migrants. He provided evidence that the post-migration environment may be the root cause of migrant health problems and, therefore, may be more relevant than other health determinants such as genetic predisposition (Fernandes et. al., 2007). Czycholl noted that migration is a social stressor, simultaneously positive and negative (Czycholl 1998). Migrants can have specific health risks such as separation from family, language barriers, lack of knowledge about health services in the new social context, discrimination and marginalization. But on the other hand, migration may bring some resources and positive factors for health such as

better living conditions or better chances for health care and treatment of different diseases (RKI 2008).

Relative to the majority population, a lot of people with migration background are socially and economically disadvantaged, therefore it can be expected that their state of health is worse. It is known, that low SES increases the risk of diseases and premature death (Mielck 2000, 2005; Lampert et al. 2005; Richter und Hurrelmann 2006). However, adult migrants in European countries and the USA present a lower mortality rate than the non-migrant majority population (Abraido-Lanza et al., 1999, Swerdlow, 1991, Razum and Twardella, 2002, Singh and Hiatt, 2006, Razum, 2006). This phenomenon is called “the healthy migrant effect”. In view of the inverse relationship between SES and mortality, healthy migrant effect looks like a paradox (Schenk, 2006). It has been suggested that (self-) selective migration may play a role: migrants are often healthier and younger than the average population in their country of origin (Syed /Vangen 2003, Mackenbach et al., 2005). But over time this effect may fade because migrants may be exposed to different risk factors in the recipient country (Lechner/Mielck 1998). Migration-related factors such as uncertain residency status, unfavorable living and working conditions, unemployment, constrained financial resources, and separation from family members could have an adverse (psychological) effect on health (Siegrist/Mueller-Leimkuehler 2003, RKI 2010). These factors could increase risk of disease in old age for people with a migration background (Dietzel-Papakyriakou/Olbermann 2001).

5.3.2 Determinant for social inequality: socioeconomic status

It is known that there is a close link between the SES of a person and his or her state of health” (Mielck 2000, 2005, Richter/Hurrelmann 2006, Lampert at al. 2011). The SES is usually determined by education, occupational status, and income and specifies the individual position of a person in the social hierarchy (Hradil, 2005, Lampert/Kroll 2009). People with low SES have an increased risk for some certain chronic diseases (Mielck 2000, 2005; Lampert et al. 2005a; Richter und Hurrelmann 2006, Geyer 2008). They tend to rate their subjective state of health worse and to have health related problems more often than people with high SES (Babitsch et al 2009, Lampert 2011). Low SES is associated with such risk factors as physical inactivity, smoking, overweight, obesity or hypertension (Klein at al. 2001, Lampert 2010). Old age is associated with lower level of income (Berkman/Gurland 1998).

In general, people with a migration background have the same health risks as people of the host country living under comparable conditions (Razum at al. 2008). Low income, low level of education and a job with low qualification requirements may increase health risks. This can be verified for instance by a higher incidence, prevalence and mortality rate of chronic diseases (Razum at al. 2008).

For assessment of SES across different studies in a standardized way, an aggregated index is used. So, the Winkler and Stolzenberg Stratification Index was developed for the German Cardiovascular Disease Prevention Study 1984–1991. For the study German Health Update (Gesundheit in Deutschland actual (GEDA) and the German Health Interview and Examination Survey for Adults ("Studie zur Gesundheit Erwachsener in Deutschland", DEGS), which was conducted by Robert Koch Institute in 2008–2011, this index was revised (Lampert 2013). This new multi-dimensional aggregated index takes into account the level of school and professional qualification, professional status and net equivalent household income and is calculated as a total points score. Based on this index, SES is divided into three groups: Low, Middle and High.

According to DEGS 2008–2011, which collected representative data about the population in Germany, persons with a low SES have a subjective state of health which is worse than that of persons with a medium or high socioeconomic status. Particularly, in the group of women aged 65 years and older, who were asked about their subjective state of health, 54.9 % of those with a low SES, 45.7 % of those with a middle SES, and only 28.4 % of those with a high SES rated it as fair to very poor. The corresponding percentage for men aged 65 years and older, who rated their subjective state of health as fair to very poor are: 48.8% with a low SES, 40.6 % with a middle SES, and only 34.7 % with a high SES (Lampert 2013).

5.3.3 Determinants for social resources

As explained in the chapter 5.3., certain determinants for social resources, coping strategies and social integration, namely social networking and self efficacy will be described now in more detail.

5.3.3.1 Social networking

In the context of social resources, social networking usually involve the following areas: frequency of social contacts, social support, spare time activities, social isolation, help in household, help outside the home and with the basic activities of daily living and others.

There are a lot of methods to measure social networking, e.g. Multidimensional Scale of Perceived Social Support (Zimet at al.1988), Questionnaire for social support, short form (F-SozU K-14) (Fydrich at al. 2009), Lubben Social Network Scale (Lubben et al. 1988), De Jong Gierveld Loneliness Scale (De Jong Gierveld 1999a; 2000). GEDA 2009 used for the measuring of social support Oslo-3-Items-Social-Support Scale, based on this scale three levels of the social support - low, moderate and high support - can be distinguished (RKI 2010).

Social networking support has a strong impact on individuals. Social support is defined as assistance from family, friends, neighbors and other community members and involves "social transactions, the aims of which are to assist individuals in coping with everyday life and particularly in responses to critical situations" (Pierce at al. 1990). The support we receive from others (Cohen et al., 2000), the structure of social networking (Brissette at al. 2000), the quality and quantity of social contacts (Kiecolt-Glaser/Newton 2001), and feelings of isolation and loneliness (Cacioppo et al. 2002) are all identified as predictors of health and wellbeing. Perceived social support is a crucial resource for coping with stress (Gadalla 2010) and for individuals with limitations in daily living activities (Antonovsky 1979). High frequency of social contacts is positively correlated with good subjective state of health and mental well-being (Borgonovi 2010).

For the elderly people, social support could represent a main source of personal care and well-being (Litwin/Landau 2000). A lack of support network and poor social contacts may be crucial in later life. So, low social support and isolation determine social vulnerability which increases with age. This could be a risk factor for morbidity and mortality (Andrew at al. 2008). Reduced social networking and social support are more frequently found among older people with low SES (Weyers et al. 2008). There is the proven importance of social contacts within family and of contacts with friend for healthy ageing (Thanakwang/Soonthorndhada 2011). It is confirmed that loss of functions and chronic stress in elderly people could be alleviated by informal and formal social support (Muramatsu at al. 2010). High level of social support is a protective factor in reducing vulnerability of elderly people (Melchiorre at al. 2013).

Some studies have discussed the relationship between immigration, ethnicity and social isolation, and supposed that elderly people with migration backgrounds could be one of the

most vulnerable risk groups for social isolation (Rao et al., 2006; Findlay and Cartwright, 2003).

Men are less likely to receive social support than women. An explanation for this could be the fact that women have a more socially oriented life style: they are more concerned about establishing social contacts (Dalgard et al. 2006).

The results of the GEDA 2009 show that a large part of the German population gets sufficient social support. However, the proportion of the men and women without adequate social support rise with age (RKI 2010).

5.3.3.2 Self-efficacy

In the context of coping strategies, self-efficacy (also colled "perceived self-efficacy", "personal efficacy", "social self-efficacy") can be investigated. The concept of perceived self-efficacy was introduced by Bandura as a main aspect of his social-cognitive theory (Bandura, 1977). It is found that a strong sense of personal efficacy is related to better health and better social integration (Bandura, 1977). Self-efficacy defined as a resource factor in stress appraisal processes. A low sense of self-efficacy is associated with depression, anxiety, and helplessness (Jerusalem/Schwarzer 1992).

The general self-efficacy-scale-questionnaire which was developed by Jerusalem and Schwarzer (GSE-questionnaire) formerly with 20 questions is now a 10-item psychometric scale that estimates self-beliefs to cope with critical live situations, such as success in solving problems, achieving goals, behavior in unexpected or difficult situations. Results of the score are presented as sum score between 10 and 40. The higher the sum score, the higher the optimistic belief and confidence to cope with difficult situations. According to German norm for general self-efficacy (GSE) (Bevölkerungsrepräsentative Normierung der Skala zur Allgemeinen Selbstwirksamkeitserwartung), normal GSE for the elderly man aged 60 and above is about 29.82 (SD 5.71), for the elderly woman 27.62 (SD 5.54) (Schumacher 2001). From an SPSS international data set that includes about 18 000 respondents (available for free download at: http://www.selbstwirksam.de/) GSE could be calculated also for elderly respondents aged 60 and above of certain migration background (Costa Rica, Germany, Great Britain, Hungary, Korea, Netherlands, Russia and Swiss): GSE of women is 29.56 (SD 6.15) and men is 30.48 (SD 5.78).

5.3.4 Determinants for health behavior

As explained in the chapter 5.3., determinants of health behavior, such as tobacco consumption, alcohol consumption, physical activity, nutrition and eating behavior, and BMI will be described now in more detail.

5.3.4.1 Tobacco consumption

Smoking is a considerable risk factor for numerous chronic diseases, e.g. cardiovascular, respiratory diseases and cancer (Ockene/Miller 1997, Centers for Disease Control and Prevention (CDC) 2008, Institute of Medicine 2009). It is the most significant single health risk factor and is the leading cause of premature mortality (US Department of Health and Human Services 2004, International Agency for Research on Cancer 2004). The estimated economic costs of treating diseases and health problems caused by smoking in Germany amount to 7.5 billion € a year (Neubauer et al 2006). Smoking is also associated with poor self rated health (California Health Interview Survey (CHIS) 2008, Wang at al. 2012).

For the assessment of tobacco consumption the following characteristics can be used: smoking rate, distribution of "daily smokers", "occasional smokers", "ex-smokers", "never smokers" as well as "heavy smokers", quite rate etc. (Lampert 2013). According to an estimation made by the WHO, "heavy smokers" are defined as persons who smoke twenty or more cigarettes per day (Latza at al. 2005).

According to the data of the Gesundheit Erwachsener in Deutschland (DEGS) 2008–2011, 29.7% of the 18- to 79-year-old population in Germany smokes tobacco: 26.9% of women and 32.6% of men (Lampert 2013). The percentage of smoking women and men aged 65–79 in Germany is 8.9 and 11.6% respectively, which is a lower than in early and middle adulthood. The persons with a low SES smoke roughly twice as often as persons with a high SES (Lampert 2013). According to Mikrozensus 2009, the smoking rate among Aussiedlers from the former USSR is 23.4%, although there is no data about the elderly Aussiedlers. The actual data about smoking rate of people 65 years and above in Russia show that smoking rate accounts for the men 40.7% and for the women 2.9% (GATS Russian Federation 2009).

5.3.4.2 Alcohol consumption

Excessive alcohol use has immediate effects that increase the risk of unintentional injuries, alcohol poisoning, violence (Smith at al. 1999, CDC 2012). Excessive alcohol consumption for a long time can lead to the development of different chronic diseases, such as liver and

pancreatic disorders, cancer, neurological problems, including dementia, stroke and neuropathy, cardiovascular diseases, including myocardial infarction, cardiomyopathy, atrial fibrillation and hypertension, psychiatric problems, including depression, anxiety, and suicide (Castaneda 1996, Gerke at al. 1997, Corrao 2004, Rehm at al. 2003, CDC 2012). The estimated economic cost of alcohol associated diseases was 26.7 billion euro for the year 2007 (Adams/Effertz 2011). "At-risk drinking" is defined as an average consumption of 10–12 g or more of pure alcohol for women and 20–24 g or more of pure alcohol for men per day (Burger at al. 2004). On the other hand, some studies show that light to moderate alcohol intake is accompanied with a reduced risk of coronary heart disease, stroke and total mortality in middle aged and elderly men and women (Doll 1997; Grobbee et al. 1999; Rimm et al. 1999). Alcohol consumption may be divided into "light", "moderate" and "heavy" levels, depending upon the amount of alcohol consumed in terms of pure ethanol per day. A "light to moderate" alcohol intake is usually defined as an intake of 1 to 2 alcoholic drinks (beer, wine or liquor) on average per day (or <30 g per day), a 'heavy drinking' as three and more drinks per day (or >30 g per day) (Dufour, 1999; Kalant and Poikolainen, 1999).

Alcohol consumption is often assessed in the self administered questionnaire with help of the Alcohol Use Disorders Identification Test– Consumption (AUDIT-C) (Bush et al 1998). Three questions of the Alcohol Use Disorders Identification Test–Consumption (AUDIT-C) were used by DEGS 2008–2011 (Lampert 2013): about frequency of alcohol consumption per month, about quantity of glasses per day, and about drinking six or more alcoholic drinks on a single occasion at least once a month. The maximum total score of the AUDIT-C is 12, a score of >3 for women and >4 for men were considered as "at-risk drinking". Persons who drink six or more alcoholic drinks on a single occasion at least once a month were considered as "heavy episodic drinkers" (Gual et al 2002). According to DEGS, which present national German data, at-risk drinking is most common among young persons aged from 19–29 year and becoming less common from an age of 65 years. At-risk drinking is more prevalent in men (41.6%) than in women (25.6%). Men are three times more likely to be heavy episodic drinkers than women. Prevalence of at-risk drinking by elderly women is 18% and by elderly men is 34.4%. Prevalence of heavy episodic drinking by elderly women is 7.5% and by elderly men is 22.5% (Lampert 2013). There is a lack of knowledge about prevalence of alcohol consumption of people with migration background and especially of elderly migrants. Strobl und Kühne could not detect any increase in alcohol consumption among interviewing ethnic German, Turkish and German-Russian youth (Strobl/Kühnel 2000: 151ff).

5.3.4.3 Sport and physical activity

Physical activity is an important factor for prevention and treatment of many chronic diseases (cardiovascular diseases, diabetes mellitus type 2, metabolic syndrome, cancer, mental, and musculoskeletal diseases), for improvement of wellbeing, and for decrease of premature mortality (Sallis/Owen 1999, CDC 1999). Physical activity includes a lot of following forms of activities: everyday walking or cycling, work-related activity, playing active games, active recreation, active play, dancing, gardening and organized and competitive sport (Department of Health, Physical Activity, Health Improvement and Protect 2011). According to the physical activity recommendations of the majority of European countries and the USA, for adults, 30 minutes of at least moderate physical activity on at least 5 days a week helps to prevent over a lot of chronic illnesses (Sedentary Behavior and Obesity Expert Working Group (SBOEWG) 2010, CDC). Physical activity could give a more positive effect on health by people with previously inactive (sedentary) life style (Mensink 1999, Fiaterone 1994). A sedentary lifestyle could be a risk factor for overweight and obesity, cardiovascular disease, raised blood pressure, breast and colon cancer and diabetes (WHO 2008, 2009). Sedentary behavior is not only a lack of physical activity, it is defined by "the individual behaviors where sitting or lying is the dominant mode of posture and energy expenditure is very low" (SBOEWG 2010). Typical types of this behavior include screen-time (TV viewing, computer use), driving a cars, sitting while reading, talking, doing homework, or listening to music. Sedentary Behavior and Obesity Expert Working Group noted that some studies that have used objective measures to assess the time adults spend sitting or lying, suggested that the majority of adults and in particular older adults spend considerable proportions of the day in sedentary position (SBOEWG 2010).

According to World Health Organization guidelines for adults aged 65 years and above, "in order to improve cardiorespiratory and muscular fitness, bone and functional health, and reduce the risk of non communicable diseases, depression and cognitive decline, the following are recommended: at least 150 minutes of moderate-intensity aerobic physical activity throughout the week, or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity".

Physical activity can be measured by the following methods: objectives (e.g. submaximal cycle ergometry test which was used for DEGS, cycle ergometer tests, spirometry to measure

maximum oxygen uptake etc) and subjectives (by questionnaire, e.g. Physical Activity Readiness–Questionnaire (PAR-Q etc.) (Finger 2013). German representative survey GEDA 2009 assessed physical activity by the question about the numbers of days with intensive physical activity and about duration of physical activity per day. Respondents who had intensive physical activity less than 2.5 hours per day were considered as physically inactive. The results shows that 40% of the German women and 45% of the German men had intensive physical activity, but only 20% of the German women and 23.3 % of the German men are physically active and meet the CDC recommendation. The majority of elderly aged 65 years and above in Germany physically inactive: 72% of the elderly women and 65.3% of the elderly men (RKI 2010). Assessment of sports by GEDA 2009 was done via questions: "Did you do sports during the last three month?", "If yes, how many hours per week?" Respondents who answered this question negatively were considered as sport inactive. The results show that the doing sports decreases with age. About one half of the elderly people in Germany do no sports, the elderly people with high SES do less sports than elderly people with low SES (RKI 2010).

5.3.4.4 Nutrition and eating behavior

The composition of food has a significant impact on state of health. A healthy diet supplies the body with essential nutrition components: fluid, proteins, carbohydrates, essential fatty acids, vitamins, minerals, and adequate calories. Healthy nutrition may protect against weight gain and related diseases such as coronary heart disease, hypertension, stroke, diabetes, and some forms of cancer (WHO 2003, World Cancer Research Fund 2007). For healthy diet WHO recommendations include the following statements: achieving energy balance between energy consumed and energy that is "burnt off" and a healthy body weight, limit energy intake from total fats with limit of "fast foods" and red meat consumption, prefer saturated fats instead of unsaturated fats, increase consumption of fruits and vegetables, whole grains, nuts and legumes, limit intake of free sugars, and limit salt intake (WHO 2004).

5.3.4.4.1 Fruit and vegetable consumption

High intake of fruit and vegetables has a lot of advantages, because fruit and vegetables are important sources of vitamins, minerals, microelements, and dietary fibers. Moreover, fruit and vegetables have relatively low calorie content. High fruit and vegetable consumption could prevent various chronic diseases, such as hypertension, coronary heart disease, stroke,

diabetes, certain cancer, and obesity (WHO 2003, World Cancer Research Fund 2007, Buijsse et al. 2009).

According to the current guidelines of the German Nutrition Society (DGE), for adults recommended amount of vegetables is at least 400 g and of fruit is 250 g every day that correspond to the "5-a-day" campaign, which promotes to consume five portions of fruit and vegetables per day (DGE 2012).

Representative national data about fruit and vegetables consumption show that these recommendations have not been met by majority of the population (Max Rubner Institut 2008, RKI 2010, Mensink at al. 2013). According to DEGS, in Germany women consume on average 3.1 and men 2.4 portions of fruit and vegetables per day. The percentage of men and women, who consume at least three portions per day, tends to rise with rising SES. Only 15% of women and 7% of men reach the DGE recommendations. Fruit consumption increases in both men and women up to the age of 60–69 years. Elderly women aged 60 and above in Germany, on the average, consume more fruit and vegetables per day than elderly men (3.5 and 2.7 portions correspondingly) (Mensink at al. 2013).

5.3.4.4.2 Meat consumption

High consumption of meat could be a risk factor for some chronic diseases, e.g. cancer, heart diseases, and diabetes type 2 (Thorogood M at al. 1994). Some studies show that vegetarians were about forty percent less likely to develop cancer compared to people who eat meat (Chang-Claude J at al. 1993). It was determined that red meat (beef, pork, or lamb) and processed meat consumption possibly increase risk for colorectal cancer (World Cancer Research Fund/American Institute for Cancer Research, 2007).

The II national survey about food consumption in Germany (Nationale Verzehrsstudie II (NVS)) showed that the men, irrespective of age, consume around twice as much meat and meat based products as the women. For 65–80 year old people, an average consumption of meat is 46g per day for women and 79g per day for men (Max Rubner Institut 2008).

5.3.4.4.3 Low fat or the fat free food consumption

High fat diet is associated with increased risk of several chronic diseases including obesity, cancer, and heart diseases (Cerrato 1991, Sarwer at al. 2012). People can improve their health by reducing the total amount of fat in their diet (Dietary Guidelines for Americans 2010). A lot of health and nutrition organizations promote a "low fat" diet and have issued dietary

recommendations that include reducing intake of total and saturated fat (e.g. US Department of Health and Human Services, US Department of Agriculture 2005). Current public health recommendations emphasize the importance of reducing total fat intake to no more than 30% of total calories. It corresponds to 60 grams of fat per day in an 1800 calorie diet (Dietary Guidelines for Americans 2010).

According to the National Consume Survey (NVS II), the national German level of the average intake of fat is 92 g per day for the men and 68 g per day for the women (Max Rubner-Institut 2008).

5.3.4.5 Body Mass Index

Body Mass Index (BMI) is used to detect overweight and obesity. In the last decades, an extension of overweight and obesity has been observed in many countries worldwide (Ehrsam et al. 2004, WHO 2005). BMI is defined as the ratio of weight in kilograms divided by the square of the height in meters (kg/m^2). The information about body weight and height could be received on the basis of the questionnaire with self conducted measuring or, for more objective results, on the basis on objective anthropometrical examinations conducted by trained staff (e.g. for DEGS 2008-2011).

According to WHO, the underweight is determined, if BMI < 18.50, the normal weight by BMI 18.50-24.99, the overweight by BMI 25.0-29.99 and the obesity, if BMI >30.0.

Overweight and obesity are associated with many chronic diseases: both of them can have consequences for the social life of a person, mobility and quality of life (Sarwer at al. 2012, Schienkiewitz at al. 2012). Obese people have an increased risk of cardiovascular diseases (Hubert at al. 1983), diabetes mellitus type 2 (Wang et al 2005), and certain types of cancers including pancreatic, kidney, breast, colon, and cervix cancer (Renehan et al 2008). It is observed that the life expectancy of people who are obese is lower than that of people with normal weight (Prospective Studies Collaboration 2009).

According to DEGS 2008-2011, 67.1% of men and 53.0% of women in Germany are overweight; 23.3% of men and 23.9% of women are obese (Mensink at al. 2013). By comparing BMI results of DEGS with results of German National Health Interview and Examination Survey (GNHIES) 98, which was conducted in 1998, it can be noticed, that the prevalence of overweight of people in Germany has not changed, but it has remained stable on a high level, whereas the prevalence of obesity has risen substantially, especially among men. The socioeconomic gradient in the prevalence of obesity also did not change in recent

years: men and women with a low SES are still more often affected by obesity than men and women with a high SES. The prevalence of overweight and obesity increases with age. So, 29.2% of women aged 60-69 years, 17.8 of women aged 70-79 years have normal weight, 70.7% of women aged 60-69 years and 80.3% of women aged 70-79 years are overweight. 15.9% of men aged 60-69 years, 17.5% of men aged 70-79 years have normal weight, 83.9% of men aged 60-69 years, 82.5% of men aged 70-79 years are overweight (Mensink at al. 2013). Also according to GEDA 2009, 60.8% of women aged 65 and above and 71.3% of men aged 65 and above in Germany were overweight and obese (RKI 2010).

5.3.5 Determinants for use of health services

For adequate supply the population with health care services, the representative information about the utilization of different health services is needed (Sachverständigenrat zur Begutachtung der Entwicklung im Gesundheitswesen 2002). Use of health services (outpatient and inpatient) depends on different factors (Andersen et al 1995), such as gender, age and SES, access conditions (enabling resources): place of residence, type of health insurance, and health status (Thode at al. 2005, Blumenstock et al 2009). For assessment of utilization of health services, the routine data about payment, treatment or diagnosis from different health insurers, as well as information about use of different health services from the viewpoint of patients by questionnaires are of valued importance. (BARMER GEK 2011, Riens at al. 2012).

DEGS 2008-2011 proved information about frequency of use and kinds of health services over the last 12 months. The results show that in Germany 96.9% of participants aged between 18 and 79 used medical services at least once over the last 12 months. Women request most medical services more often than men. For almost all services, an increase in utilization is recorded with increasing age. Self-rated state of health is a very strong influencing factor in use of outpatient medical services: respondents with good or very good subjective state of health visited a medical practice 7.4 times in the past year, whereas respondents with fair to very poor health had 15.0 contacts with their general practicioner (GP). The respondents noted to have, on the average, 9.2 contacts with a physician during the last 12 months. The number of contacts increases with age: women aged 60 and above had 12-13 contacts with their GP, men aged 60 and above had 10 to 11 contacts with their GP during the last year (Rattay at al. 2013).

A representative survey in Hamburg in 1998 found that 62.6% of the respondents with a migration background medical received treatment due to illness (64.6% of the women, 61.5% of the men), and only 46.5% of the German respondents received corresponding treatment. The Turkish participants used health services more often than the other nationalities (Freie und Hansestadt Hamburg Behoerde fuer Arbeit Gesundheit und Soziales 1998).

People with a migration background use many health services less often than the majority population (RKI 2008). Cultural, linguistic and structural barriers can prevent people with a migration background from adequate use of health services and participation in health promotion programs. Many studies have shown the high need of health related programs for migrants (Lampert/Voth 2009, RKI 2008, Sağlik project).

5.3.6 Determinant for health inequity: subjective state of health

There is no data available of objective state of health for elderly people with migration background (Robert Koch Institut (RKI) 2010). Some studies suppose a high prevalence of chronic diseases (Bundesministerium fuer Familie Senioren Frauen und Jugend (BMFSFJ) 2000). According to Mikrozensus 2009, the percentage of ill elderly people with migration background aged 65 and above was higher than that of elderly people without a migration background (24.04% and 22.80% accordingly). (Statistisches Bundesamt 2010).

Subjective state of health or self reported state of health is widely used for measurement of perceived current health status of a population (Fylkesnes/Forde 1992, Krause/Jay 1994, Farmer/Ferraro 1997, Idler/Benyamini 1997). Subjective state of health has been measured in various ways, using single questions or scales. A lot of studies used the proposed WHO question: “How is your health in general?” with five possible answers from “very good” to “very bad” (De Bruin 1996, Lampert 2013).

A comparative survey in Hamburg in 1998 found a higher rate of self reported age-related diseases of respondents with a migration background (from Turkey, Poland, Yugoslavia, Italy, Iran and Portugal) aged 55 years and older in comparison to the German respondents aged 60 years and older, although, the average age of the German respondents was higher than that of the respondents with a migration background. Cardiovascular diseases and rheumatism was noted as the most frequent diseases. 54% of the respondents with a migration background rated their state of health as poor and very poor compared to 23.9% of the German participants. The Turkish participants rated their subjective state of health as poor

and very poor more often than other participants (Freie und Hansestadt Hamburg Behoerde fuer Arbeit Gesundheit und Soziales 1998).

5.3.7 Resume about migration and health

Summarizing the available information about state of health and determinants of health of the people with migration background, it could be noticed that "there is a gap in the availability of high quality information and research in the field of migration health" (IOM 2005), particularly about health of elderly people with migration background: available information is scattered and has not been gathered systematically. The health of migrants in the European Union is underresearched (Mladovsky, 2007). Thus, there is an urgent need for systematic research to be carried out, for the evidence based public health decision making.

5.4 Special case: people with Russian migration background

The migrants from the countries of the former Soviet Union can be divided in the following groups: Aussiedlers (Russian Germans in the narrow sense, as a rule they possess the German citizenship, because their ancestors had immigrated to Russia from Germany, they are a numerous group), non-German family members, immigrants with Jewish origin (contingent refugees), and other persons from the former USSR (who came to Germany due to study, work, or marriage). The majority of them came to Germany after the dissolution of the former Soviet Union in 1991.

The educational level of the Aussiedlers is significantly higher than that of the other people with migration background (Statistisches Bundesamt (Destatis) und Wissenschaftszentrum Berlin für Sozialforschung. 2011: 195). The Aussiedlers are significantly more often affected by unemployment than the other people with migration background and the German population. Aussiedlers with university degrees are even more affected by unemployment than ethnic Germans without vocational training (Institut für Arbeitsmarkt- und Berufsforschung der Bundesagentur für Arbeit. 2007: 1ff). The reasons probably are the problem of the recognition of their qualifications by German authorities and lack of German knowledge.

The current Hamburg population of citizens originating from Russia and the former Soviet Union (Armenia, Aserbaidschan, Estonia, Kasachstan, Kirgistan, Lithuania, Latvia, Moldavia, Tadschikistan, Turkmenistan, Ukraine, Usbekistan, Belorussia) amounts 71.725

persons (14% of all people with migration background). This is the second largest population of people with migration background in Hamburg next to the Turkish population. This corresponds to the distribution of migrants in Germany (cf. chapter 5.2.). The proportion of people with a Russian migration background aged 60 or above recently is about 14% of all people with Russian migration background living in Hamburg, 60% of them are women and 40% are men (Statistikamt Nord 2012). But because of demographic change we will expect an increasing amount of elderly people in the near future, including people with a Russian migration background (Statistikamt Nord 2012).

The quarters with the highest density of elderly people aged 60 or above with a Russian migration background are the following (Statistikamt Nord 2012) (corresponding percentage of all people with migration background is given):

- Neuallermöhe (44.9%), Lohbrügge (36.1%) and Bergedorf (28.8%) in the borough of Bergedorf
- Hausbruch (45.7%) and Neugraben-Fischbek (46.0%) in the borough of Harburg
- Billstedt (12.4%) in the borough of Hamburg-Mitte.

There are no data available about the objective state of health for elderly people with a Russian migration background (RKI 2010). Although there are some studies investigated the objective state of health of the Russian migrants, but they did not differentiate by age. Some other studies investigated the subjective state of health and a narrow range of determinants of health of the elderly Russian migrants, but only via qualitative analysis.

Studies from a cohort of Aussiedlers from the former Soviet Union (34 393 Aussiedlers studied from 1990 to 2002) showed a significantly lower mortality rate for Aussiedlers than for the German population, particularly for cardiovascular diseases. However, non-natural causes of death in the group of of Aussiedlers (e.g, suicide, acute accidents, ingestions of psychotropic substances) were detected more frequently than in the German population. This applies particularly to the male participants (Becher et al. 2007).

The follow up study of this cohort in 2009-2010, which investigated the risk factors for cardiovascular and cerebrovascular diseases among ethnic Germans from the former Soviet Union, showed that the commonly known risk factors for cardiovascular disease (consumption of alcohol, smoking, diabetes, cholesterol and consumption of sweets) as relevant also to the Aussiedlers. The prevalence of these risk factors was lower than that of the German population. This study concluded that the reported lower prevalence of known

risk factors in women such as alcohol consumption, high cholesterol, diabetes and smoking could contribute to a lower risk of cardiovascular diseases (Kuhrs at al. 2012).

Some authors stated on a significantly high number of alcohol dependent Russian-speaking migrants (Czycholl 2003: 159).

A qualitative study, which investigated health (information) behavior of elderly people with Turkish or Russian background, found that those people have a fatalistic view about health. For Turkish elderly, who lived in Germany longer than the Russian people, were health services more familiar. The participants from both groups stated, that the social contacts and the communication between people with the same background are of great importance. (Lampert/Voth 2009)

Thus, as can be seen, the information about the health status and its determinants of the people with Russian background is very scarce. There is a gap in representative knowledge about the health of elderly Russian migrants.

6 Study description and methods

6.1 Objectives and hypotheses

Till today there is a lack of reliable and valid data about the health status, SES and other health related factors of Russian migrants in Hamburg (Lampert 2009). Our assumptions are:

- low SES
- poor subjective state of health
- high risk factor profile for chronic diseases: unhealthy eating behaviour, lack of physical activity, high prevalence of smoking people, frequent alcohol consumption, low consumption of fruit and vegetables
- poor social network, need of help in household, outside the home or with the basic activities of daily living
- high need of health promotion programs

This master thesis is a result of the study "Assessment of the socioeconomic status, other health related factors, and the subjective health status of the elderly people with a Russian migration background in Hamburg", which is based on the current interdisciplinary Sağlik project.

The **main objective** is the need, risks and resources assessment to get knowledge about health and its determinants of elderly women and men with Russian background in Hamburg. This knowledge can help in future to strengthen their social networks by developing of the adequate, effective, complex health promotion programs.

6.1.1 Objectives

The specific objectives are following:

- Survey of the **SES** of the target group to increase knowledge about social determinants of health.
- Survey of other **certain health related factors** (according to the listing in 5.3. and 6.2.3) of the target group to increase knowledge about distribution and frequencies.

- Survey of the **subjective state of health** of the target group to enhance evidence based decisions and interventions for the future.
- **Comparison** of certain health related factors (according to the listing in 5.3. and 6.2.3) and subjective state of health of the target group and of the corresponding Sağlik participants, that is the elderly persons with Turkish and Polish background and the elderly members of the German control group in Hamburg, to develop a joint strategy to battle health inequities.

6.1.2 Hypotheses

1. The elderly men and women with Russian background in Hamburg have low SES, similar to the Sağlik participants with Turkish and Polish background and significantly different from the members of the German control group
2. There are significant differences in other certain health related factors (according to the listing in 5.3. and 6.2.3) between the Russian participants and other Sağlik participants
3. The subjective state of health of the elderly Russian men and women in Hamburg is poor, similar to the Sağlik participants with Turkish and Polish background and significantly different from the members of the German control group
4. There is a significant difference between the elderly Russian men and women concerning SES, other certain health related factors (according to the listing in 5.3. and 6.2.3) and their subjective state of health
5. Components of SES are associated with the subjective state of health of the Russian participants:
    a. Lower education, lower income, higher age are accompanied with a poorer subjective state of health
    b. Employment is accompanied with a rather better subjective state of health then the state of not working, jobs with high qualification requirements are accompanied with a better subjective state of health
    c. Higher education is associated with jobs with higher qualification requirements and with higher income
    d. People with a high education who work in a job with lower qualification requirements have a poorer subjective state of health than those who work in a job with higher qualification requirements

6. Components of SES are associated with social resources and health behavior of the Russian participants:
    a. lower education, state of not working, lower individual income are more often accompanied with nicotine consumption
    b. lower education, state of not working, lower individual income are accompanied with more frequent alcohol consumption
    c. lower education, state of not working, lower individual income are accompanied with lower fruit and vegetable consumption
    d. lower education, state of not working, lower individual income are accompanied with more frequently warm meals consumption
    e. lower education, state of not working, lower individual income are accompanied with higher meat consumption
    f. lower education, state of not working, lower individual income are more often accompanied with low fat or fat free food consumption
    g. lower education, state of not working, lower individual income are more often accompanied with deliberate reduction of food in order not to gain weight
    h. lower education, state of not working, lower individual income are accompanied with less attention to healthy nutrition
    i. lower education, state of not working, lower individual income are accompanied with less physical activity
    j. lower education, state of not working, lower individual income are accompanied with less attention to sufficient physical activity
    k. lower education, state of not working, lower individual income and higher age are accompanied with a higher BMI
    l. lower education, state of not working, higher age are accompanied with less frequent social contacts
    m. higher age is accompanied with higher frequency of getting help, poorer social support and poorer general self-efficacy

7. Social resources and health behavior are associated with the subjective state of health of the Russian participants:

a. nicotine consumption, more frequent alcohol consumption, lower fruit and vegetable consumption, physical inactivity, higher meat consumption, less frequent low fat or fat free food consumption, less frequent deliberate reduction of food in order not to gain weight, and higher BMI are accompanied with a poorer subjective state of health
b. less frequent social contacts are accompanied with a poorer subjective state of health
c. more frequent team-activity, getting help compared to not getting help, social support, higher self-efficacy are accompanied with a better subjective state of health

8. Components of SES and the subjective state of health are associated with use of health services of the Russian participants:

a. lower education, higher age are accompanied with higher frequency of visits of a general practitioner
b. people with low education, people who are not working, people with low individual income tend not to participate in health promotion programs
c. people with low education, people who are not working, people with low individual income tend not to participate in spa treatment and rehabilitation programs
d. the Russian participants with a poorer subjective state of health more frequently visit their GP, participate in health promotion, spa treatment and rehabilitation programs than the participants with a better subjective state of health

6.2 Methods

This study started in February 2013. It is divided into three phases: preparation, data collection and data analysis.

6.2.1 Preparation of the project/Sampling

In February 2013 the preparation of the study started with an up to date, in depth and complete literature research which lead to the adaptation of the Sağlik project design to this study.

The 137 questions which have proven good for the Sağlik project could be also used here. It was translated from German into Russian, and 3 questions about rehabilitation care were added (questions 138-140). The whole questionnaire is in given the appendix (in Russian).
The questionnaire covers the following areas:

1. Use of health care facilities and their quality (questions 1-11, 138-140)
2. State of health and health related quality of life (questions 12-47)
3. Physical activities and sports (questions 48-52)
4. Tobacco and alcohol consumption (questions 53-58)
5. Nutrition and eating behavior (questions 59-73)
6. Assessment of self-efficacy (questions 74-83)
7. Deprivation and satisfaction in Germany (question 84)
8. Social networking (questions 85-103)
9. Socio-demographic data (questions 104-113)
10. Housing conditions (questions 114-118)
11. Education (questions 119-121)
12. Professional activity (questions 122-126)
13. Care of relatives (questions 127-129)
14. Religious denomination (questions 130-131)
15. Income (questions 132-135)
16. Ideas, initiatives, wishes (questions 136-137)

The Russian translation then was tested for validity and reliability via the reverse translation into German. The questionnaire was approved by the ethics committee.

6.2.2 Data collection/Interview of the participants

The recruitment for the study took place in the three quarters of Hamburg with the highest concentration of residency of the target group. How it was already noticed, the quarters with the highest density of seniors with a Russian migration background in Hamburg are (Statistikamt Nord 2012):

- Neuallermöhe, Lohbrügge and Bergedorf in the borough of Bergedorf
- Hausbruch and Neugraben-Fischbek in the borough of Harburg
- Billstedt in the borough of Hamburg Mitte

In order to have a possibility to compare the results with the other groups of the Sağlik project, it was decided to select the participants from the following quarters: Neuallermöhe, Neugraben-Fischbek and Billstedt.

Selected locations for the recruitment were Russian shops, Russian-German meeting points, senior citizens meeting points, churches (after service), language courses, concerts and exhibitions, public transport, offices of the general practitioners. An active approach as well as the snowball effect was used to get in contact with the target group.

Interviewing of the participants lasted from March till the end of April 2013. Inclusion criteria for the participation were an age above 60 years, current residency in one of the selected quarters of Hamburg, a Russian migration background, no level of care yet, and the informed consent with the private policy. Every candidate was given an explanation of the current study and overview of the questionnaire. The intended sample size had to be at least a hundred persons in order to be comparable to the other groups of the Sağlik project (Turkish, Polish and German group). 117 persons were asked to participate, a hundred from them agreed.

As a native Russian speaker, I conducted all questionnaire guided interviews myself and made sure participants were comfortable and understood the questions. I was responsible for the high quality and completeness of the data collected.

An interview lasted about 45 minutes on average.

6.2.3 Data-Analysis

Since not all the questions were related to the objectives and helpful for the approval or disproval of the hypotheses, not all questions were chosen for the analysis. The ones that were chosen are listed in table 28 in the appendix. The numbers given there are the same as in questionnaire. The groups of the variables were determined according to the explanation model of social inequity (Mielck 2000) with demographic characteristics (according to the listing in 5.3.):

1. Demographic characteristics (age, gender, ethnicity, country of birth, duration of living in Germany, mother tongue, German knowledge, marital status, number of children, desired place of living, living situation, religious denomination)

2. Determinants of social inequality: components of SES (school education, tertiary education, employment rate, reason for not working, occupation/profession, individual income, housing conditions)
3. Determinants of social resources (social networking, general self efficacy)
4. Determinants of health behavior (tobacco and alcohol consumption, physical activities and sports (physical activity, attention to sufficient physical activity), nutrition and eating behavior (fruit consumption, vegetable consumption, frequency of warm meals, frequency of meat consumption, low fat diet, deliberate reduction of food, attention to healthy nutrition, height and weight), body mass index)
5. Determinants of use of health services (GP visits, participation in health promotion programs, participation in spa treatment and rehabilitation programs)
6. Determinants of health inequity: subjective state of health (subjective state of health and change of subjective state of health)

Relevant variables and the kind of statistic analysis are shown in table 29 in the appendix. Since for the data evaluation the SPSS version 20 was used, the data were coded by entering them into the system. For some cases new variables were developed (they also given in table 29 in the appendix). Some ordinal ranked variables for frequencies were converted into interval variables, whereupon the week, the month or the year was chosen as time interval and the value vas calculated from the mean value of the category, e.g. frequency of alcohol consumption per month: 0 = never, 1 = 1x month or less, 3 = 2-4x month, 11 = 2-3x week, 17 = 4x week or more. Some other ordinal ranked variables were used as interval variables because the differences between the intervals could be considered as equal, e.g. self assessment of current state of health as 1 = excellent, 2 = very good, 3 = fair, 4 = poor, 5 = very poor.

The first data to be analyzed were the demographic data of the respondents with Russian background as well as of the other ethnic groups of the Sağlik project (the Turkish group with 100 participants, the Polish group with 103 participants, and the German group with 101 respondents), they were analyzed with the help of descriptive statistics. After that the aforenamed health-related factors and subjective state of health of the respondents with Russian background as well as of the other ethnic groups were evaluated with the help of descriptive statistic and bivariate analysis (Chi-square) and two-factorial ANOVA.

Then specially for the participants with Russian background the associations between the components of SES and their subjective state of health, between the components of SES and the aforenamed determinants of health resourses and behavior, between certain aforenamed determinants of health resourses and behavior and the subjective state of health, between the components of SES, certain aforenamed determinants of health behavior and the use of health services were estimated with the help of bivariate analysis (Mann-Whitney U test, Spearman's test, t-test, Chi-square). The difference between the elderly Russian men and women regarding to their subjective state of health and health determinants was evaluated with the help of Chi-square.

Usually for analysis of SES a multi-dimensional aggregated index is used, which takes into account the level of school education, professional status and net equivalent income (Lampert 2013). For assessment of SES of the respondents of this project it was not possible to use this index. First of all, the school education systems of the four countries are not easily to compare. Secondly, professional status of the Russian participants in Germany often did not correspond to the level of their Russian education. Furthermore a lot of the Russian respondents did not work in Germany because they did not find a job or already received old pension. Lastly, the Turkish data about household income was not reliable, so only individual income could be used for statistical analysis. That is why for assessment of associations between SES and other factors of this group the components of SES were used separately: educational level, state of working (instead of professional status, because a lot of the Russian respondents did not work in Germany) and individual income. “Employed people” or “working people” are those who have currently a job, “unemployed people” or “not working people” are the remaining people, those who do not work because of old age or other kind of pension, who are looking for a job, and who stay at home as a housewife.

The used methods of statistical analysis will now be described more precisely.

Descriptive statistic of frequencies showed absolute frequency, percent frequency including missing cases, percent frequency not including missing cases (valid percent) for all variables; mean, standard deviation, minimum, maximum for continuous variables. Results are presented in tables with valid percents (some table are presented in chapter 7 and the others are places in the appendix), in figures in form of bar charts which supply valid percents or the mean, and for the continuous variable age in the figure in form of a box plot with whiskers.

Box plot with whiskers is a convenient way of graphically depicting groups of numerical data by their quartiles. The bottom and top of the box are the first and fourth quartiles, and the band inside the box consist of the second and third quartile (below and above the median), the ends of the whiskers represent the minimum and maximum of the data (Weiß 2010).

Different kinds of **bivariate and multifactorial analysis** were conducted to test of the relatonship between different variables.

To find the statistically significant association for nominal or ordinal data Pearson's **Chi-square** test was used. The Chi-square test for independence, also called Pearson's Chi-square test or the chi-square test of association, is used to find out whether there is a relationship between two categorical variables (Weiß 2010), e.g. the difference between the Russian women and men concerning smoking. The level of significance was set to 95% (p=0.05). The "no comment" cases and missing cases were excluded from the analysis. The results were presented in form of bar chart.

To find the statistically significant interaction between two independent (categorical) variables and their influence on one dependant variable (interval or ratio level) **two-factorial ANOVA** was used, e.g. influence of nationality and gender on the subjective current state of health and the interaction between gender and nationality. The level of significance was set to 95% (p=0.05). The results were presented in form of bar charts with estimated marginal means, which show the mean response for each factor, adjusted for any other variables in the model (Field 2009).

To investigate the difference between two independent groups (categorical binary variable) concerning one dependant normally distributed variable (ordinal or continuous) **independent t-test** was used. This test assumes that the difference between the samples is normality distributed, or that the variances of the two populations are equal. Between two groups of the same continuous, dependent variable it compares mean values (Weiß 2010). e.g. the difference between gender concerning BMI. The level of significance was set to 95% (p=0.05). The "not specified" cases were excluded from the analysis. The results in SPSS output are to be interpreted in the following way: if the p-value for the Levene's test for equality of variance is below "significance level", this implies that the variances cannot be assumed to be equal. Therefore, the value of t-test result is given in the row "Equal variances not assumed" (Field 2009).

To investigate the difference between two independent groups (categorical binary variable) concerning one dependant not normally distributed variable (ordinal or continuous) **Mann-Whitney U test** was used. The Mann-Whitney U test evaluates whether the medians or mean ranks of the dependent test variable differ significantly between two groups (Weiß 2010), e.g. difference between the women and men concerning frequency of alcohol consumption. The level of significance was set to 95% (p=0.05).

To measure the correlation between two ranked variables **Spearman's correlation** coefficient was used. This non parametric test based on ranks, can be used for ordinal, interval or ratio variables, e.g. correlation between age and self-efficacy. Spearman's correlation coefficient is a statistical measure of the strength of a monotonic relationship between paired data, it can take values from +1 (a perfect positive correlation) to -1 (a perfect negative correlation) (Weiß 2010). The level of significance was set to 95% (p=0.05).

7 Results

7.1 Demographic characteristics

Overall, data from 100 participants with Russian background (47 men and 53 women), aged between 60 and 91, were evaluated. The participants were born in former USSR (68%), Kazakhstan (13%), Ukraine (14%), Belorussia (4%) and Uzbekistan (1%).

The average age was 70.1 years with standard deviation (SD) 8.51 (Figure 1). Figure 1 illustrates the age of Sağlik participants with Russian, Turkish and Polish background and the members of the German control group in Hamburg. So, as can be seen, that the three groups (Russian, Polish and German) have a similar mean age about 70 years, and the participants from Turkish group are younger (their average age is 65.7 years). Overall, the Russian participants have the highest age in comparison to persons from other Sağlik groups: in the Turkish group there are no participants who are older than 80, in the Polish and German groups the percentage of these people is similar (12.6% and 13.9% accordingly).

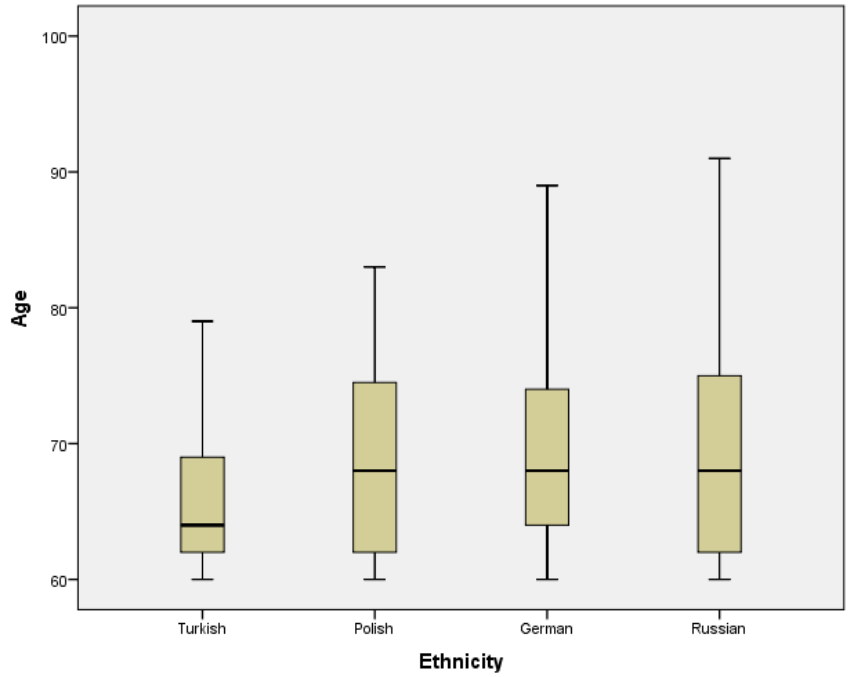


Figure 1. *Box plot of the age of the Sağlik participants with Russian, Turkish and Polish background, and of the members of the German control group in Hamburg.*

As can also be noticed, the age difference between men and women with Russian background is not significant: they both have the mean age of 70.1. The Turkish women a little younger than Turkish men: the average age of the Turkish women is 64.3 years, of the Turkish men is 66.9 years. The Polish women a little older than Polish men: their average age is 69.3 years, the average age of the Polish men is 68.4 years. The average age of men and women in German group is rather different (average age of men is 67.3 and of women is 72.1 years). The corresponding table is table 5 in the appendix.
Generally, all four groups have a relatively homogeneous age distribution, so it gives us the possibility to compare them.

Table 1 shows data about the country of birth and the arrival time of participants to Germany. As can be seen, the majority of people with Russian background (58.0 %) came to Germany between 1981 and 2000 (actually, they came between 1991 and 2000, after the dissolution of Soviet Union in 1991), the rest of them came after 2001. The Turkish and Polish participants live in Germany for a longer time, the first persons already came before 1960 (2.0 to 3.0 %). So, the majority of the Turkish group left their country of birth between 1961 and 1980 (87.0 %), the last participants came between 1981 and 2000. Most of the Polish participants left Poland between 1981 and 2000, but about one quarter of them already lived in Germany before 1980.

Table 1. *Country of birth and time of arrival to Germany of the Sağlik participants with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg.*

Ethnicity	Country of birth	Arrival to Germany, % of participants			
		1940-1960	1961-1980	1981-2000	2001-2013
Russian	USSR, Kazakhstan, Ukraine, Uzbekistan, Belorussia	0.0	0.0	58.0	42.0
Turkish	Turkey, Macedonia	2.4	84.6	13.0	0.0
Polish	Poland, Upper Silesia, Germany	2.9	26.2	68.9	1.9
German	Germany	n/s*	n/s*	n/s*	n/s*

*n/s – not specified

As can be seen, there were three different immigration epochs:

- 1961 - 1980 – epoch of Turkish immigration, only a little more than 10% came within the next 20 years
- 1981 - 2000 - epoch of Polish immigration, only about quarter of them came in the period 20 years before 1981 and nearly no one of them came before 1961
- epoch of Russian immigration from 1991 to 2010.

The participants were asked about their mother tongue. Only few participants (16.0 %) of the Russian group and one third (33.0 %) of the Polish group speak German as their mother tongue. The remaining Russian and Polish participants, as well as all Turkish interviewees (all of those have Turkish as their mother tongue) were asked about their German language skills. The answers are very subjective, therefore it is difficult to compare group results. Underestimation or overestimation of self-appraisal, which may be different for different ethnic groups, will certainly influence the answers. For the real evaluation of German knowledge the official test results could be more suitable. The majority of the Russian group rated their German language skills as “fair” and “poor” (41.7 % and 42.9 % accordingly) and only about 15% as “good” and “very good” (11.9% and 3.6% accordingly). This might be due to the fact that the participants of the Russian group came to Germany in the age 40 and older, so, their ability to learn foreign language was relatively reduced. In comparison to the Russian group, the majority of the Turkish participants evaluate their German skills as “fair” and “good” (62.0% and 19.0 % accordingly) and only 16% as “poor”. The Polish participants assess their German skills as “fair” and “good” (both answer are 37.1%) and nearly one quarter of them think of it as “very good”, the answer “poor” was given only by 7.9% of the Polish participants.

Table 2 informs about the desired place, where the Sağlik participants with Russian, Turkish, Polish background and the members of the German control group would like to live in the future. As can be seen, nearly three quarter of the Russian and German participants, as well as three fifths of the Polish and only one quarter of the Turkish interviewees would like to stay in Hamburg. More than one quarter of the Turkish and one sixth of the Polish interviewees would like to move back to the country of birth. About one fifth of Russian and Polish participants, as well as two fifths of the Turkish and one tenth of the German people would

like to live in Hamburg and in the country of birth or in other country. One sixth of the German interviewees, and even a small percentage of the Russian, and Polish participants would like to live somewhere else (in Spain, Thailand, Greece, Costa Rica, India, Turkey, or Bavaria).

Table 2. *Desired place for living in the future of the Sağlik participants with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg.*

Desired place for living in the future	Percentage of the participants			
	Ethnicity			
	Russian, %	Turkish, %	Polish, %	German, %
Hamburg	78.0	27.0	58.3	72.3
Country of birth (or other country before immigration)	0.0	28.0	16.5	0.0
Hamburg and country of birth (or other country before immigration)	19.0	42.0	18.4	9.9
Other place	3.0	0.0	6.8	15.8
No comment	0.0	3.0	0.0	2.0
Total	100.0	100.0	100.0	100.0

Table 3 gives the information about marital status and the living situation (alone or with other people) of the four Sağlik groups. The majority of all participants are married (59.0 % Russian, 53.0 % Turkish and 63.1 % Polish people), but only 38.6 % German interviewees have a spouse. One third of the Russian, one third of the Polish and one third of the German participants are widows or widowers, and only 14% of the Turkish participants are widowed. The Turkish group has the highest percentage of persons, who live in non-marital partnership (18.0%), the corresponding percentage of the German group is 12.9 %. For Russian and Polish participants this percentage is very low (3.0 % and 1.0 % accordingly). The German group has the highest percentage of people, who live alone (about one half of all), the corresponding percentage of the Russian group is also high (more than one third). Nearly one third of Turkish participants live together with other persons (29.0%), such as children, grandchildren, parents and friends. For the other groups this percentage is very low (1.0% for the Russian, 7.8% for the Polish and 3.0% for the German group).

Table 3. *Marital status and living situation of the Sağlik participants with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg.*

	Marital status, %						Living situation, %		
Ethnicity	single	living in non-marital partnership	married	living separated from partner	divorced	widowed	alone	with partner	with other person
Russian	0.0	3.0	59.0	0.0	7.0	31.0	38.0	61.0	1.0
Turkish	3.0	18.0	53.0	2.0	10.0	14.0	16.0	55.0	29.0
Polish	0.0	1.0	63.1	1.0	4.9	30.1	29.1	63.1	7.8
German	5.0	12.9	38.6	2.0	8.9	32.7	48.5	48.5	3.0

94.0% of the Russian, 99.0% of the Turkish, 91.3% of the Polish and 78.2% of the German interviewees have children. Figure 2 illustrates the number of children of the Sağlik participants with Russian, Turkish and Polish background, and the members of the German control group in Hamburg. Two fifths of the Russian participants have one child and more than one half of them have two children. Only a small number of them have three or more children (7.4%). The Turkish interviewees have the more children, than the participants of the other groups. Only one quarter of the Turkish interviewees have one or two children, two fifths have three children, and the rest have even four and more children. Nearly one third of the Polish and German participants have one child, a little more than two fifths of them have two children, and about one quarter of them have three and more children.

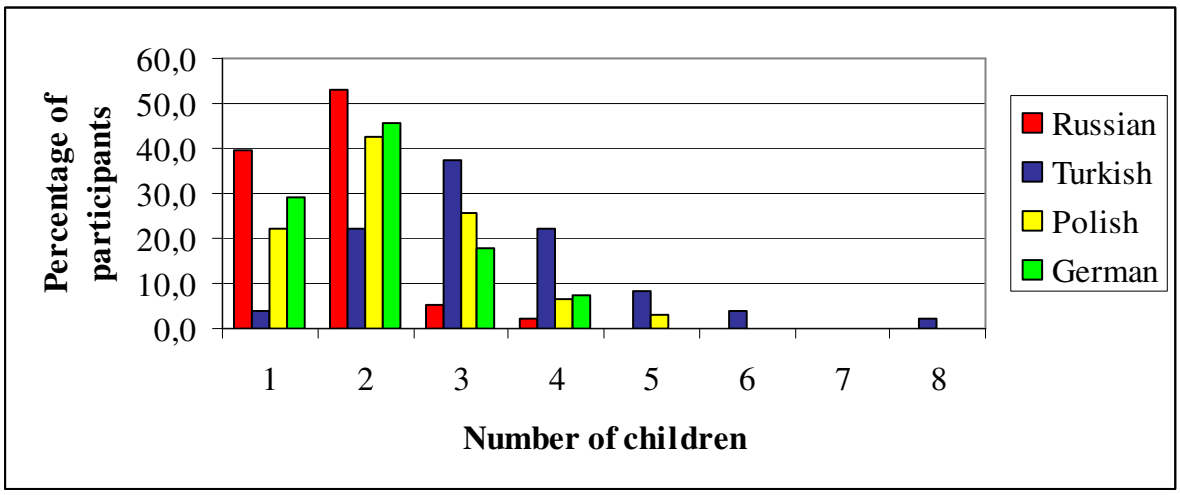


Figure 2. *Number of children of the Sağlik participants with Russian, Turkish and Polish background , and of the members of the German control group in Hamburg.*

The data about religious denomination (table 4) show that most of the Russian interviewees are atheists (42.0%). This may be due to the influence of living in the former Soviet Union. The majority of remaining Russian participants are Russian Orthodox (35.0%), but there are also Jewish (16.0%), Catholics (4.0 %) and Protestants (3.0%). All of the Turkish participants are Muslims. The majority of the Polish interviewees are Catholics (94.2%). Most of the German participants and Protestants (65.3%), about one quarter of them are atheists and some are Catholics (8.9%).

Table 4. *Religious denomination of the Sağlik participants with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg.*

	Religious denomination, %						
Ethnicity	**atheist**	**Muslim**	**Catholic**	**Protestant**	**Russian Orthodox**	**Jewish**	**No comment**
Russian	42.0	0.0	4.0	3.0	35.0	16.0	0.0
Turkish	0.0	100.0	0.0	0.0	0.0	0.0	0.0
Polish	3.9	0.0	94.1	1.0	0.0	0.0	1.0
German	24.8	1.0	8.9	65.3	0.0	0.0	0.0

7.2 Determinant for social inequality: socioeconomic status

7.2.1 Educational level

Figure 3 gives the information about school education in the four groups. This information is difficult to evaluate because of the differences between the education systems in the four countries involved. So, in the former USSR the school education system consisted of three basic elements: primary school (3 years), incomplete secondary school (8 years) and complete secondary school (10 years). After the incomplete secondary school students could complete their education in a technical or other professional school. Students, who had completed secondary school, could go on studying at certain institutes (college) or at a university to get a higher education (tertiary education).

Nearly four fifths of the Russian participants attended school for 10 years (84.9% of women and 72.0% of men) and the remaining one fifth of them went to school for 6 to 8 years. There was nobody in this group with less than six years of school.

A similar situation can be observed in the Polish group: there is also a high percentage of persons, who attended school for more than 9 years (three quarter of all Polish participants), the remaining participants went to school at least for six to eight years. In this group find a high percentage of persons, who went to school for more than 12 years (58.8% of men and 39.1% of women).

Most of the participants of the German group also attended school for more than six years (about 40% both for 6 to 8 years and for 9 to 11 years) and about 10% learned more than 12 years.

On the other hand, the majority of the participants of the Turkish group only have a poor school education. More than half of them attended school only for one to five years, and 11.0 % of the Turkish participants did not go to school at all (14.8% of women and 6.5% of men). Only one third of Turkish interviewees went to school more than 6 years (26.0 % of women and 43.4% of men). As can be seen, there is a considerable difference between Turkish men and women. More details can be found in table 6 in the appendix.

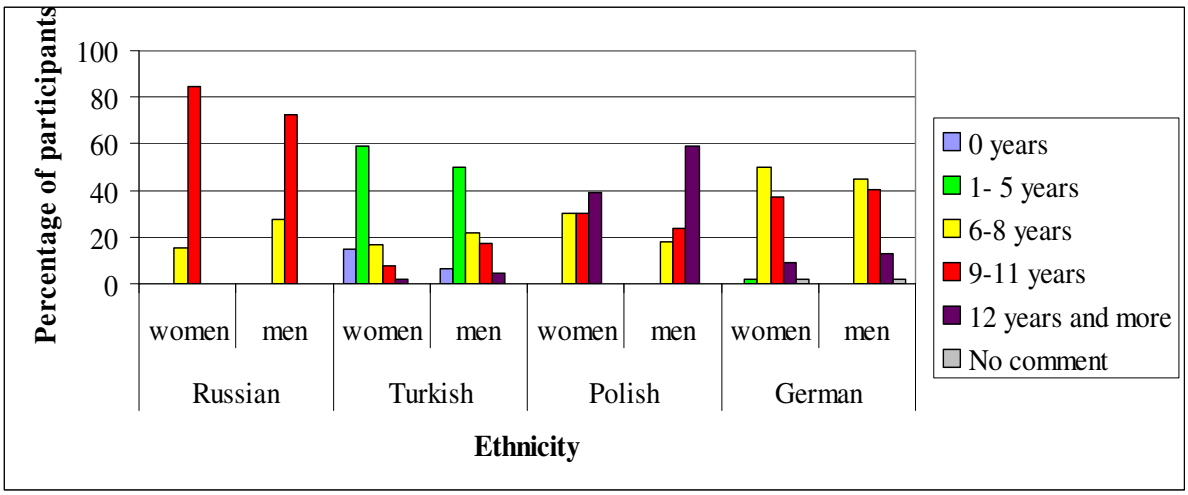


Figure 3. *School education by men and women of the Sağlik project with Russian, Turkish, Polish background, and the members of the German control group in Hamburg.*

Figure 4 and - in more detail - table 7 in the appendix illustrates the next level of education or professional training after finishing school (tertiary education). As can be seen, that nearly three quarters of the Russian participants got a higher education at a special institute or university, one quarter of them finished a technical or other professional school or received vocational training. Only a small percentage of the Russian interviewees have no professional degree.

On the other hand, three fifths of the participants of the Turkish group have no professional degree (without gender difference) and only 10% received some vocational training (15.2% of the men and 5.6% of the women).

Nearly 60% of the Polish interviewees had some vocational training or finished a technical or other professional school. One fifth of the Polish women have no professional degree and at the same time there are no men without professional degree. The percentage of men, who attended a technical or other professional school, is two times higher than that of women. About one quarter of the Polish interviewees have a college or university degree.

The majority of the German participants have only some vocational training (72.3% of men and 59.3% of women). There is also a high percentage of people without a professional degree with a notable gender difference (33.3% of women and 8.5% of men). Only 3.8% of the women and 10.6% of the men in this group have a college or university degree.

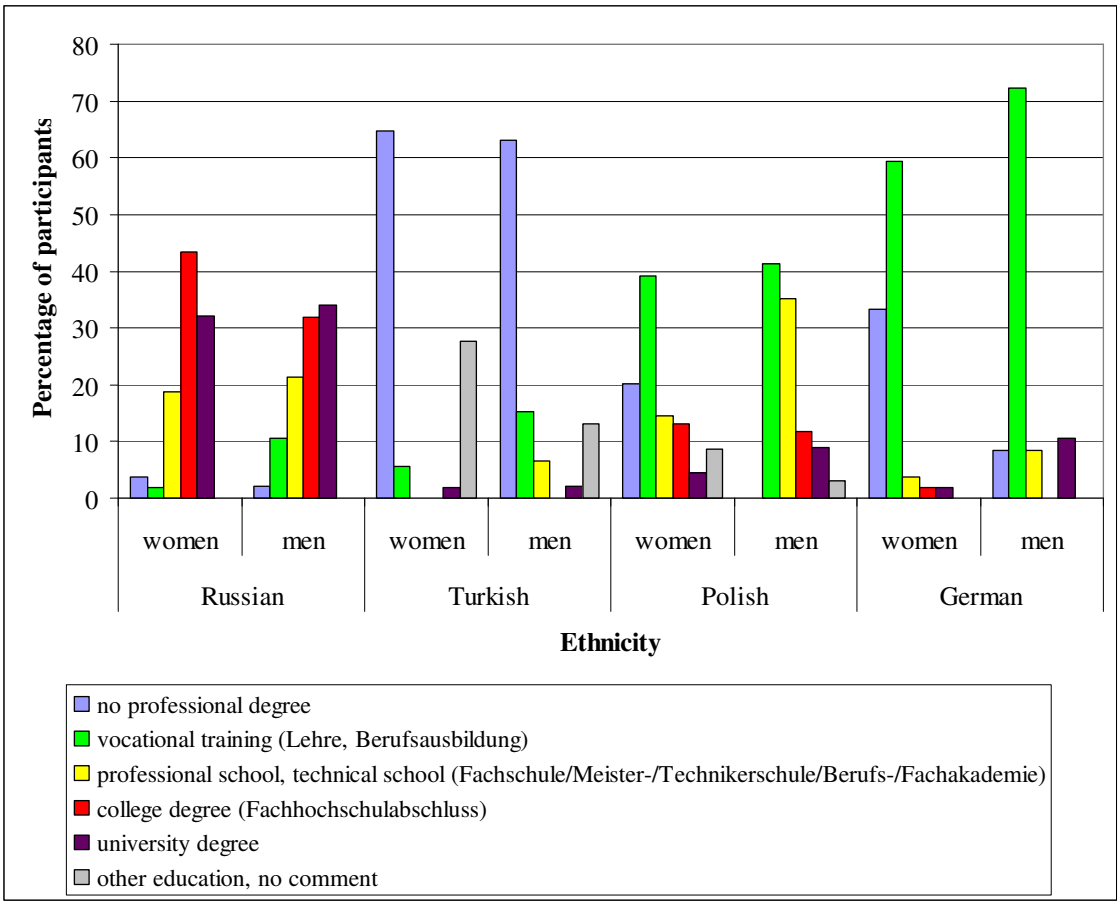


Figure 4. *Professional /higher school/ postgraduate (tertiary) education of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg.*

7.2.2 Professional level

The Russian women worked in the former USSR in the following branches: production (18.9% as engineers, a small percentage as chemists and mathematicians), public health (as physicians, nurses, hospital attendants, and altogether 5.7%), education (15.1% as teachers). In Germany they worked or work now as office-cleaner (17.0%), office staff (7.5% of all Russian women), housemaids (7.5%), public health employees (nurses, hospital attendants, altogether 5.7%).

The Russian men worked in Russia in the production field as engineers (19.1%) and in education (4.3%). In Germany the majority of them worked or work now as common labor: unskilled workmen (25.5%), technical workers: electrician, metalworker, welder, joiner (altogether 19.1%), drivers (8.5%), and only 10.6% worked or work now in Germany according to their higher education (as programmer, physicist, musician, artist).

All Russian participants with higher education had in former USSR jobs with higher qualification requirements. And only 26.7% of the Russian participants with higher education had in Germany corresponding jobs with higher qualification requirements. All Russian participants without higher education have in Germany job with low or middle qualification requirements. The more detailed data are shown in the table 7a in the appendix.

This discrepancy between their education from Russia and the working place in Germany can only to a small degree be ascribed to the fact that they came to Germany when they were already old and did not have sufficient knowledge of German. Mostly it is due to the fact, that their Russian certificates often are not accepted by German authorities.

The professional level of the other Sağlik participants mainly correspond to their educational level: the Turkish, Polish and German participants who have low, middle and high education had in Germany corresponding job with low, middle and high qualification requirements.

Figure 5 informs about the employment rate of Sağlik participants. Nearly one quarter of the Russian and Polish participants and about 14 to 16 % of the Turkish and German interviewees have a job. The percentage of working men is higher than that of working women in the Russian (29.8% of the men and 18.9% of the women are employed), Polish (32.4% of the men and 18.8% of the women are employed) and German groups (19.1% of the men and 9.3% of the women are employed), but in the Turkish group the percentages for working men is a little lower than it for women (15.2% of the men and 16.7% of the women

are employed). The main reason for not working for all four groups is the pension: old age pension, early retirement pension, and disability pension (76.7% to 90.0%). Another reason for not working is staying at home as a housewife. The percentage of participants, who work full-time in their households, is higher in the Turkish group than in the other groups (12.8% of the Turkish, 6.3% of the Polish, 4.4% of the German participants, nobody from the Russian group). Unemployment is another reason for not working. The Russian group has the highest percentage of unemployed person (10.5%), for the other groups this percentage is only about one to four %. More details are given in table 8 in the appendix.

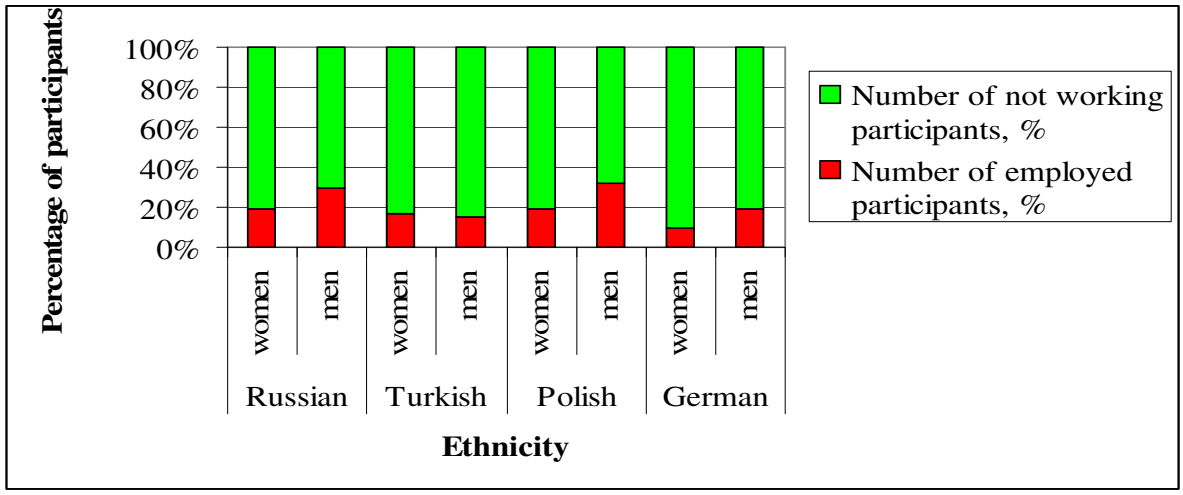


Figure 5. *Employment rate of the Sağlik participants with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg.*

7.2.3 Individual income

Figure 6 gives the information about the individual income by men and women from Sağlik project with Russian, Turkish, Polish background, and the members of the German control group in Hamburg. The interpretation of this information can not be very reliable because some people (especially a lot of the Russian participants) did not include the social benefits (for instance, housing benefits) in their individual income.

So, it is conspicuous, that the individual income of the majority of the Russian participants is lower than 500 euros (86.8% of women and 72.3% of men). The individual income lower than 500 euros have also 22.2% of the Turkish women, 2.2% of the Turkish men, 30.4 % of the Polish women, 2.9 % of the Polish men, 27.8% of the German women and 14.9% f the German men.

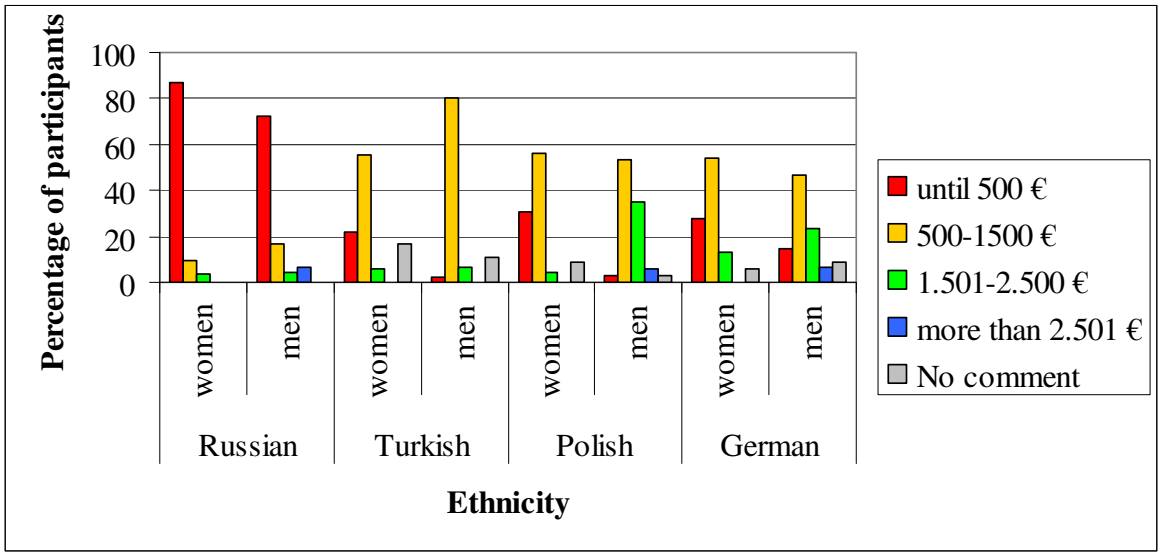


Figure 6. *Individual income of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg.*

The Turkish participants have the highest percentage of those, who have an individual income between 500 and 1500 euros with large gender difference (55.6% of the women and 80.4% of the men), only one half of the Polish and German participants, as well as 9.4% of the Russian women and 17.0% of the Russian men have a similar income. 17.8% of the German interviewees (13% of the women and 23.4% of the men) and 14.6 % of the Polish participants (4.3% of women and 35.3% of men) have their individual income between 1501 and 2500 euro. For the other groups is this percentage very low. The precise information can be seen in table 9 in the appendix.

The majority of the participants live in rented apartments (99.0 % of the Russian, 95.0 % of the Turkish, 83.2 of the German and 77.7 % of the Polish people). Only a small percentage of the interviewees live in rented houses (about 1-2 % of the German, Turkish, Polish and none of the Russian participants). A small percentage of the interviewees (5.0 % of the German, 2.0 % of the Turkish, 1.0 % of the Polish and none of the Russian participants) live in their own apartments. Some participants have their own houses (18.4 % of the Polish, 10.9 % of the German, 1.0 % of the Russian and Turkish participants).

7.3 Determinants for social resources

As explained in the chapter 5.3., social resources, coping strategies and social integration were investigated by the health determinants “social networking”, which includes social contacts, getting help in household, outside the home and with the basic activities of daily living, social support; and “self efficacy”.

7.3.1 Social networking

7.3.1.1 Frequency of social contacts

Figure 7 and - in more detail - table 10 in the appendix show information about personal social contacts of men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg.

About two thirds of the Russian, two thirds of the Turkish, and two thirds of the Polish interviewees, as well as one half of the German participants have a daily contact with their partners. Nearly one fifth of the Russian, three fifths of the Turkish, one third of the Polish, and only a small percentage (6.9%) of the German participants see their children every day. About one half of Russian, one half of Polish, and one half of German interviewees have a contact with their children weekly or monthly.

Nearly two fifths of all participants have a weekly or monthly contact with their grand children, and about one quarter of the Turkish people see their grand children every day. This percentage for other groups is noticeably lower: between two and ten percent. A little more than one tenth of the Turkish, a little more than one tenth of the German participants, and only small percentage of the Russian and Polish interviewees have contact with their parents more often than once a month, if they have any. About one quarter of the Russian, one quarter of the German, one half of the Turkish, and one quarter of the Polish participants communicate with other relatives weekly or monthly.

About 10 to 15% of the Russians, the similar percentage of the Turkish and Polish respondents, as well as 5% of the German interviewees meet their friends every day. The majority of all groups see their friends weekly or monthly. More than one quarter of the Polish and more than one quarter of the German interviewees communicate with their neighbors every day. The corresponding percentage for Turkish and Russian participants is lower (14.0 and 3.0% accordingly), but nearly one half of them see their neighbors weekly or monthly.

A little more than one fifth of the Russian interviewees see their work colleges (inclusive the former colleges) every day. The corresponding percentage for the other groups is noticeably lower: between three and seven percent. But nearly one quarter of the Turkish, about one seventh of the Polish, and about one seventh of the German participants have a weekly or monthly contact with their work colleges. Almost one half of the Russian, nearly one third of the German, one quarter of the Polish, and one sixth of the Turkish interviewees contact your community members monthly or more often. About two fifths of the Russian, one third of the German, one quarter of the Polish, and only one eighth of the Turkish participants contact the guests of the meeting points monthly or more often. Three quarter of the Polish, two fifths of the Turkish and about one fifth of the Russian, and about one fifth of the German participants contact the visitors of the church monthly or more often.

Figure 7 summarized information about the frequency of personal social contacts per week by men and women of the Sağlik project. The Turkish men have the highest frequency of contact with relatives (about fourteen times a week), tan the other respondents. The Turkish women and the Polish men meet their relatives nearly ten times a week. The Polish women, the Russian women and men, as well as the German men meet their relatives nearly eight times a week. The German women meet their relatives only four times a week. A two-factorial ANOVA found a highly significant difference regarding to contacts with relatives between the four nationalities ($F (3/396) = 21.77$; $p = 0.000$), as well as highly significant difference between genders: the Turkish, Polish and German men have more contacts with relatives than the corresponding women, except of the Russian men, who have similar contacts with relatives compared to the Russian women ($F (1/396) = 10.69$; $p = 0.001$). The interaction between gender and nationality did not attain significance ($F (3/396) = 1.91$; $p = 0.127$).

All participants meet their friends about three or four times a week. A two-factorial ANOVA did not find a significant difference regarding to contacts with friends between the four nationalities ($F (3/396) = 1.05$; $p = 0.370$), as well as between genders ($F (1/396) = 0.30$; $p = 0.587$). The interaction between gender and nationality also did not attain significance ($F (3/396) = 0.14$; $p = 0.937$).

The Russian women and the Turkish men have the highest frequency of contacts with their community (about five times a week) compared to the other participants. The Russian men, the Polish men, and the Polish women meet their community members nearly four times a

week. The German participants have contact with their community about three times a week. The Turkish women have the poorest contact with their community (about two times a week) compared to the other respondents. A two-factorial ANOVA found a significant difference concerning contacts with the community between the four nationalities ($F (3/396) = 3.19$; $p = 0.024$). The difference between genders is not significant ($F (1/396) = 2.05$; $p = 0.153$). The interaction between gender and nationality attains significance ($F (3/396) = 4.43$; $p = 0.004$).

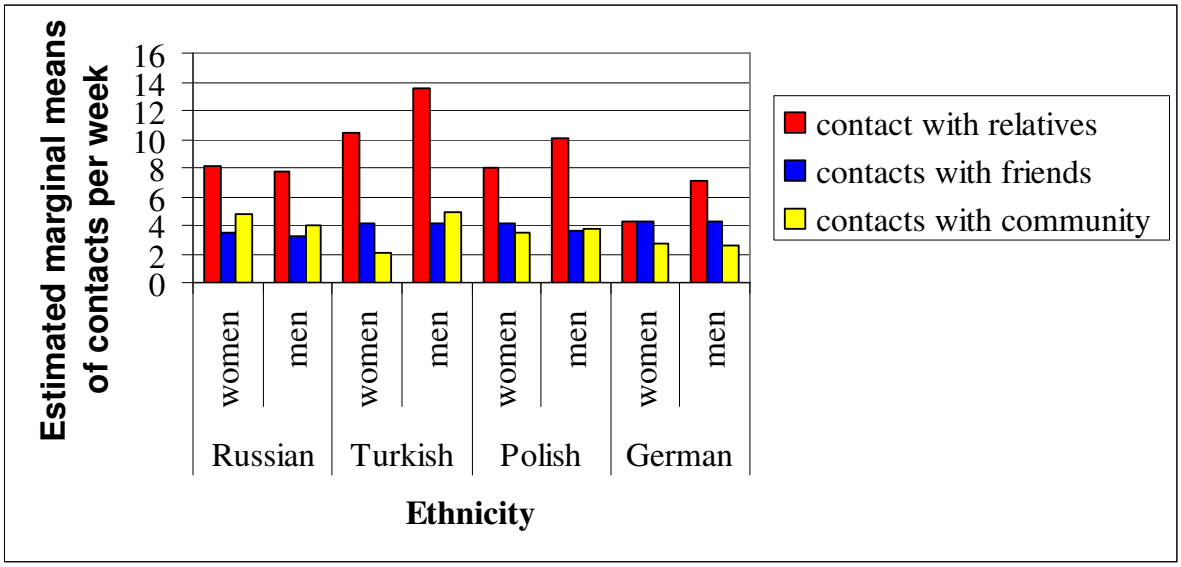


Figure 7. *Estimated marginal means of personal social contacts per week of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

The data of all social contacts (contacts with relatives, friends, and community) shows, that the Turkish men have the highest social contacts (about twenty two times a week) compared to the other respondents. The Turkish and the Polish women, the Polish men and the Russian women have social contacts about seventeen times a week. The Russian and the German men have social contacts about fifteen times a week. The German women have only about eleven social contacts per week.

A two-factorial ANOVA found a highly significant difference regarding to all contacts between the four nationalities ($F (3/396) = 12.30$; $p = 0.000$), as well as significant difference between genders: the Turkish, Polish and German men have more contacts than the corresponding women, except the Russian men, who have less social contacts than Russian

women (F (1/396) = 6.88; p = 0.009). The interaction between gender and nationality also attained significance (F (3/396) = 3.30; p = 0.020).

7.3.1.2 Spare time activity

Figure 8 and - in more detail - table 11 in the appendix shows the information about spare time activity of the Sağlik participants with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg.

As can be seen, nearly one half of the Russian participants pursue their hobby and one sixth of them meet their fiends every day. One quarter of the Turkish interviewees meet their fiends every day, small percentage of them pursue their hobby and visit the church services every day. One sixth of the Polish participants pursue their hobby, a small percentage of them meet their fiends and visit the church services every day. And only a small part of the German interviewees meet their fiends and pursue their hobby every day. The majority of all participants see their friends weekly or monthly. About two fifths of the Russian, two fifths of the Polish, two fifths of the German interviewees, and only one sixth of the Turkish people pursue their hobby weekly or monthly. Three fifths of the German, one half of the Turkish, only about one quarter of the Russian, and about one quarter of Polish participants visit a restaurant or café more often than ones a month, the remaining people visit it rarely or never. About one quarter of the Russian, one ninth of the Turkish, and only a small percentage of the Polish and German participants visit some courses and do it weekly or monthly. Nearly one fifths of the Russian, one fifths of the German interviewees, a little more than one half of the Turkish, and a little more than one half of Polish participants visit church services more often than once a month. One third of the Turkish participants and only one tenth of other interviewees help the neighbors more often, than monthly. The majority of the Russian participants (about two fifths of them), only one eighth of the German, and a small percentage of the Polish and Turkish participants visit cultural arrangements (concerts, theatre, cinema etc) every week or every month. Nearly one third of the Russians, one third of the German people, one seventh of the Turkish, and one seventh of the Polish participants visit senior meeting points weekly or monthly. One quarter of the Russians, one eighth of the German interviewees, only a small percentage of the Turkish and Polish participants visit a library weekly or monthly. Only a small percentage of all respondents participate in some political arrangements weekly or monthly.

Figure 8 illustrates differences in spare time activity which was doing alone and with other people per week by men and women from Sağlik project.

As can be seen, the Russian participants spend their spare time alone about three or four times a week. It is more often than the other participants do. The Polish participants spend their spare time alone about one or two times a week, the Turkish and German interviewees spend their spare time alone about one times a week. A two-factorial ANOVA found a highly significant difference concerning spare time activity which was doing alone between the four nationalities ($F (3/396) = 36.42$; $p = 0.000$). The difference between genders did not attain significance ($F (1/396) = 0.153$; $p = 0.696$). The interaction between gender and nationality also did not attain significance ($F (3/396) = 1.48$; $p = 0.219$).

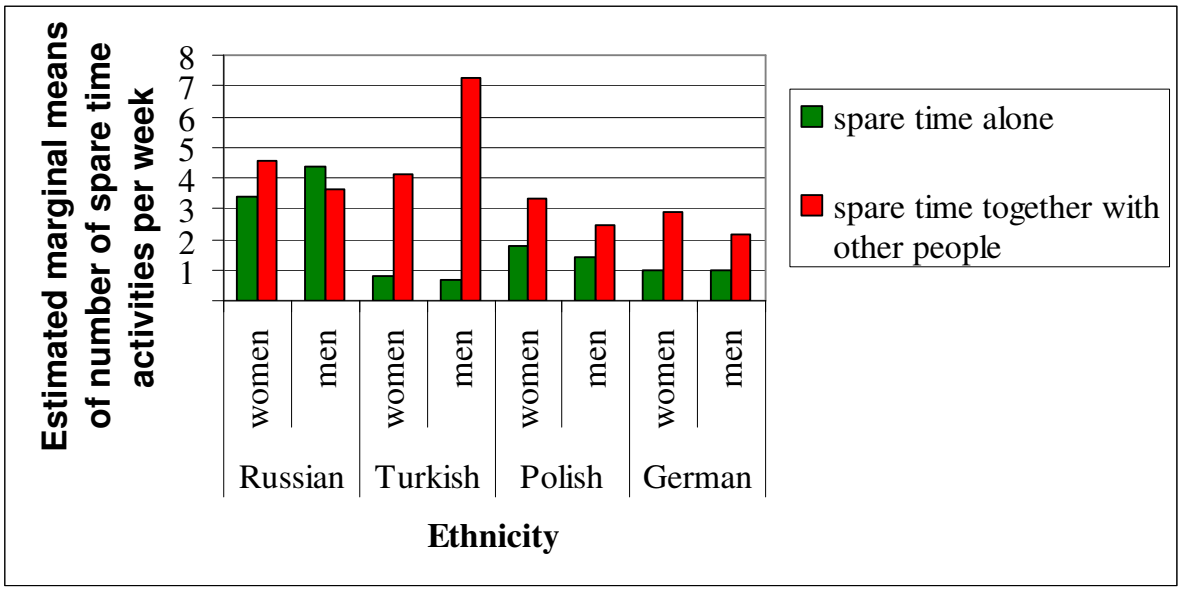


Figure 8. *Estimated marginal means of number of spare time activities per week of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

The Turkish men have the highest frequency of spare time activities, which they do together with other people (they do it, on the average, every day) compared to the other participants. The Russian participants and the Turkish women spend their spare time together with other people about four times a week. The remaining participants have this kind of activity about two or three times a week. Generally, the Russian, Polish and German women spend their spare time with other people more often than the corresponding men, except the Turkish women. A two-factorial ANOVA found a highly significant difference concerning team

activity between the four nationalities (F (3/396) = 16.25; p = 0.000). The difference between genders did not attain significance (F (1/396) = 0.209; p = 0.648). The interaction between gender and nationality attained significance (F (3/396) = 7.72; p = 0.000).

Generally, it can be seen, that the majority of the participants spend their spare time together with other people more often than alone, except of the Russian men: they spend more often their spare time alone.

7.3.1.3 Help in household, outside the home and with the basic activities of daily living

7.3.1.4 Figure 9, 10 - in more detail - table 12 in the appendix illustrate the information about getting help in household, outside the home, help with the basic activities of daily living**,** and the need in help of the Sağlik participants.

One half of the Russian women and two fifths of the Russian men get help in household. The Polish participants have the highest percentage of those, who get help in household (82.4% of the men and 62.3% of the women) compared to the other respondents. More than one half of the German women, less than three fifths of the German men, one quarter of the Turkish women, and about one third of the Turkish men get help in household. Nearly one half of the Russian, one half of the Turkish, one half of the German, and three fifths of the Polish participants get help in household from their partner. About one third of all interviewees get help in household from their children. About one quarter of the Russian participants get this help from professional staff. The remaining participants get some help from their neighbors and friends.

About one third of all Russian participants, one third of Polish women, one quarter of the Turkish, one quarter of the German women, two fifths of the Turkish men, one sixth of the Polish men, and only small percentage of the German men get help outside their home. Two fifths of the Russian, about one third of the Turkish, one third of the Polish, and one fifth of the German participants get help outside their home from their partner. About three fifths of all interviewees get help outside their home from their children. The remaining participants get some help from their neighbors and friends.

About one eighth of all Russian participants, one sixth of the Turkish women, two fifths of the Turkish men, and only small percentage of the Polish and German interviewees get help with the basic activities of daily living care. They get it from their partners and children.

The figure 9 shows the information about getting accumulating help in household, outside the home and with the basic activities of daily living of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg. There is a significant difference between the women within four ethnic groups (Chi-Square = 12.9; df = 3; p = 0.005) and between men within four ethnic groups (Chi-Square = 18.9; df = 3; p = 0.000). So, the Turkish women get more help (about 70 %) than the Russian and German women (both about one half) and the Polish women (about one third). The Russian men get more help than the men of the other groups. So, about 60 % of the Russian men, one half of the Turkish, one third of the German and one fifth of the Polish men get help in household, outside the home and with the basic activities of daily living. But there is no significant gender difference between women and men. So, Chi-Square = 1.6; df = 1; p = 0.205 between the Russian women and men, Chi-Square = 3.5; df = 1; p = 0.060 between the Turkish women and men, Chi-Square = 3.7; df = 1; p = 0.052 between the Polish women and men, and Chi-Square = 2.2; df = 1; p = 0.140 between the German women and men.

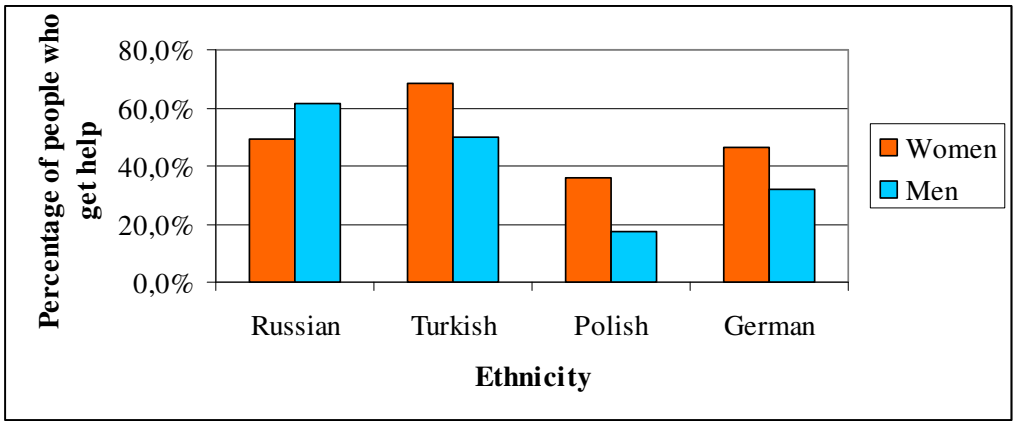


Figure 9. *Getting help in household, outside the home and with the basic activities of daily living of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

The figure 10 and - in more detail - table 12 in the appendix show the information about needed help and support by the Sağlik participants in their everyday life, compared to what they currently have.

As can be seen, 10 to 23% of the respondents need additional help. The Russian interviewees generally need less help than the participants of the other groups. It was also noticed, that all participants with migration background who already get help need more help compared to corresponding respondents who get no help. But the difference between the four nationalities is not significant: Chi-Square = 2.6; df = 3; p = 0.447.

There is also no significant difference between the participants, who already get help and who get no help within four ethnic groups. So, Chi-Square = 0.3; df = 1; p = 0.611 between the Russian participants, Chi-Square = 0.8; df = 1; p = 0.362 between the Turkish participants, Chi-Square = 0.1; df = 1; p = 0.717 between the Polish participants, and Chi-Square = 0.4; df = 1; p = 0.509 between the German participants.

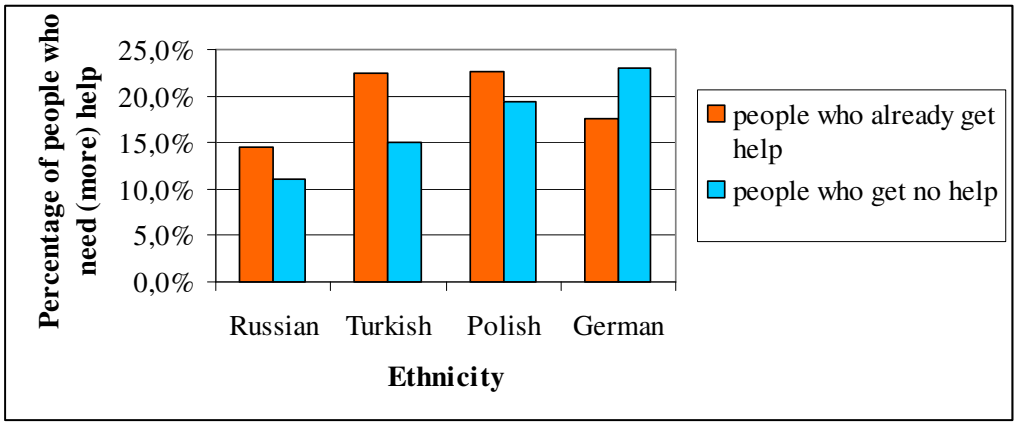


Figure 10. *Need in help of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

7.3.1.5 Social support

Figure 11 illustrates the information about social support of the men and women of the Sağlik project.

As it can be seen, social support of the Turkish participants is higher than it of the other participants: the Turkish participants they get exactly corresponding support of their friends and relatives. The lowest social support get the Polish men: they get partly corresponding support of their friends and relatives. The Russians, the German participants, and the Polish women get a corresponding support. A two-factorial ANOVA found a highly significant difference concerning social support between the four nationalities (F (3/396) = 19.08; p = 0.000). The difference between genders is not significant F (1/396) = 1.68; p = 0.199). The

interaction between gender and nationality also did not attain significance (F (3/396) = 1.92; p = 0.125).

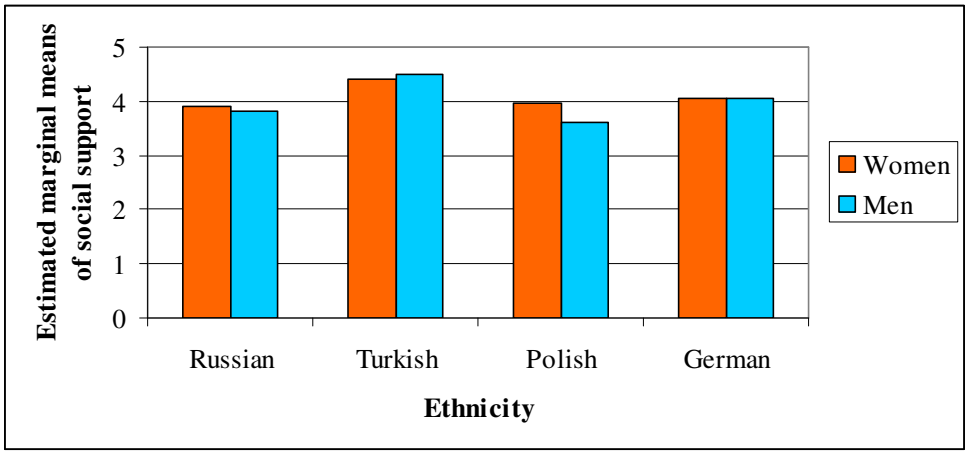


Figure 11. *Estimated marginal means of social support of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

5 - "it is exactly right" (high support), 4 - "it is right", 3 -"it is partly right", 2 -"it is rather not right", 1 - "it is not right" (no support)

7.3.2 General self-efficacy

Figure 12 illustrates the information about general self-efficacy of the men and women of the Sağlik project.

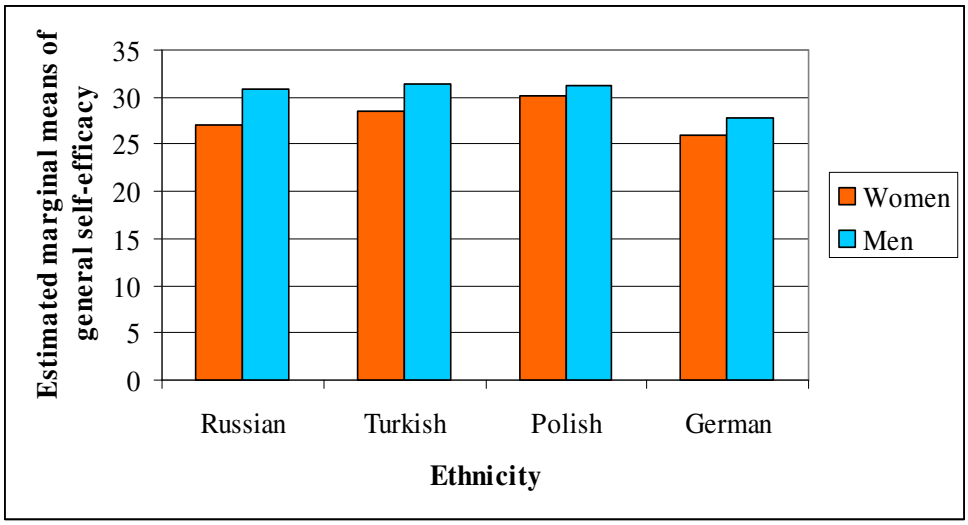


Figure 12. *Estimated marginal means of general self-efficacy of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

As it can be seen, GSE of the Russian, Turkish and Polish participants is higher than that of the German participants. A two-factorial ANOVA found a highly significant difference concerning GSE between the four nationalities (F (3/396) = 8.23; p = 0.000), as well as between genders (F (1/396) = 17.73; p = 0.000): the men generally have higher GSE than the women. The interaction between gender and nationality did not attain significance (F (3/396) = 1.10; p = 0.346).

7.4 Determinants for health behavior

As explained in the chapter 5.3., as determinants of health behavior were investigated the following factors: tobacco consumption, alcohol consumption, physical activity, nutrition and eating behavior, and BMI.

7.4.1 Tobacco consumption

The figure 13 and - in more detail - table 13 in the appendix illustrate the smoking habits of the Sağlik participants. About one quarter of the Russian and Turkish interviewees, a little less than one third of the German and only about one sixth of the Polish participants are smokers.

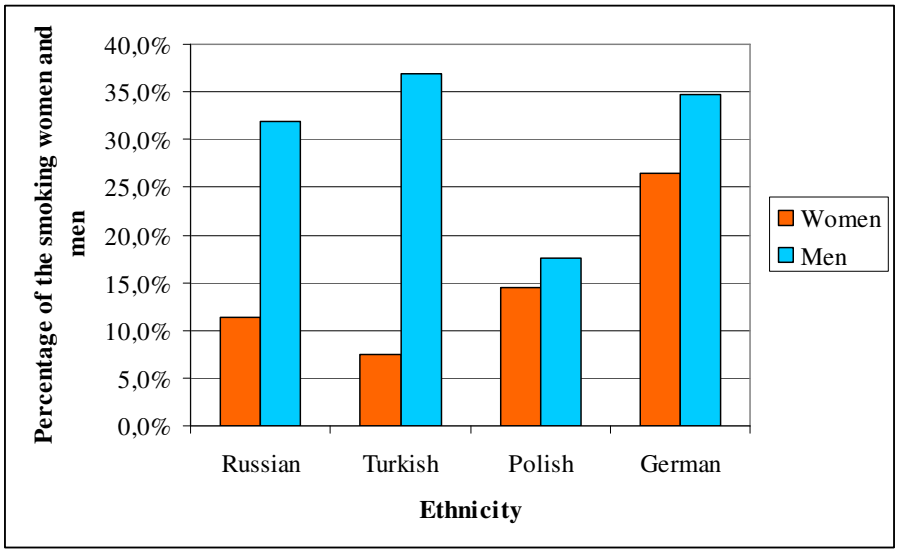


Figure 13. *Smoking rate of men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

There is a significant gender difference as to smoking between the Russian women and men (Chi-square = 6.4; df = 1; p = 0.012) and the Turkish women and men (Chi-square = 12.7; df

= 1; p = 0.000). The gender difference between the Polish women and men (Chi-square = 0.173; df = 1; p = 0.678) as well as between the German women and men (Chi-square = 0.816; df = 1; p = 0.366) is not significant. There is also a significant difference between the four ethnic groups as to percentage of smoking women (Chi-square = 8.3; df = 3; p = 0.039), whereas the respective difference concerning the smoking men is not significant (Chi-square = 3.9; df = 3; p = 0.272).

7.4.2 Alcohol consumption

About one half of the Russian and about one half of the Polish participants, two thirds of the German and nearly all Turkish interviewees consume alcohol less than once a month. More than one third of the Russian participants, about one quarter of the Polish and German respondents and only a few Turkish interviewees consume alcohol two to four times per month. Only a small percentage of all participants consume alcohol more often than two to three times per week (15.0% of Russian, 4.0% of Turkish, 18.5% of Polish and 14.9% of German interviewees). The precise information is given in table 14 in the appendix.

If one looks at figure 14 and compare the frequency of alcohol consumption of the four groups it is conspicuous that the Turkish interviewees drink alcohol much more seldom than the other participants, for they drink alcoholic beverage only once a month or even less. The participants of the remaining groups consume alcohol on an average of two to four times a month.

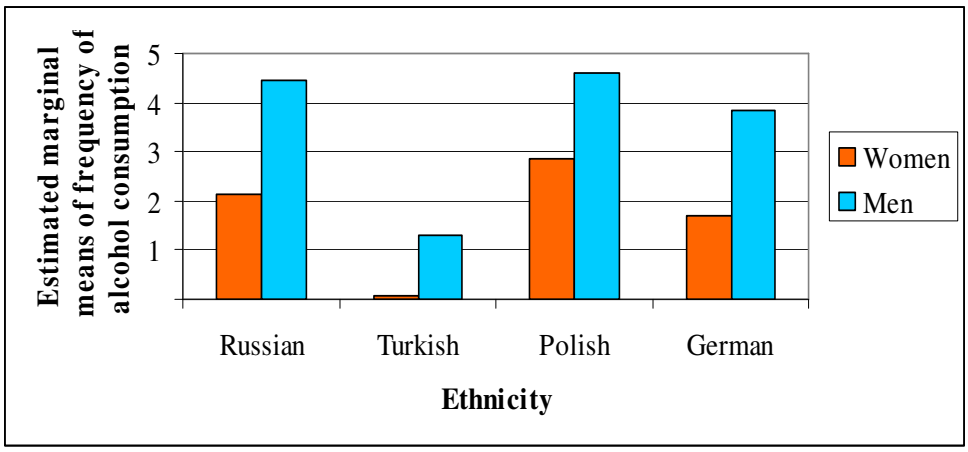


Figure 14. *Estimated marginal means of frequency of alcohol consumption per month by the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

A two-factorial ANOVA found a highly significant difference between the four nationalities (F (3/396) = 14.05; p = 0.000) and between genders (F (1/396) = 26.7; p = 0.000). Figure 14 also shows that the women reported consistently lower alcohol consumption than men. The interaction between gender and nationality did not attain significance (F (3/396) = 0.44; p = 0.726).

7.4.3 Regular physical activity

As can be seen from the figure 15 and - in more detail - table 15 in the appendix, more than one half of the Russian and more than one half of the Polish interviewees as well as one half of the German participants and only about one quarter of the Turkish people usually do some sports or physical activity.

Separated for gender there is a highly significant difference between the four ethnic groups, for women (Chi-square = 21.7; df = 3; p = 0.000) and men (Chi-square = 10.2; df = 3; p = 0.017). There is no significant gender difference concerning physical activity for any of the four ethnic groups (for the Russian men and women Chi-square = 2.273; df = 1; p = 0.132, for the Turkish men and women Chi-square = 0.069; df = 1; p = 0.793, for the Polish men and women Chi-square = 0.052; df = 1; p = 0.819, for the German men and women Chi-square = 0.818; df = 1; p = 0.366).

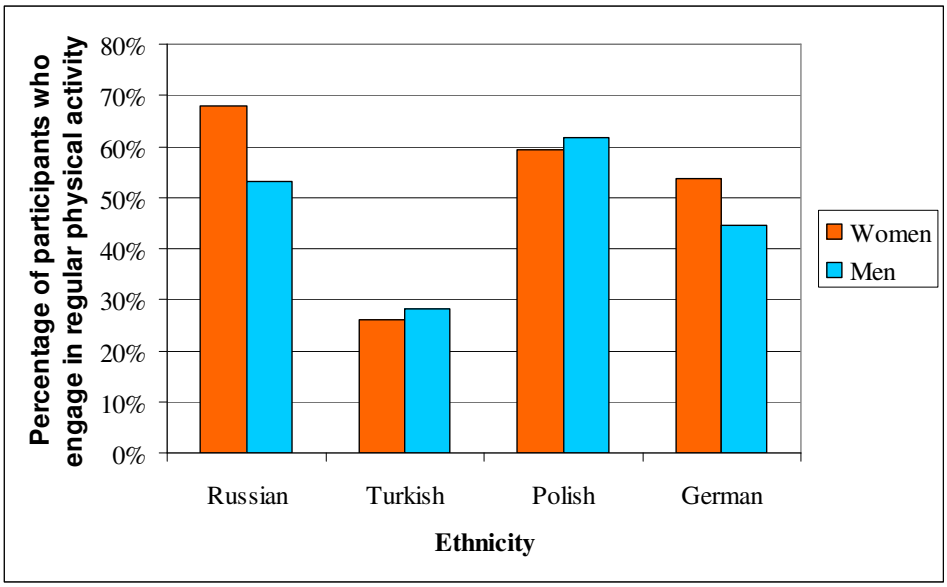


Figure 15. *Percentage of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg who engage in regular physical activities.*

Gymnastics, jogging, cycling, walking and swimming were mentioned by the Sağlik participants as the most frequent types of physical activity.

The data about **attention to sufficient physical activity** between four groups from the figure 16 show, that the Turkish and Russian interviewees pay less attention to the sufficient physical activity (they both pay moderate or little attention) than the Polish and German participants (they both pay moderate or strong attention to the sufficient physical activity). A two-factorial ANOVA found a highly significant difference between the four nationalities ($F(3/396) = 8.8$; $p = 0.000$), but not between genders ($F(1/396) = 0.74$; $p = 0.389$). The interaction between gender and nationality also did not attain significance ($F(3/396) = 0.12$; $p = 0.947$).

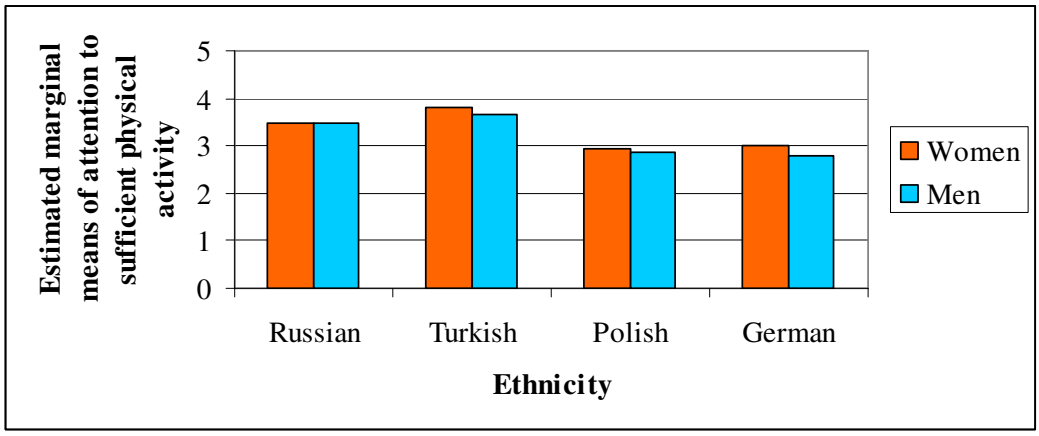


Figure 16. *Estimated marginal means of paying attention to sufficient physical activity of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*
1 = very strong, 2 = strong, 3 = moderate, 4 = little, 5 = not at all.

Table 16 in appendix show more detailed data. So, more than one third of the German and Polish participants pay a strong or a very strong attention to the sufficient physical activity (36.6% and 42.7% accordingly). On the contrary, relatively small percentage of the Russian and the Turkish interviewees pays a strong or a very strong attention to the sufficient physical activity (17.0% and 12.0% accordingly). The majority of all participants pay a moderate attention to the sufficient physical activity: about one third of the Russians, one third of the Polish people, and about one half of the Turkish and about one half of the German interviewees. Nearly one half of the Russian participants pay a little attention or do not pay

attention to the sufficient physical activity. The corresponding percentage of the remaining groups is lower: about 20 to 30%.

7.4.4 Nutrition and eating behavior

Nutrition and eating behavior were investigated by fruit and vegetable consumption, warm meals and meat consumption, low fat or the fat free food consumption, deliberate reduction of food in order not to gain weight, and attention to healthy nutrition.

7.4.4.1 Fruit and vegetable consumption

On the average, the Russian women consume 1.38 ± 0.60 portions of fruit and 1.74 ± 0.68 portions of vegetables, the Russian men consume a little less fruits and vegetables (accordingly 1.21 ± 0.59 and 1.62 ± 0.57). The majority of the Russian interviewees eat, on the average, one portion of fruit and two portions of vegetables per day.

The Turkish participants, on the average, consume 1.58 ± 0.98 portions of fruit and 1.62 ±1.15 portions of vegetables per day. The Polish interviewees eat, on the average, 1.88 ± 1.07 portions of fruit and 1.33 ±0.83 portions of vegetables. The German participants consume, on the average, 1.64 ± 1.03 portions of fruit and 1.75 ± 0.88 portions of vegetables per day. These precise results are shown in the tables 17 and 18 in appendix.

Figure 17 shows the information about the average consumption of fruit and vegetable of the Sağlik interviewees. As it can be seen, all participants consume about 2.8 to 3.8 portions fruits and vegetables per day.

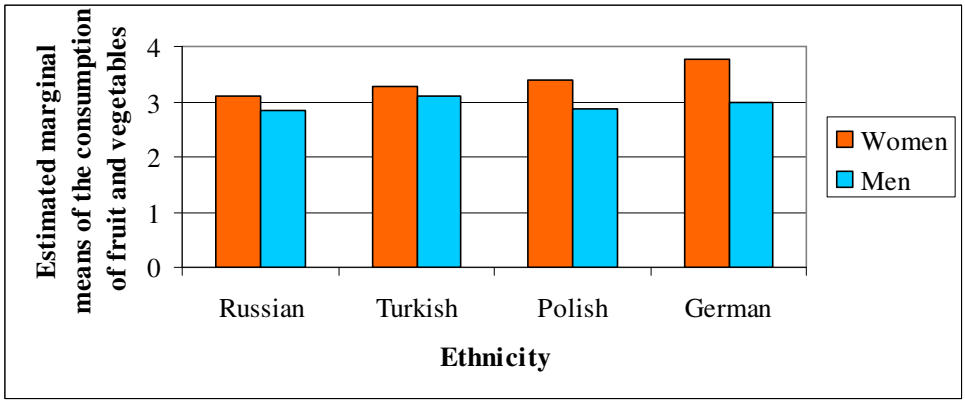


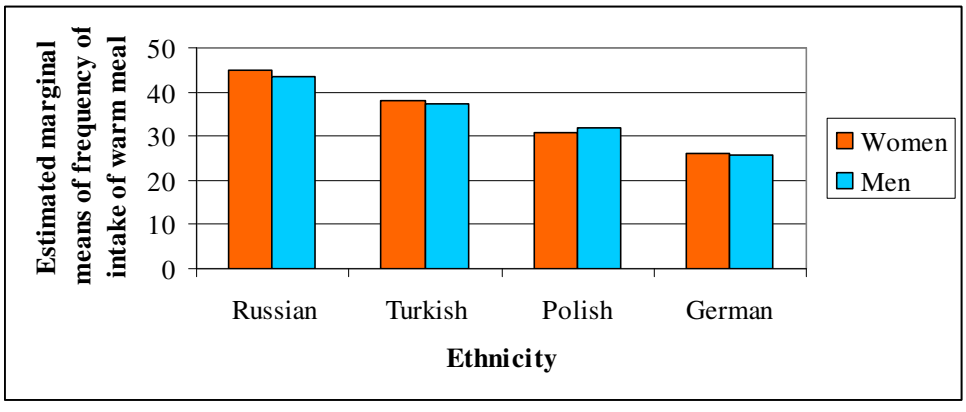
Figure 17. *Estimated marginal means of the consumption of fruit and vegetable per day in portions of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

A two-factorial ANOVA did not find a significant difference between the four nationalities ($F(3/392) = 1.02$; $p = 0.385$). But it was found a significant difference between genders ($F(1/392) = 6.85$; $p = 0.009$): the women reported consistently higher fruit and vegetables consumption than the men. The interaction between gender and nationality did not attain significance ($F(3/392) = 0.68$; $p = 0.567$).

Generally, for the majority of the Sağlik participants the consumption of fruit and vegetable is not enough according to the recommendations given by the German Nutrition Society (Deutsche Gesellschaft für Ernährung (DGE)). DGE recommend a consumption of five portions of fruits and vegetable per day (DGE 2012). Only a small percentage of the participants corresponds to the foregoing recommendations: only 20% of the German, 17.5% of the Turkish, 16.5% of the Polish, and 6.0% of the Russian interviewees eat five or more portions of fruits and vegetable per day. More than four fifths of all participants consume, on the average, only about 3 portions of fruits and vegetables per day.

7.4.4.2 Consumption of warm meals

As can be seen from figure 18, the Russian participants, on the average, consume warm meals significantly more often than the other respondents. About one half of the Russian participants consume warm meals more often than once per day and about the other half once per day. Only one third of the Turkish and only a small part of the Polish and of the German participants consume warm meals more often than once per day. Most of the Turkish, Polish and German interviewees eat warm meals once per day. About one third of the German group consumed warm meals only several times per week.



Fugure 18. *Estimated marginal means of the frequency of warm meals consumption per month of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

A two-factorial ANOVA found a highly significant difference concerning warm meals consumption between the four nationalities (F (3/396) = 31.89; p = 0.000). The difference between genders is not significant (F (1/396) = 0.08; p = 0.776). The interaction between gender and nationality also did not attain significance (F (3/396) = 0.16; p = 0.920).

7.4.4.3 Meat consumption

As can be seen from figure 18, the Russian participants, who eat meat nearly every day, on the average, consume meat significantly more often than the other respondents. The Turkish and the German respondents eat meat less often than the Polish participants, but still they eat meat about several times a week. These detailed data are shown in the table 19 in appendix.

A two-factorial ANOVA found a highly significant difference concerning meat consumption between the four nationalities (F (3/396) = 7.72; p = 0.000) and between genders (F (1/396) = 7.27; p = 0.007). On average, men consumed more meat than women (except the Russian participants). The interaction between gender and nationality did not attain significance (F (3/396) = 1.88; p = 0.134).

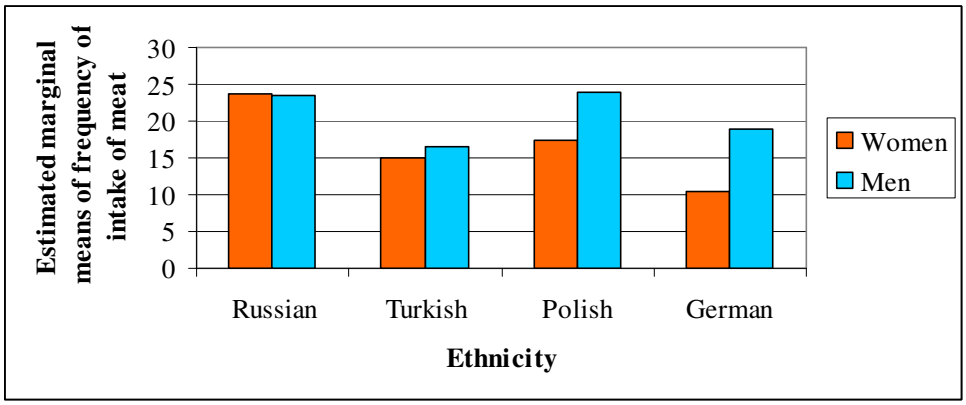


Figure 19. *Estimated marginal means of the frequency of meat consumption per month of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

7.4.4.4 Low fat or fat free food consumption

One third of the Russian participants always or often consume low fat or fat free food. About one sixth of them do it sometimes and about one half of them do it rarely or never. The participants from the Turkish group keep to a free fat diet more often than the Russian respondents. About two fifth of the Turkish respondents do it always or often, nearly one half of them do it sometimes, and about one fifth do it rarely or never. The Polish group has the

highest percentage of those, who keep to a free fat diet always or often (about three fifths of all Polish participants) compared to the other groups. About one quarter of them do it sometimes and only one sixth of them do it never or rarely. About two fifth of the German interviewees eat fat free food always or often, one fifth of them do it sometimes, and about one third of them do it rarely or never. The detailed results are given in tables 20 in the appendix.

Generally, as can be seen from figure 20, the Russian participants, on the average, consume low fat or fat free food more rarely than the other groups. The frequency increases from the Russian group over the German and the Turkish group to the Polish group. A two-factorial ANOVA found a significant difference concerning the low fat consumption between the four nationalities (F (3/396) = 11.49; p = 0.000) and between genders (F (1/396) = 6.16; p = 0.014). On the average, women keep to a free fat diet more often than the men. The interaction between gender and nationality did not attain significance (F (3/396) = 0.47; p = 0.703).

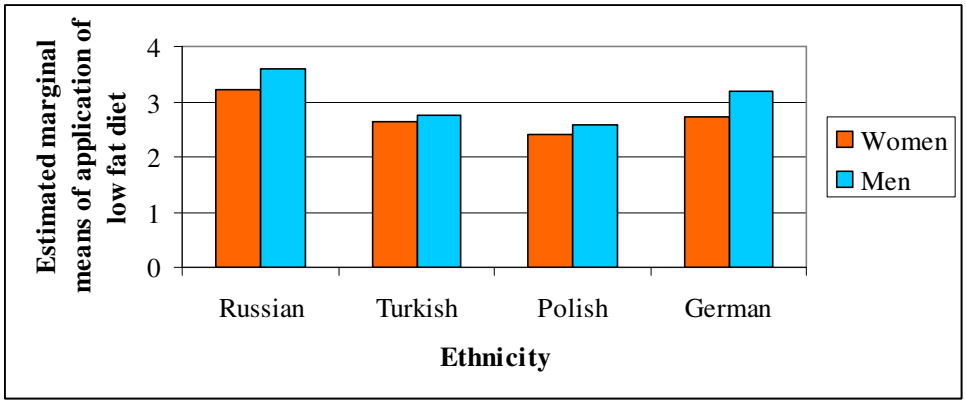


Figure 20. *Estimated marginal means of the frequency of application of low fat or fat free diet of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

1 = always, 2 = often, 3 = sometimes, 4 = rarely, 5 = never

7.4.4.5 Deliberate reduction of food in order not to gain weight

Only small percentage of the Russian participants limits their food intake always or often (13%), one third of them did it sometimes, and a little more than one half of them do it rarely or never. The similar situation was noticed in the German group, but the percentage of those, who limit their food intake always or often was a little bit higher (24,8%). On the contrary, nearly two fifths of the Turkish and nearly two fifths of the Polish participants limit their food

intake always or often. About one third of them do it sometimes and one fifth of them do it rarely or never. The precise results are shown in the table 21 in appendix.

Generally, the Russian participants limited their food intake in order not to gain weight, on the average, significantly less often than the other participants. The frequency of the limitation of food intake in order not to gain weight increases for the four groups in the same order as the frequency fat or fat free food consumption. A two-factorial ANOVA found a highly significant difference concerning the reduction of food between the four nationalities (F (3/396) = 16.67; p = 0.000) and between genders (F (1/396) = 9.16; p = 0.003). On average, the women limit their food intake in order not to gain weight significantly more often than the men. The interaction between gender and nationality did not attain significance (F (3/396) = 0.44; p = 0.728).

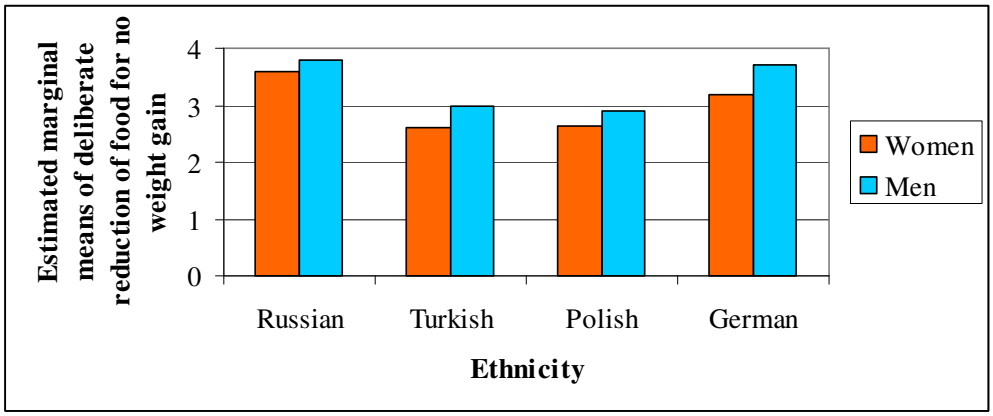


Figure 21. *Estimated marginal means of frequency of deliberate reduction of food in order not to gain weight of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

1 = always, 2 = often, 3 = sometimes, 4 = rarely, 5 = never

7.4.4.6 Attention to healthy nutrition

Data about attention to healthy nutrition from figure 22 show, that the Russian participants, on the average, pay less attention to healthy nutrition than the other participants (they pay moderate or little attention). The German participants pay, on the average, moderate attention to the healthy eating. The Turkish and Polish participants pay moderate and strong attention to the healthy diet. The more detailed date can be seen in table 22 in appendix.

A two-factorial ANOVA found a highly significant difference concerning attention to the healthy diet between the four nationalities (F (3/396) = 15.57; p = 0.000).The difference

between genders was not significant (F (1/396) = 3.03; p = 0.083). The interaction between gender and nationality also did not attain significance (F (3/396) = 1.81; p = 0.145).

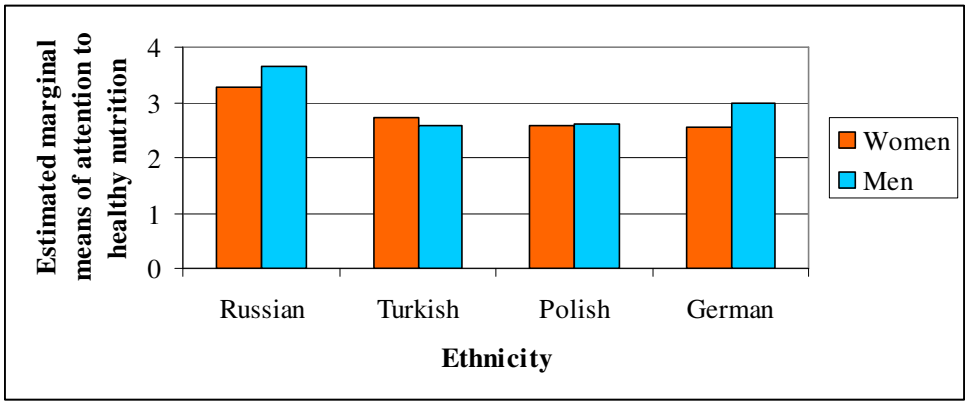


Figure 22. *Estimated marginal means of paying attention to healthy nutrition of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

1 = very strong, 2 = strong, 3 = moderate, 4 = little, 5 = not at all.

7.4.5 Body Mass Index

As can be noticed from the figure 23, which illustrates the data about BMI, about one quarter of the Russian women and one third of the Russian men have normal weight. One third of the Russian women and more than one half of the Russian men are overweight. The remaining one third of the Russian women and one tenth of the Russian men are obese. There is a significant gender difference (Chi-square = 8.75; df = 2; p = 0.013): the Russian women have a higher BMI than the Russian men.

A little less than one half of the Turkish women and men are overweight, two fifths of the Turkish women and one sixth of Turkish men are obese. There is a significant gender difference (Chi-square = 10.86; df = 2; p = 0.004): the Turkish women have a higher BMI than the Turkish men.

One half of the Polish women and two fifths of the Polish men are aoverweight, nearly one quarter of all Polish participants have obesity. There is no significant gender difference (Chi-square = 4.85; df = 3; p = 0.183). About one half of the German interviewees are overweight, one sixth of the German women and one third of the German men are obese. There is no significant gender difference (Chi-square = 4.30; df = 2; p = 0.117). The more detailed information can be seen in table 23 in appendix.

Generally, only nearly one quarter of all Sağlik participants have normal weight, the remaining people are overweight or obese (except 2.9% of the Polish men, who have underweight). A two-factorial ANOVA did not find a significant difference concerning BMI between the four nationalities (F (3/394) = 0.31; p = 0.819). But the interaction between gender and nationality attained significance (F (3/396) = 6.12; p = 0.000): the Russian and the Turkish women have a higher BMI than the corresponding men, but the Polish and the German men have higher BMI than the corresponding women.

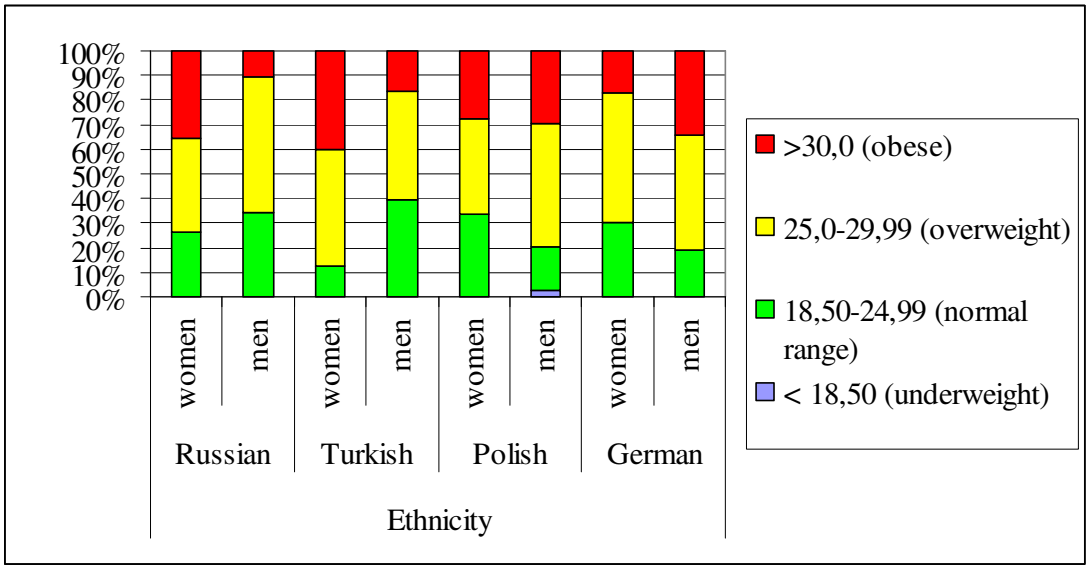


Figure 23. *Percentage of the Sağlik participants with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg who have underweight, normal weight or overweight or obesity according to "International Classification of adult underweight, overweight and obesity according to BMI"*

7.5 Determinants for use of health services

As explained in the chapter 5.3., use of health services was investigated by the frequency of visiting the general practitioner, participation in health promotion programs, and, especially for the Russian respondents, by participation in spa treatment and rehabilitation programs.

7.5.1 Visits of a general practitioner

Results about the number of visits of a general practitioner during the last 2 years are shown in the figure 24 and - in more detail - in table 24 in the appendix.

More than three fifths of the Turkish participants visit their GP more often than monthly (64.0%). The corresponding percentage for the Russian, Polish, and German groups is significantly lower: 23.0%, 26.3% and 36.7% accordingly. About one half of the Russian and one half of the Polish interviewees visit their GP quarterly. This percentage for the Turkish and German group is 22.0% and 37.6% accordingly.

One quarter of the Russian interviewees, one fifth of the Polish, one fifth of the German participants, and only 6% of Turkish people visit their GP less than quarterly or do not visit GP. The small percentage of the Turkish, Polish and German participants have no GP (3 to 6%).

As can be seen from the figure 24, generally, the Turkish participants visit their GP more often than the other interviewees: the Turkish respondents visit their GP, on the average, once per month. The German participants visit their GP about 7 times a year, the Russian and the Polish participants do it quarterly.

A two-factorial ANOVA found a significant difference the four nationalities ($F(3/396) = 14.03$; $p = 0.000$). The difference between genders ($F(1/396) = 0.37$; $p = 0.546$) is not significant. As well as the interaction between gender and nationality did not attain significance ($F(3/396) = 0.24$; $p = 0.868$).

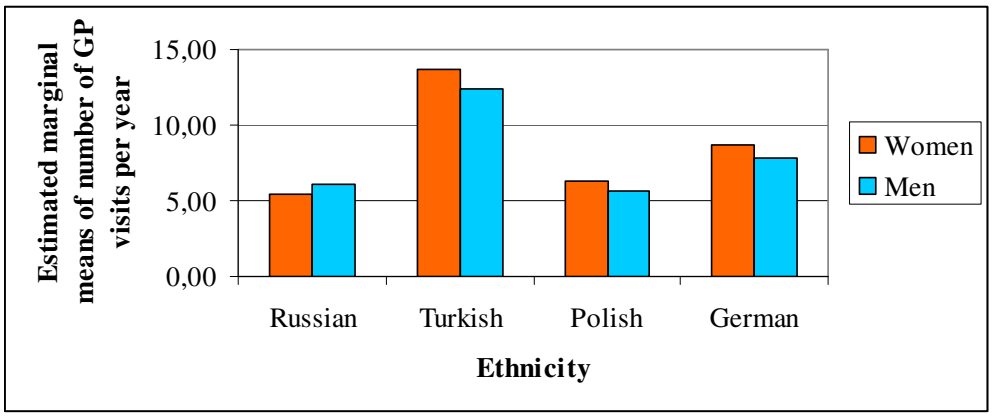


Figure 24. *Estimated marginal means of visits of a general practitioner per year during the last 2 years of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

7.5.2 Participation in health promotion programs

The figure 25 and - in more detail - table 25 in appendix illustrate data about the participation in health promotion programs during the last year of the Sağlik participants. As can be seen,

about one third of the Russian and one third of the Polish interviewees participated in some health promotion programs during the last year. For the German and Turkish participants the corresponding percentage is lower (25.7% and 12.0% accordingly) compared to the Russian and Polish respondents.

It was noticed a significant difference between the women within four ethnic groups (Chi-Square = 14.3; df = 3; p = 0.003). The difference between the men within four ethnic groups was not significant (Chi-Square = 3.9; df = 3; p = 0.276).

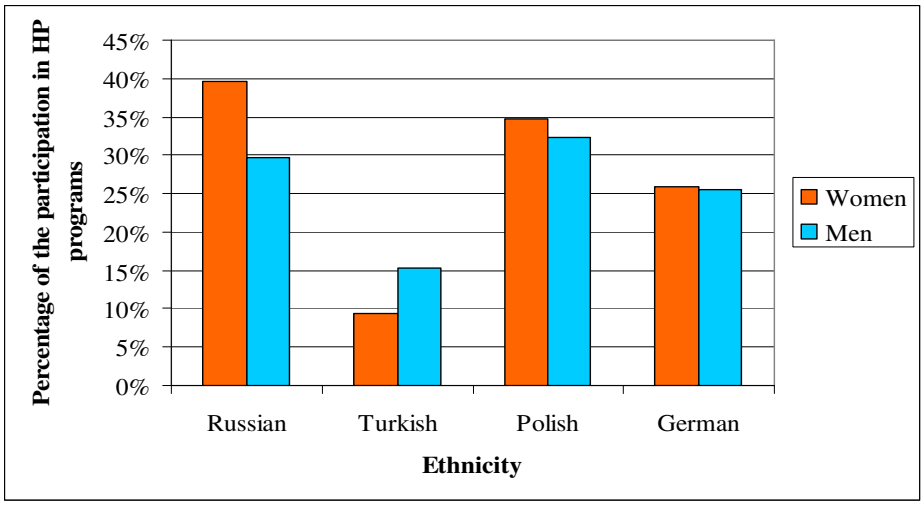


Figure 25. *Participation rate in health promotion programs during the last year of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

The Russian interviewees mention their participation in the following health promotion programs during the last year: gymnastics, water gymnastics, fitness, physiotherapy, massage. The Sağlik interviewees of the other groups additionally mentioned their participation in programs about healthy nutrition and weight reduction programs. The Turkish, Polish, and German interviewees additionally notice their participation in some rehabilitation programs. All Sağlik participants were also asked about a change of their state of health after these programs. Nearly 90% of the Russian and nearly 90% of the Polish, about 80% of the Turkish and about 80% of the German interviewees, who participated in health promotion programs, notice a positive improvement of their state of health.

7.5.3 Participation in spa treatment and rehabilitation programs

The Russian interviewees were additionally asked about their participation in spa treatment and rehabilitation programs. About one third of them participate in such programs last 10 years (19.0% once and 10.0% twice and more often). All of them notice a positive improvement of their state of health after these programs. As a reason of spa treatment, a general strengthening of health state and a presence of some chronic diseases, such as osteochondrosis, arthrosis, psoriasis, chronic obstructive pulmonary disease were indicated. As a reason of the rehabilitation, trauma, operation or chronic disease was noticed.

7.6 Determinant for health inequity: subjective state of health

Figure 26 and - in more detail - table 26 in the appendix, illustrate the **subjective current state of health** of the men and women of the Sağlik project.

By comparing the subjective current state of health of the four groups one can see that the Turkish interviewees evaluated their health worse than the other participants: about one quarter of them rated their health as “poor” or “very poor”, three fifths as “fair” and only one tenth as “good”.

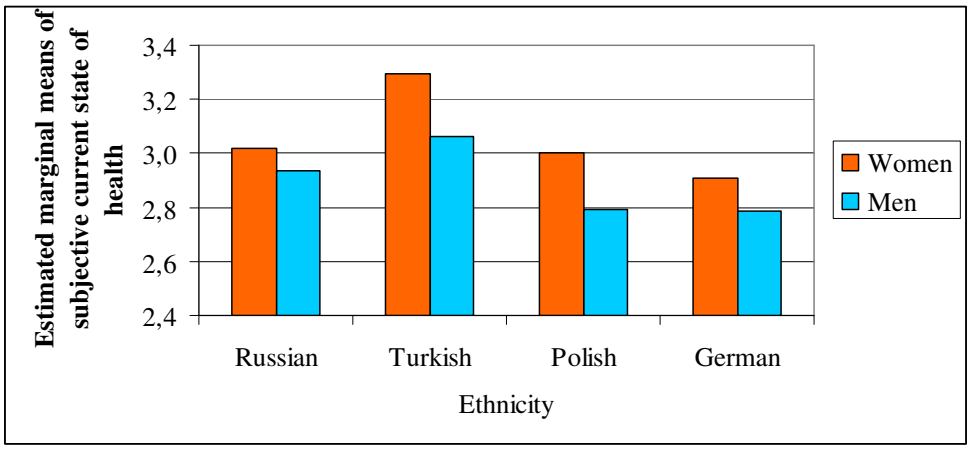


Figure 26. *Estimated marginal means of subjective current state of health of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

(1 = excellent, 2 = very good, 3 = fair, 4 = poor, 5 = very poor).

One sixth of the Russian participants valued their health as “good” (16.0%), the majority of them as “fair” (70.0%), and the rest of them as “poor” (14.0%). The self assessment of health

status by the Polish participants is very similar to that of the Russian interviewees, but some of the Polish interviewees evaluated their health not only as “good” (15.5%) but also as “excellent” (2.9%).
On the other hand, one third of the German participants estimate their health as “good”, one half as “fair” (51.5%), and the remaining part as “poor” or “very poor” (15.9%).

Thus, the subjective current state of health of the men and women from the Sağlik project with migration background is generally relatively poor, it is worse than that of the German Sağlik participants. A two-factorial ANOVA found a significant difference between the four nationalities ($F(3/396) = 4.7$; $p = 0.003$) and between genders ($F(1/396) = 5.6$; $p = 0.019$). As one can see from Fig. 7, the women reported consistently worse subjective health than men. The interaction between gender and nationality is not significant ($F(3/396) = 0.27$; $p = 0.848$).

Figure 27 and - in more detail – table table 27 in the appendix shows **the change of the subjective current state of health** of the men and women from the the Sağlik project within the last year. About 50 percent of all participants rated their health status now the same as a year ago (for the Russian interviewees this percentage was a little higher – 65.0%). One third of the Russian group assessed this change as “somewhat worse and much worse now than a year ago”, and more women evaluated this change as “somewhat worse” in comparison to men (35.8% and 27.7% accordingly). And only 2.0% of the Russian participants noticed a positive change in their health during the last year. 44.0% of the Turkish group rated a negative change in their health status. This is the highest percentage: only 33.0% of the Russian, 23.3% of the Polish and 30.7% of the German participants noticed the same change. The highest percentage for a positive change of the subjective current health state was found with the Polish participants (about 25%), for the German and the Turkish interviewees this percentage was 15.9% and 12.0% accordingly.

By comparing the results of the genders, one can see from figure 27, that more Russian, Turkish and German women noticed a negative change in their health during the last year compared with the Polish women, while more Russian and Turkish men recorded a negative change in their health during the last year compared with the Polish and German men. But the two-factorial ANOVA did not find a significant difference between genders ($F(1/396) = 2.9$; $p = 0.09$). On the other hand, it found a significant difference between the four nationalities

(F (3/396) = 3.5; p = 0.015). Thus, the Turkish and the Russian participants more often reported a negative change in their health than the German and Polish ones. The interaction between gender and nationality is not significant (F (3/396) = 0.61; p = 0.610).

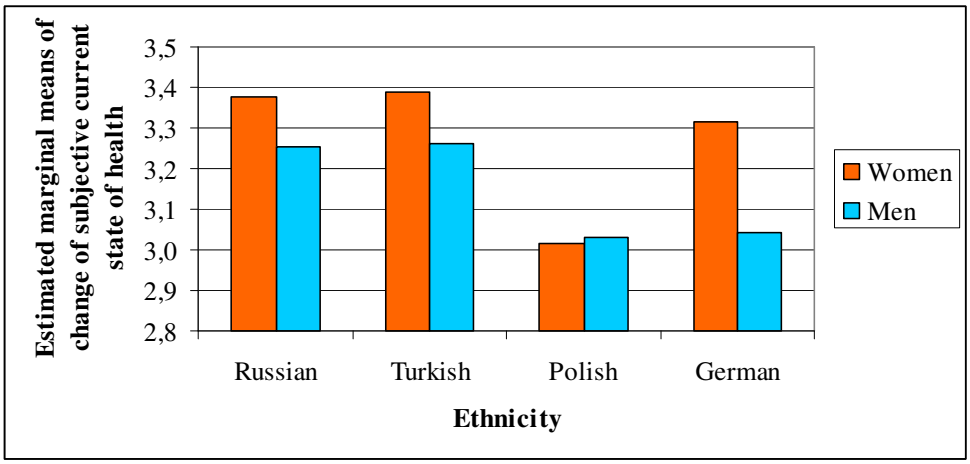


Figure 27. *Estimated marginal means of change of subjective current state of health of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

(1 = much better now than a year ago, 2 = somewhat better now than a year ago, 3 = about the same, 4 = somewhat worse now than a year ago, 5 = much worse now than a year ago.

7.7 Ideas and expressed wishes

The Russian interviewees were asked about desired additional information about healthy nutrition, sport activities and social networking.

About one tenth of them would like to know more about healthy nutrition. One tenth would like to know about sport activities (particularly about gymnastics and water gymnastics) in their communities in Russian language. More than one third of the Russian respondents would like to know about Russian meetings points in their communities, cultural arrangements for Russian people in Hamburg, about early retirement pension, spa treatment and rehabilitation programs, Russian speaking doctors, care assistance, German language course, cheap shops in their quarters).

7.8 Association between the subjective state of health and health determinants of the elderly people with a Russian migration background

7.8.1 Components of SES and the subjective state of health

a) Lower education, lower income, higher age are accompanied with a poorer subjective state of health

On the contrary, the Russian participants without a high education have a better subjective state of health, but there is no significant difference between the participants without high education and the participants with high education in regards to their subjective state of health (U = 1015 ; p = 0.888). There is no significant gender difference between both groups in regards to education (Chi-square = 1.1; df = 1; p = 0.295). There was also no significant gender difference in regards to the subjective state of health (U = 1158; p = 0.451).

The Russian participants with lower income have a poorer subjective state of health, there is a statistically significant difference between the Russian participants who have an income of less than 500 euros per month and who earns 500 euros and more in regards to their subjective state of health (U = 549 ; p = 0.003). But this difference is significant only due to the Russian women: there is no statistically significant difference between the Russian men with a monthly income of less than 500 Euros and those with an income higher than 500 Euros in regards to their subjective state of health (U = 157 ; p = 0.064). There is a statistically significant difference only among the Russian women, between those with a monthly income less than 500 Euros and those who earn 500 euros and/or more in regards to their subjective state of health (U = 109 ; p = 0.025).

There is no statistically significant correlation between the age of the Russian participants and their subjective state of health (Spearman's rho = 0.151; p = 0.134). There is also no significant difference between gender in regards to age (t = 0.018; df = 98; p = 0.986).

b) Employment is accompanied with a rather better subjective state of health then the state of not working, jobs with high qualification requirements are accompanied with a better subjective state of health

The employed Russian participants have a better subjective state of health in comparison to the not working participants. There is a statistically significant difference between the working and not working Russian participants in regards to their subjective state of health (U = 676; p = 0.018). But this difference is significant only due to the Russian men: there is no

statistically significant difference between the working and not working Russian women in regards to their subjective state of health (U = 189; p = 0.446). There is a statistically significant difference only between the working and not working Russian men (U = 150; p = 0.021). There is no significant gender difference between both groups in regards to employment (Chi-square = 1.6; df = 1; p = 0.202).

Jobs with high qualification requirements are accompanied by a better subjective state of health: there is a significant low positive correlation between the professional level of the Russian participants in Germany and their subjective state of health (Spearman's rho = 0.369; p = 0.004), although this correlation can be seen only among the the Russian women: there is a significant moderate correlation between the professional level of the Russian women in Germany and their subjective state of health (Spearman's rho = 0.506; p = 0.008), for the Russian men there is no correlation between the professional level in Germany and their subjective state of health (Spearman's rho = 0.324; p = 0.066).

c) Higher education is associated with jobs with higher qualification requirements and with higher income

Despite their higher level of education, the Russian participants could only find jobs with middle or low qualification requirement in Germany: there is a significant difference between their educational level and their profession level in Germany (Chi-square = 8.9; df = 1; p = 0.003).

There is no significant difference between the participants without higher education and the participants with higher education in regards to their income based on Chi-Square test (Chi-square = 1.0; df = 1; p = 0.301). There is also no significant gender difference in regards to education (Chi-square = 1.1; df = 1; p = 0.295). There is no significant difference between gender in regards to income (Chi-square = 2.4; df = 1; p = 0.124).

d) People with a high education who work in a job with lower qualification requirements have a poorer subjective state of health than those who work in a job with higher qualification requirements

People with high education who work in a job with lower qualification requirements have a poorer subjective state of health than those who work in a job with higher qualification requirements, but the statistically significant difference was not found (U = 50; p = 0.068).

7.8.2 Health behavior, social resources and components of SES

a. lower education, state of not working, lower individual income are more often accompanied with nicotine consumption

Low education is accompanied with nicotine consumption: there is a significant difference between the Russian participants without higher education and the participants with higher education in terms of nicotine consumption (Chi-square = 7.1; df = 1; p = 0.008). But this association can only be attributed to the men: there is a significant difference between the men without higher education and the men with higher education in regards to nicotine consumption (Chi-square = 10.4; df = 1; p = 0.001). The difference between the Russian women without higher education and the Russian women with higher education in regards to nicotine consumption is not significant (Chi-square = 0.226; df = 1; p = 0.635).

There is no significant difference between the working and not working Russian participants in regards to nicotine consumption (Chi-square = 0.001; df = 1; p = 0.982). There is also no significant difference between gender in these both groups regarding to employment (Chi-square = 1.6; df = 1; p = 0.202). But there is a significant difference between the women and the men regarding to nicotine consumption (Chi-square = 6.4; df = 1; p = 0.012): the men smoke more than the women.

There is no significant difference between the Russian participants with a monthly income of less than 500 Euros and those who earn 500 Euros or more in regards to consumption of nicotine (Chi-square = 0.126; df = 1; p = 0.722). There is also no significant difference between gender in regards to income (Chi-square = 2.4; df = 1; p = 0.124).

b. lower education, state of not working, lower individual income are accompanied with more frequent alcohol consumption

The Russian participants without higher education consume alcohol more often, but there is no significant difference between the participants without higher education and the participants with higher education in regards to the frequency of alcohol consumption (U = 917; p = 0.355). There is also no significant difference between genders in these both groups in regards to education (Chi-square = 1.1; df = 1; p = 0.295). But there is a highly significant difference between the women and the men in regards to the frequency of alcohol consumption (U = 759; p = 0.000): the men consume alcohol more often than the women.

On the contrary, the working Russian participants consume alcohol more often than not working respondents: there is a statistically significant difference between the working and

not working Russian participants in regards to the frequency of alcohol consumption (U = 585; p = 0.004). But this association is only due to the men: there is a statistically significant difference between the working and not working Russian men in regards to alcohol consumption (U = 134; p = 0.016). The difference between the working and not working Russian women in regards to the frequency of alcohol consumption is not significant (U = 170; p = 0.230).

On the contrary, the Russian participants who earn 500 euros and more per month, consume alcohol more often than those who have an income of less than 500 euros: there is a statistically significant difference between the Russian men and women who have a monthly income of less than 500 euros and those who earn 500 euros or more regarding to the frequency of alcohol consumption (U = 449; p = 0.000). There is no significant difference between gender in these both groups regarding to income (Chi-square = 2.4; df = 1; p = 0.124).

c. lower education, state of not working, lower individual income are accompanied with lower fruit and vegetable consumption

There is no significant difference between the participants without higher education and the participants with higher education concerning in regards to fruits and vegetable consumption (U = 1005; p = 0.846). There is also no significant difference between gender in regards to education (Chi-square = 1.1; df = 1; p = 0.295). There is also no significant difference between gender in regards to fruits and vegetable consumption (U = 1059; p = 0.178).

On the contrary, the not working Russian participants consume more fruits and vegetable than the working respondents, but there is no statistically significant difference between the working and not working Russian participants in regards to fruits and vegetable consumption (U = 787; p = 0.292). There is also no significant difference between gender in regards to employment (Chi-square = 1.6; df = 1; p = 0.202).

There is no statistically significant difference between the Russian participants who have a monthly income of less than 500 euros and those who earn 500 euros or more regarding to the fruits and vegetable consumption (U = 696; p = 0.236). There is no significant difference between gender in these both groups (Chi-square = 2.4; df = 1; p = 0.124).

d. lower education, state of not working, lower individual income are accompanied with more frequently warm meals consumption

There is no significant difference between the participants without higher education and the participants with higher education regarding to the frequency of warm meals consumption (U = 954; p = 0.513). There is also no significant difference between gender regarding to education (Chi-square = 1.1; df = 1; p = 0.295). There is also no significant difference between gender regarding to frequency of warm meals (U = 1194; p = 0.684).

The not working Russian participants consume warm food more often than the working respondents: there is a statistically significant difference between the working and not working Russian participants in regards to the frequency of warm meals consumption (U = 598; p = 0.004), although this association can be seen only for the Russian men: the not working Russian men consume warm food more often, than employed Russian men (U = 111; p = 0.002). The difference between the working and not working Russian women in regards to the frequency of warm meals consumption is not significant (U = 189; p = 0.499).

The Russian participants who have a monthly income of less than 500 euros consume warm food more often than those who earn per month 500 euros and more: there is a statistically significant difference between the Russian participants who have a monthly income of less than 500 euros and who earns per month 500 euros and more in regards to the frequency of warm meals consumption (U = 489; p = 0.001), although this association can be seen only for the Russian men: the Russian men who have a monthly income of less than 500 euros consume warm food more often than men who earn per month 500 euros and more (U = 111; p = 0.003). The corresponding difference between the Russian women in regards to the frequency of warm meals consumption is not significant (U = 128; p = 0.139).

e. lower education, state of not working, lower individual income are accompanied with higher meat consumption

There is no significant difference between the participants without higher education and the participants with higher education in regards to their intake of meat (U = 922; p = 0.365). There is also no significant difference between gender in regards to education (Chi-square = 1.1; df = 1; p = 0.295). There is also no significant difference between gender in regards to intake of meat (U = 1190; p = 0.669)

There is no statistically significant difference between the working and not working Russian participants in regards to their meat consumption based on Mann-Whitney U test (U = 883; p = 0.796). There is also no significant difference between gender in regards to employment (Chi-square = 1.6; df = 1; p = 0.202).

There is no statistically significant difference between the Russian participants who have a monthly income of less than 500 euros and those who earn 500 euros or more regarding to meat consumption (U = 820; p = 0.929). There is no significant difference between gender regarding to income (Chi-square = 2.4; df = 1; p = 0.124).

f. lower education, state of not working, lower individual income are more often accompanied with low fat or fat free food consumption

There is no significant difference between the participants without higher education and the participants with higher education in regards to low fat or fat free food consumption (U = 861; p = 0.186). There is also no significant difference between gender in regards to education (Chi-square = 1.1; df = 1; p = 0.295). There is also no significant difference between gender in regards to low fat or fat free food consumption (U = 1023; p = 0.113)

There is no statistically significant difference between the working and not working Russian participants in regards to low fat or fat free food consumption (U = 821; p = 0.447). There is also no significant difference between gender in regards to employment (Chi-square = 1.6; df = 1; p = 0.202).

There is no statistically significant difference between the Russian participants who have a monthly income of less than 500 euros and those who earn 500 euros or more regarding to low fat or fat free food consumption (U = 720; p = 0.336). There is no significant difference between gender regarding to income (Chi-square = 2.4; df = 1; p = 0.124).

g. lower education, state of not working, lower individual income are more often accompanied with deliberate reduction of food in order not to gain weight

There is no significant difference between the participants without higher education and the participants with higher education in regards to deliberate reduction of food in order not to gain weight (U = 939; p = 0.474). There is also no significant difference between gender in regards to education (Chi-square = 1.1; df = 1; p = 0.295). There is also no significant difference between gender in regards to deliberate reduction of food in order not to gain weight (U = 1099; p = 0.290).

There is no statistically significant difference between the working and not working Russian participants in regards to deliberate reduction of food in order not to gain weight (U = 730; p = 0.126). There is also no significant difference between gender in regards to employment (Chi-square = 1.6; df = 1; p = 0.202).

There is no statistically significant difference between the Russian participants who have a monthly income of less than 500 euros and those who earn 500 euros or more regarding to deliberate reduction of food in order not to gain weight (U = 681; p = 0.190). There is no significant difference between gender regarding to income (Chi-square = 2.4; df = 1; p = 0.124).

h. lower education, state of not working, lower individual income are accompanied with less attention to healthy nutrition

On the contrary, The Russian participants without higher education pay more attention to healthy nutrition, but there is no significant difference between the participants without higher education and the participants with higher education regarding to their attention to healthy nutrition (U = 997 ; p = 0.790). There is also no significant difference between gender regarding to education (Chi-square = 1.1; df = 1; p = 0.295). But there a significant gender difference concerning the attention to healthy nutrition: the Russian women pay more attention to healthy nutrition than the Russian men (U = 894; p = 0.009).

The not working Russian participants pay less attention to healthy nutrition, but there is no statistically significant difference between the working and not working Russian participants regarding to their attention to healthy nutrition (U = 845 ; p = 0.560). There is also no significant difference between gender regarding to employment (Chi-square = 1.6; df = 1; p = 0.202).

There is no statistically significant difference between the Russian participants who have a monthly income of less than 500 euros and those who earn 500 euros or more regarding to their attention to healthy nutrition (U = 821; p = 0.938). There is no significant difference between gender regarding to income (Chi-square = 2.4; df = 1; p = 0.124).

i. lower education, state of not working, lower individual income are accompanied with less physical activity

There is no significant difference between the participants without higher education and the participants with higher education in regards to physical activity (Chi-square = 0.020; df = 1; p = 0.889). There is also no significant difference between gender in regards to education (Chi-square = 1.6; df = 1; p = 0.202). There is also no significant difference between in regards to physical activity (Chi-square = 2.3; df = 1; p = 0.132).

There is no significant difference between the working and not working Russian participants in regards to physical activity (Chi-square = 0.094; df = 1; p = 0.759). There is also no

significant difference between gender in regards to employment (Chi-square = 1.6; df = 1; p = 0.202).

There is no statistically significant difference between the Russian participants who have a monthly income of less than 500 euros and those who earn 500 euros or more regarding to physical activity (Chi-square = 0.830; df = 1; p = 0.362). There is no significant difference between gender regarding income (Chi-square = 2.4; df = 1; p = 0.124).

j. lower education, state of not working, lower individual income are accompanied with less attention to sufficient physical activity

On the contrary, the Russian participants without higher education pay more attention to sufficient physical activity than the high educated respondents, but there is no significant difference between the participants without higher education and the participants with higher education regarding to their attention to sufficient physical activity (U = 939 ; p = 0.473). There is also no significant difference between gender in regards to education (Chi-square = 1.1; df = 1; p = 0.295). There is also no significant difference between gender regarding to the attention to sufficient physical activity (U = 1227; p = 0.891).

There is no statistically significant difference between the working and not working Russian participants regarding to their attention to healthy sufficient physical activity (U = 879; p = 0.781). There is also no significant difference between gender regarding to employment (Chi-square = 1.6; df = 1; p = 0.202).

There is no statistically significant difference between the Russian participants who have a monthly income of less than 500 euros and those who earn 500 euros or more regarding to their attention to healthy sufficient physical activity (U = 783; p = 0.681). There is no significant difference between gender regarding to income (Chi-square = 2.4; df = 1; p = 0.124).

k. lower education, state of not working, lower individual income and higher age are accompanied with a higher BMI

The Russian participants without higher education, on the average, have higher BMI than the high educated respondents, but there is no statistically significant difference between the Russian participants without higher education and the participants with higher education regarding to their BMI (t = 0.822 df = 98; p = 0.413). There is also no significant difference between gender regarding to education (Chi-Square = 1.1; df = 1; p = 0.295). There is also no significant difference between gender regarding to BMI (t = 1.155 df = 98; p = 0.251).

On the contrary, the working Russian participants, on the average, have higher BMI than the not working respondents, but there is no statistically significant difference between the working and not working Russian participants regarding to their BMI (t = 1.250; df = 98; p = 0.214). There is no significant difference between gender regarding employment (Chi-Square = 1.6; df = 1; p = 0.202).

There is no statistically significant difference between the Russian participants who have a monthly income of less than 500 euros and those who earn 500 euros or more regarding to their BMI (t = - 0.412; df = 98; p = 0.681). There is no significant difference between gender in these both groups concerning income (Chi-Square = 2.4; df = 1; p = 0.124).

There is no statistically significant difference between the age of the Russian participants and their BMI (Spearman's rho = - 0.176; p = 0.079). There is also no significant difference between gender regarding to age (t = 0.018; df = 98; p = 0.986).

l. lower education, state of not working, higher age are accompanied with less frequent social contacts

On the contrary, the Russian participants without higher education have more frequently social contacts than the high educated respondents, but there is no significant difference between the participants without higher education and the participants with higher education regarding to their social contacts (U = 824; p = 0.117). There is also no significant difference between gender regarding to education (Chi-Square = 1.1; df = 1; p = 0.295). There is no significant difference between the women and the men regarding to their social contacts (U = 1123; p = 0.397).

The not working Russian participants have poor social contacts, there is a statistically highly significant difference between the working and not working Russian men and women concerning their social contacts (U = 318 ; p = 0.000). There is no significant difference between gender concerning employment (Chi-square = 1.6; df = 1; p = 0.202).

Higher age accompanied by poorer social contacts: there is a highly significant low negative correlation between age and frequency of social contacts (Spearman's rho = -0.396; p = 0.000), although the correlation can be seen only for the Russian women: there is a highly significant moderate negative correlation between age and frequency of social contacts of the Russian women (Spearman's rho = 0.530; p = 0.000). The corresponding correlation between the Russian men is not significant (Spearman's rho = - 0.252; p = 0.082).

m. higher age is accompanied with higher frequency of getting help, poorer social support and poorer self-efficacy

On the contrary, higher age is accompanied by lower frequency of getting help: there is a highly statistically significant difference between the Russian participants who get help and who get no help regarding to age (U = 541; p = 0.000). There is no significant difference between gender regarding to age (t = 0.018; df = 98; p = 0.986) and between gender regarding to getting help: (Chi-square = 1.7; df = 1; p = 0.205).

There is no significant correlation between age and social support (Spearman's rho = - 0.077; p = 0.448). There is no significant difference between gender regarding to age (t = 0.018; df = 98; p = 0.986) and between gender regarding to social support (U = 1053; p = 0.520).

There is no significant correlation between age and general self-efficacy (Spearman's rho = - 0.084; p = 0.405). There is no significant difference between gender regarding to age (t = 0.018; df = 98; p = 0.986). But there is a highly significant difference between the women and men concerning self-efficacy (U = 679; p = 0.000): the Russian men have higher GSE in comparison to the Russian women.

7.8.3 Health behavior, social resources and the subjective state of health

a. nicotine consumption, more frequent alcohol consumption, lower fruit and vegetable consumption, physical inactivity, higher meat consumption, less frequent low fat or fat free food consumption, less frequent deliberate reduction of food in order not to gain weight, and higher BMI are accompanied with a poorer subjective state of health

The smoking Russian participants have a poor subjective state of health, but there is no statistically significant difference between nicotine consumption and the subjective state of health (U = 727; p = 0.280). There is no significant difference between gender regarding to the subjective state of health (U = 1158; p = 0.451).

On the contrary, more frequently alcohol consumption is accompanied by a better subjective state of health: there is a significant positive week monotone correlation between frequency of alcohol consumption and the subjective state of health (Spearman's rho = 0.313; p = 0.002). There is no significant difference between gender regarding to the subjective state of health (U = 1158; p = 0.451). But there is a significant difference between the women and

men regarding to the frequency of alcohol consumption (U = 759; p = 0.000): the men consume alcohol more often than the women.

There is no significant correlation between fruit and vegetable consumption and the subjective state of health (Spearman's rho = 0.106; p = 0.296). There is also no significant difference between gender regarding to fruit and vegetable consumption (U = 1059; p = 0.178). There is no significant difference between gender regarding to the subjective state of health (U = 1158; p = 0.451).

Physical activity is not associated with the subjective state of health: there is no statistically significant difference between the physically active and the physically inactive Russian participants regarding to their subjective state of health (U = 1094; p = 0.405). There is also no significant difference between gender concerning physical activity (Chi-square = 2.3; df = 1; p = 0.132). There is no significant difference between gender regarding to the subjective state of health (U = 1158; p = 0.451).

There is no significant correlation between frequency of meat consumption and the subjective state of health (Spearman's rho = - 0.062; p = 0.543). There is also no significant difference between gender regarding to intake of meat (U = 1190; p = 0.669).

There is no significant correlation between frequency of low fat or fat free food consumption and the subjective state of health (Spearman's rho = 0.078; p = 0.118). There is also no significant difference between gender regarding to low fat or fat free food consumption (U = 1023; p = 0.113).

There is no significant correlation between frequency of deliberate reduction of food in order not to gain weight and the subjective state of health (Spearman's rho = - 0.001; p = 0.984). There is also no significant difference between gender regarding to deliberate reduction of food in order not to gain weight (U = 1099; p = 0.290).

There is no significant correlation between the BMI and the subjective state of health (Spearman's rho = 0.011; p = 0.910). There is also no significant difference between gender regarding to BMI (t = 1.155 df = 98; p = 0.251).

b. less frequent social contacts are accompanied with a poorer subjective state of health

Less frequent social contacts are accompanied by poorer subjective state of health: there is a significant positive week correlation between frequency of social contacts and subjective

state of health (Spearman's rho = 0.219; p = 0.028). There is no significant difference between the women and men regarding to social contacts (U = 1123; p = 0.397).

c. more frequent team-activity, getting help compared to not getting help, social support, higher self-efficacy are accompanied with a better subjective state of health

More frequent team activity is accompanied with a better subjective state of health: there is a significant week positive correlation between frequency of team activity and the subjective state of health (Spearman's rho = 0.199; p = 0.047). There is no significant difference between the women and men regarding to team activity (U = 1007; p = 0.096).

The Russian participants who get help have a better subjective state of health than those who get no help. There is a statistically significant difference between the Russian participants who get help and who get no help regarding to their subjective state of health (U = 988 ; p = 0.032). There is no significant difference between gender regarding to getting help (Chi-square = 1.6; df = 1; p = 0.205).

There is no significant correlation between social support and the subjective state of health (Spearman's rho = 0.059; p = 0.560). There is no significant difference between gender regarding to social support (U = 1053; p = 0.520).

There is also no significant correlation between general self-efficacy and the subjective state of health (Spearman's rho = 0.138; p = 0.172). But there is a high significant difference between the women and men regarding to social self-efficacy: the Russian men have higher GSE than the Russian women.

7.8.4 Components of SES, use of health services and the subjective state of health

a. lower education, higher age are accompanied with higher frequency of visits of a general practitioner

The Russian participants without higher education visited their GP more often than high educated respondents, but there is no significant difference between the participants without higher education and the participants with higher education in regards to the frequency of visit of GP (U = 995 ; p = 0.772). There is also no significant difference between gender in regards to education (Chi-square = 1.1; df = 1; p = 0.295). There is also no significant difference between gender in regards to the frequency of visiting their GP (U = 1222; p = 0.857).

Higher age is accompanied by higher frequency of GP visits: there is a significant positive week correlation between age and frequency of GP visits (Spearman's rho = 0.337; p = 0.001). There is no significant difference between gender in regards to age (t = 0.018; df = 98; p = 0.986).

b. people with low education, people who are not working, people with low individual income tend not to participate in health promotion programs

Low education is accompanied with low participation in these programs, but difference between the participants without higher education and the participants with higher education in regards to participation in these programs is not significant (Chi-square = 3.7; df = 1; p = 0.055). There is no significant difference between the women and men in regards to education (Chi-square = 1.1; df = 1; p = 0.295). There is also no significant difference between gender in regards to the participation in these programs (Chi-square = 1.1; df = 1; p = 0.303).

On the contrary, state of not working is accompanied with high participation in health promotion programs: there is a significant difference between the working and not working Russian participants concerning their participation in health promotion programs (Chi-square = 7.0; df = 1; p = 0.008). But this association is significant only due to men: the working Russian men participate in these programs more often than the not working Russian men (Chi-square = 4.9; df = 1; p = 0.027). There is no significant difference between the working and not working Russian women in regards to their participation in health promotion programs (Chi-square = 2.0; df = 1; p = 0.159).

There is no statistically significant difference between the Russian participants who have a monthly income of less than 500 euros and those who earn 500 euros or more regarding to the their participation in these programs (Chi-square = 3.0; df = 1; p = 0.085). There is no significant difference between gender in these both groups regarding to income (Chi-square = 2.4; df = 1; p = 0.124).

c. people with low education, people who are not working, people with low individual income tend not to participate in spa treatment and rehabilitation programs

Low education is accompanied by low participation in spa treatment and rehabilitation programs: there is a significant difference between the participants without higher education and the participants with higher education regarding to participation in these programs (Chi-square = 6.9; df = 1; p = 0.009). But this association is significant only due to women: there is

a significant difference between the Russian women without higher education and the women with higher education regarding to participation in spa treatment and rehabilitation programs (Chi-square = 8.6; df = 1; p = 0.003). The corresponding association of the Russian men is not significant (Chi-square = 0.3; df = 1; p = 0.588).

There is no significant difference between the working and not working Russian participants regarding to their participation in these programs (Chi-square = 0.25; df = 1; p = 0.620). There is also no significant difference between gender regarding to employment (Chi-square = 1.6; df = 1; p = 0.202). There is also no significant difference between gender regarding to the participation in spa treatment and rehabilitation programs (Chi-square = 1.3; df = 1; p = 0.246).

There is no statistically significant difference between the Russian participants who have a monthly income of less than 500 euros and those who earn 500 euros or more regarding to the their participation in spa treatment and rehabilitation programs (Chi-square = 2.8; df = 1; p = 0.085). There is no significant difference between gender in these both groups regarding to income (Chi-square = 2.4; df = 1; p = 0.124).

d. the Russian participants with a poorer subjective state of health more frequently visit their GP, participate in health promotion, spa treatment and rehabilitation programs than the participants with a better subjective state of health

A negative weak correlation was found between the subjective state of health and frequency of GP visit of the Russian respondents: the Russian participants with a poorer subjective state of health visit their GP more frequently than those who have a better state of health (Spearman's rho = - 0.286; p = 0.004). There is also no significant difference between gender regarding to the frequency of visiting their GP (U = 1222; p = 0.857).

The Russian participants with a poorer subjective state of health significantly more often participate in such programs, than those who have a better state of health (U = 854; p = 0.011). There is also no significant difference between gender regarding to the participation in health promotion programs (Chi-square = 1.1; df = 1; p = 0.303).

The association between participation in spa treatment and rehabilitation programs and subjective state of health was not significant (U = 920; p = 0.305). There is also no significant difference between gender regarding to the participation in these programs (Chi-square = 1.3; df = 1; p = 0.246).

8 Discussion

8.1 Discussion of the results and methods

In this study the differences in health status were investigated through different health determinants according to the explanation model of health inequity by Mielck (Mielck 2000)(see chapter 5.3). As the main health indicator the subjective current state of health was used in this study.

8.1.1 Determinant of health inequity: subjective state of health

The results show that the subjective current state of health of the men and women with Russian background as well as of the other participants of the Sağlik project with migration background is generally relatively poor. It is significantly worse than that of the German Sağlik participants. So, 89% of the Turkish, 84% of the Russian and 82% of the polish respondents rated their health as fair to very poor, compared to 67% of the German interviewees. The women reported consistently significantly worse subjective health than the men. The self related state of health of the Russian and other migrants is noticeably below the German national level as found by DEGS 2008–2011 (Lampert 2013). Moreover, the Russian and the Turkish participants reported a negative change in their health significantly more often than the German and Polish ones. The possible reasons are discussed later in connection with the health determinants.

The association between age of the Russian participants and subjective state of health did not attain significance. With relatively homogeneous age distribution (between 60 and 91) of the Russian group this finding could be probably explained by the health satisfaction paradox (Brandtstädter/Greve 1994, Borchelt et al. 1999) as well as relatively small sample size.

8.1.2 Determinants of social inequality: socioeconomic status

The data about socioeconomic status showed a noticeably difference between the Russian respondents and the other Sağlik participants. Usually for analysis of SES, a multi-dimensional aggregated index is used, which takes into account the level of school education, professional status and net equivalent household income (Lampert 2013). For assessment of

SES of the respondents of this project it was not appropriate to use this index because of little overlap of these three factors. First of all, the school education systems of the four countries are not easy to compare and the applied question about school education was not appropriate for the satisfying comparison. Secondly, professional status of the Russian participants in Germany often did not correspond to the level of their Russian education. Furthermore a lot of the Russian respondents did not work in Germany because they did not find a job or already received old pension. Lastly, the Turkish data about household income was not reliable (Buchcik at al. 2012), so only individual income could be used for statistical analysis. That is why the components of SES were evaluated separately.

8.1.2.1 Educational level

The first component investigated was the level of education. The majority of the Russian participants have a high secondary and tertiary education. Nearly three quarters of the Russian participants received a tertiary education at a special institute or at university, one quarter of them finished a technical or other professional school or received vocational training. Only a small percentage of the Russian interviewees have no professional degree. Compared to the other Sağlik participants, the Russian respondents have the highest percentage of the people with higher education. The lowest educational level have the Turkish participants: three fifths of the participants of the Turkish group have no professional degree.

It is known that poor education, job with low qualification requirements, and low income are associated with poor health (Mielck 2000, 2005, Razum at al. 2008)**.** In this study the association between the level of education of the Russian participants and the subjective state of health on the other hand did not attain significance. The reason for it could be the fact that the majority of the Russian respondents have a high educational level. A bigger sample size could help to investigate this relationship in a future research.

8.1.2.2 Professional level

The second component investigated was the professional level. The majority of the Russian respondents are pensioners, most of them because of old age. Only about one quarter of the Russian participants are employed. It was found that in comparison to the Russian men who are not working, the employed Russian men have a significantly better subjective state of health. This agrees to the results that can be found in the literature (Mielck 2000, 2005,

Razum at al. 2008)**.** This association for the Russian women, however, was not significant. The reason may be the small sample size.

It was also found, that all Russian participants with a higher tertiary education, who did not work in Germany, had in the former USSR jobs with higher qualification requirements. In the former USSR they worked according to their education in the following branches: production, public health, education. This group was not investigated further.

Only 26.7% of the Russian participants with a higher education, who worked or still work now in Germany, had a job with higher qualification requirements. And the others had or have jobs with lower or middle qualification requirements: this is a significant difference between educational level and professional level in Germany. In Germany the Russian women worked or work now as office-cleaner, low qualified office staff, and housemaids, whereas the men worked or work now as common labor: unskilled workmen, technical workers: electrician, metalworker, welder, joiner, drivers. Only very few of the Russian participants worked or work now in Germany according to their higher education (as programmer, physicist, musician, artist). This discrepancy between their education from Russia and the working place in Germany can only to a small degree be ascribed to the fact that they came to Germany when they were already old and did not have sufficient knowledge of German. Mostly it is due to the fact, that their Russian certificates often are not accepted by German authorities. This fact can also confirm the finding, that high education of the Russian respondents was not associated with high income: there was no significant difference between the Russian participants without higher education and the participants with higher education concerning their income.

Having a job with higher qualification requirements is accompanied by a better subjective state of health for the Russian women: there is a significant moderate correlation between their professional level and subjective state of health. For the Russian men the correlation was not found. The reason could be a small number of people who have a job with higher qualification requirements.

Especially the Russian participants with high education who have or had a job with lower qualification requirements, have a poorer subjective state of health than those who work in a job with higher qualification requirements, but the difference was statistically not significant. The reason probably is the very small number of the high educated Russian participants who

have a job with higher qualification requirements. That is why a sufficiently big sample size can help to investigate this question in the future.

In contrast to the professional level of the Russian respondents, the professional level of the other Sağlik participants mainly corresponds to their educational level: the Turkish, Polish and German participants who have low, middle and high education have corresponding job with low, middle and high qualification requirements in Germany.

8.1.2.3 Individual income

The third component of SES is the income. The individual income of the Russian participants is very low and noticeably lower than that of the other Sağlik respondents: the majority of the Russian participants earn less than 500 euros per month. The majority of the other Sağlik respondents have an individual income between 500 and 1500 euros, about two fifths of the Polish and German men earn even more than 1500 euros per month. But the interpretation of this information can not be very reliable because some people of the Russian group did not include the social benefits (for instance, housing benefits) in their individual income. The higher income is usually associated with better state of health (Mielck 2000, 2005, Razum at al. 2008)**.** Compatibly to that, the Russian women with an income less 500 euros per month have significantly poor subjective state of health than those who earn 500 euros and more. The association between income and subjective state of health of the Russian men was not significant. The reason could be the generally low income and a relatively small sample size. For further research the household equivalent income should be calculated based on the number of persons in the household.

8.1.2.4 Resume for the Russian group

Generally, it was noticed that the components of SES of the Russian elderly men is similar to that of the Russian elderly women: high educational level, professional level in former USSR according to their educational level and in Germany not according to their educational level, and low individual income. This reveals an internal social discrepancy within the Russian group. The components of SES of the participants with Russian background in Hamburg are noticeably different from those of the other Sağlik respondents.

8.1.3 Determinants of social resources

As explained in the chapter 5.3., social resources, coping strategies and social integration were investigated by the health determinants "social networking", which includes social contacts, getting help in household, outside the home and with the basic activities of daily living, social support; and "self efficacy".

8.1.3.1 Social networking

It is known, that the support we receive from others (Cohen et al., 2000), the structure of social networking (Brissette at al. 2000), the quality and quantity of social contacts (Kiecolt-Glaser/Newton 2001), and feelings of isolation and loneliness (Cacioppo et al. 2002) are all identified as predictors of health and wellbeing. This study also confirms that less frequent social contacts are accompanied by a poorer subjective state of health: there was found a significant week positive correlation between the frequency of social contacts and the subjective state of health of the Russian participants.

The findings about **social contacts** show, that the Russian and the other Sağlik participants, on average, have relatively frequent social contacts, but with significant differences between nationalities and gender. It is conspicuous, that the participants with migration background have noticeably more social contacts than the member of the German control group. It could be explained via cultural differences and by the nature of migration itself. Still the Russian respondents, on average, have less social contacts than the Turkish and Polish participants. It was also found that even about one seventh of the Russian participants have very poor social contacts. This group may be liable to suffer for isolation. The Russian men have less social contacts than the Russian women. An explanation for this could be the fact that women have a more socially oriented life style, they are more concerned about establishing social contacts (Dalgard et al. 2006). But this fact distinguishes the Russian group from the other Sağlik participants: the Turkish, Polish and German men of have significantly more social contacts than the women.

The not working Russian participants have significantly poorer social contacts than the working Russian participants. A significant association between education and frequency of social contacts was not found. It is known that the frequency of social contacts decrease with age (Andrew at al. 2008). The study also confirms this fact: for the Russian women there was found a significant moderate negative correlation between age and frequency of social

contacts in the Russian women: the Russian women with higher age have less social contacts. For the Russian men a corresponding correlation was not found. This could be ascribed to the fact that the Russian men have less social contacts.

It was found that the Russian group – of all other Sağlik groups with migration background - has the highest percentage of people who live alone (about two fifth of all). This percentage for the German control group is even higher (about one halve of all). Persons who live alone can have a risk of isolation, for them the social networking is very important. Since isolation was investigated in the study not directly, but by the question of living alone, by frequency of social contacts, and by the spare time activity, there could be a limitation of the study.

The results about the **spare time activities** show that the Russian participants, on average, spend their spare time alone about as often as with other people, whereas the other Sağlik respondents spend their spare time more often with other people. In general, the Russian participants spend their spare time alone significantly more often than the other participants. This fact could also be a risk factor for isolation for those Russian participants with less frequent team activities than the average Russian, especially if they live alone and have less social contacts.

The study confirms the knowledge that more frequent team activity is accompanied by better subjective state of health (Borgonovi 2010): there was found a significant week positive correlation between frequency of team activity and subjective state of health of the Russian participants.

Methodically, it should be noticed that the instrument for social contacts and spare time activity was not sufficient. As an extreme example there may be a person whose brother – at the same time – his friend, his neighbor and his colleague, whom he sees every day, and who has very few other social contacts. If he answers every time that he sees daily his family members, his friend, his neighbor, and his colleague, then he gives the impression of a lot of social contacts, although there is only one person, whom he sees as often as one a day.

Also the question about spare time activities gives only indirect possibility to assess isolation because only two questions about hobby and library visits. For the future research the use of other instruments (e.g. Lubben Social Network Scale (Lubben et al. 1988), De Jong Gierveld Loneliness Scale (De Jong Gierveld 1999a; 2000) to investigate social contacts and isolation could be helpful.

The results about **getting help** show that the Russian participants who get help have significantly better subjective state of health than those who do not get help. The findings about getting help in household, outside the home and with the basic activities of daily living show that 20 to 70% of the respondents get this help. There were found significant differences between four nationalities, both for men and women. So, the Russian men get help more often than the other participating men, the Turkish women get help more often than the other participating women. The results about need in help and support by the Sağlik participants in their everyday life, compared to what they currently have, show that 10 to 23% of the respondents need additional help. The Russian interviewees generally need less help than the participants of the other groups. This could be explained by cultural differences and by a possible lack of awareness of social facilities. It was also noticed, that all participants with migration background who already get help need more help compared to corresponding respondents who get no help. This result is difficult to assess without the further research investigations.

It was found, that in the Russian group higher age was accompanied by lower frequency of getting help: there is a statistically significant difference in age between the Russian men and women getting help and getting no help. This fact probably can be explained by a loss of social contacts with increasing age.

The assessment of the results about getting help is difficult, because selection bias of the convenient sample selection method: persons in need help in household, outside the home and with the basic activities of daily living are rarely seen in public and therefore mostly not included in the study. Random sampling in future researches can prevent this selection bias.

Results about the social support show, that on the average, the Russian and the other Sağlik participants receive strong to moderate social support from their relatives and friends. The highest social support was found for the Turkish participants, only a little higher than for the German respondents. Social support from their relatives and friends is significantly lower for the Russian and the Polish group. There was found no significant correlation between age and social support in the Russian group.

8.1.3.2 Self efficacy

It is known that a strong sense of personal self-efficacy is related to better health and better social integration (Bandura, 1977). In this study, however, a significant association between

GSE and the subjective state of health of the Russian respondents was not found. Possible reason could be the relatively similar GSE values of the Russian participants with relatively small deviation from the mean value as well as a small sample size. Also the correlation between age and general self-efficacy did not attain significance in the Russian group.

The level of general self-efficacy is relatively high for the participants of all four groups. GSE of the Russian, Turkish and Polish participants is significantly higher than that of the German participants. The GSE of the Russian women is lower than that of the women with Turkish and Polish background. The men generally have significantly higher GSE than the women. Scholz et al. (2002) try to explain this difference by the culturally defined gender roles, which seem to reflect such a difference.

8.1.3.3 Resume for the Russian group

Generally, the Russian respondents have fewer social contacts and lower social support than the other participants with migration background; they spend their spare time alone significantly more often than the other participants; in the Russian group the percentage of people who get help, as well as the frequency of their social contacts, decrease with age. These findings could indicate that the Russian respondents do not sufficiently use social resources as a protective factor for health. This conjecture is supported by the fact that more than one third of the Russian respondents would like to know more about social networking in their community (Russian meetings points, cultural arrangements for Russian people in Hamburg, information about early retirement pension, care assistance, German language course). There really seems to be a need for strengthening of the social networks of the Russian migrants by adequate programs.

8.1.4 Determinants of health behavior

As determinants of health behavior were investigated the following factors: tobacco, alcohol consumption and BMI as a risk factor, physical activity and eating behavior as possible protective factors for health.

8.1.4.1 Tobacco consumption

Smoking is usually associated with poor state of health. It is considerable risk factor for numerous chronic diseases. Moreover it is usually associated with poor self-rated health

(CDC 2008, CHIS 2008, Wang at al. 2012). This study did not found a significant association between smoking and subjective state of health among the Russian respondents. The reason for it could be generally high smoking rate and the relatively small sample size. There was found a significant difference between the Russian men without higher education and the men with higher education concerning nicotine consumption: the low educated Russian men smoke more than the higher educated men. This difference between the Russian women was not significant. The association between state of working and income on the one hand and nicotine consumption on the other hand also did not attain significance. The possible reason for it could be also the relatively small sample size.

The results about tobacco consumption show the relatively high smoking rate in the Russian group as well as in the other Sağlik participants: that about one quarter of the Russian and Turkish interviewees, a little less than one third of German and only about one sixth of Polish participants are smokers. There was a significant gender difference between the Russian women and men and the Turkish women and men: the men smoke more than the women. These findings could be explained by culture differences. For example, the results of the Russian group tend to the current results of smoking rate of the elderly people in the Russian Federation (GATS Russian Federation 2009).

The gender difference between the Polish women and men as well as between the German women and men was not significant. It was also noticed the significant difference between the smoking women within four ethnic groups: the German women smoke significantly more the women from the other groups. The difference between the smoking men within four ethnic groups was not significant. For the future research could be useful to investigate the quantity of smoked cigarettes per day in order to find the heavy smokers.

By comparison the results to the national German level made by DEGS 2008–2011 it can be noticed the noticeably higher smoking rate of all Sağlik participants (Lampert 2013). For the future research the distribution on “daily smokers”, “occasional smokers”, “ex-smokers” “never smokers”, “heavy smokers”, as well as quite rate could be useful to get more differentiated information about this risk factor influencing health and have a possibility to compare the data with the national level.

8.1.4.2 Alcohol consumption

It is well known that alcohol misuse and abuse can lead to the development of different chronic diseases (Rehm at al. 2003, CDC 2012), but some studies show that light - moderate alcohol intake is accompanied with a reduced risk of coronary heart disease, stroke and total mortality in middle-aged and elderly men and women (Doll 1997; Grobbee et al. 1999; Rimm et al. 1999). This study found a significant positive week correlation between frequency of alcohol consumption and subjective state of health of the Russian men and women. With relative low frequency of alcohol consumption this finding can suppose the positive effect on health. Although the further research about the quantity of consumed alcohol is needed to clarify this result.

There was also found a statistically significant difference between the working and not working Russian men concerning the frequency of alcohol consumption: the working Russian men consume alcohol more often than not working men. The difference between the working and not working Russian women concerning alcohol consumption was not significant. Also educational level was not associated with frequency of alcohol consumption. But the low individual income was significantly accompanied with less frequently alcohol consumption of the Russian men and women.

The findings of the four ethnic groups show the relatively low frequency of alcohol consumption. So, The Russian, Polish and German participants consume alcohol on an average of two to four times a month. It is conspicuous that the Turkish interviewees on average drink alcohol significantly much more seldom than the other participants, for they drink alcoholic beverage only once a month or even less. The women consistently reported a significantly less frequently alcohol consumption than the men. These results can probably be explained by cultural differences, habit and religious statements.

Generally, the finding was difficult to assess because of lack of precise information about the quantity of alcohol consumed. Moreover, because of self reporting the reporting bias can appear: systematic, deliberate underreporting of frequency of alcohol consumption. For a future research should be evaluated the quantity of alcohol consumption - in grams of pure alcohol per day could be investigated.

8.1.4.3 Physical activity

Lack of physical activity has a negative impact on health, and regular physical activity can prevent from different chronic diseases (Mensink 1999, Fiaterone 1994, WHO 2008). In the

Russian group in this study a significant association between physical activity and subjective state of health was not found. A significant difference between education, state of working and individual income concerning physical activity was also not found. The reason could be insufficient instrument for measuring physical activity, the similar level of physical activity of the Russian respondents, as well as the relatively small sample size.

The results show the relative shortage of physical activity by all Sağlik participants with a significant difference between the four ethnic groups, for women and men: only three fifths of the Russian and three fifths of the Polish interviewees, as well as one half of the German participants and only about one quarter of the Turkish people usually do some sports or physical activity. By comparing the attention to sufficient physical activity between the four ethnic groups a significant difference was found: the Russian and the Turkish interviewees pay less attention to sufficient physical activity than the Polish and German participants. Nearly one half of the Russian participants pays a little or no attention or no to sufficient physical activity.

These findings can not be compared with the national data received by GEDA 2009 (RKI 2010) because the used instrument for investigation physical activity in this study was not sufficient. For a future research the duration of physical activity, intensive physical activity and sports per week could be investigated. More objective results about physical activity can be achieved via e.g. submaximal cycle ergometry test which was used for DEGS (Finger 2013). Also order to investigate the risk of the sedentary life style, objective data about as the whole activities per day in hours (particularly with sitting or lying) could be collected (SBOEWG 2010).

8.1.4.4 Characteristics of nutrition and eating behavior

Nutrition and eating behavior were investigated by fruit and vegetable consumption, warm meals and meat consumption, low fat or the fat free food consumption, deliberate reduction of food in order not to gain weight, and attention to healthy nutrition.

8.1.4.4.1 Fruit and vegetable consumption

High fruit and vegetable consumption could helps to prevent from various chronic diseases (WHO 2003, World Cancer Research Fund 2007). In this study a significant association between the quantity of fruit and vegetable consumption and the subjective state of health in the Russian group was not found. Also differences in fruit and vegetable consumption by the

Russian elderly with different educational level, state of working, and income level were not significant. The reason could be that the fruit and vegetable consumption, for the Russian participants in general is low, and the rather small sample size.

The results show that the fruit and vegetable consumption is relatively low not only for the Russian participants, but also for the other Sağlik respondents. The Sağlik participants consumed on average of about 2.8 to 3.8 portions fruits and vegetables per day without a significant difference between the four nationalities. The women reported consistently higher fruit and vegetable consumption than the men. Generally, for the majority of the Sağlik participants the consumption of fruit and vegetable is not enough according to the recommendations given by the German Nutrition Society (Deutsche Gesellschaft für Ernährung (DGE)): five portions of fruits and vegetable per day (DGE 2012). Only a small percentage of the participants is corresponding to the foregoing recommendations: 20% of the German, 17.5% of the Turkish, 16.5% of the Polish and only 6.0% of the Russian interviewees. The received results about the fruit and vegetable consumption are similar to the result of DEGS 2008-2011, which stats that elderly women aged 60 or above in Germany, on the average, consume more fruit and vegetables per day than elderly men (3.5 and 2.7 portions correspondingly) (Mensink at al. 2013).

8.1.4.4.2 Meat and warm meals consumption

In this study a significant association between the frequency of meat consumption and the subjective state of health was not found in the Russian group. Also the differences in meat consumption by the Russian elderly with different educational level, state of working, and income level were not significant. The reason could be relatively high meat consumption of nearly all of the Russian respondents, an insufficient instrument for investigating meat consumption, and the small sample size. Further research should use other instruments, which will help to investigate the kind of meat products (red or white meat), the quantity of meat consumption in grams per day, etc. to compare the findings with national data. The investigation of fish consumption could also be useful to assess the possible risk and protective factors.

The results show that the Russian participants, who eat meat nearly every day, on the average, consume meat significantly more often than the other groups. The Turkish and German respondents eat meat less often than the Polish participants, but still they eat meat about several times a week. The differences could be explained by cultural and differences between

the four ethnic groups. On the average, men consumed more meat than women (except the Russian participants: the Russian men and women consume meat with similar frequency). This finding about the gender difference in the Turkish, Polish and German is similar to the results of the II national survey about food consumption in Germany (Max Rubner Institut 2008).

To get more knowledge about the eating habits of the four nationalities, also the frequency of **warm meals consumption** was investigated.

The not working Russian men consume warm food significantly more often than the employed Russian men. The Russian men with an income less than 500 euros per month consume warm food significantly more often than men with an income 500 euros per month or more. State of working and income level of the Russian women, as well as educational level of all Russian participants were not associated with the frequency of warm meals.

The Russian participants, on the average, consume warm meals significantly more often than the other groups. About one half of the Russian participants consume warm meals more often than once per day and about the other half once per day. Only one third of the Turkish and only a small part of the Polish and of the German participants consume warm meals more often than once per day. Most of the Turkish, Polish and German interviewees eat warm meals once per day. About one third of the German group consumed warm meals only several times per week. These differences between the four ethnic groups reflect the differences of the eating habits in the countries of origin. These findings could be useful for the planning of the future health promotion programs concerning healthy nutrition for the different nationalities.

8.1.4.4.3 Low fat or fat free food consumption and limitation of food intake in order not to gain weight

It is known that people can improve their health by reducing the total amount of fat in their diet (Dietary Guidelines for Americans 2010). A significant association between the frequency of low fat or fat free food consumption and the limitation of food intake in order not to gain weight and the subjective state of health in the Russian group was not found. Differences between education, state of working, and individual income concerning low fat or fat free food consumption, and deliberate reduction of food in order not to weight also did not attain significance among the Russian participants. The reason for it could be the relatively

low frequency fat or fat free food consumption (on the average, sometimes or rarely) of the majority of the Russian respondents and the small sample size. However, there is a significant difference of the frequency of low fat or fat free food consumption between the four groups: the frequency increases from the Russian group over the German and the Turkish group to the Polish group. On average, women kept to a free fat diet significantly more often than men.
Similar results were found for the limitation of the food intake in order not to gain weight. Generally, the Russian participants limited their food intake in order not to gain weight, on the average, significantly less often than the other participants. The frequency of the limitation of food intake in order not to gain weight increases for the four groups in the same order as the frequency fat or fat free food consumption. On the average, the women limit their food intake in order not to gain weight significantly more often than the men.

8.1.4.4.4 Attention to healthy nutrition

Data about the attention to healthy nutrition show that the Russian participants, on the average, pay significantly less attention to the healthy nutrition than the other participants (they pay on average moderate or little attention). Educational level, state of working, and individual income of the Russian participants also have no association with attention to healthy nutrition in this group. The reason could be relatively low attention to healthy nutrition of nearly all of the Russian respondents and the small sample size. The attention to healthy nutrition significantly increases from the Russian participants over the German respondents to the Turkish and Polish participant.

8.1.4.5 Body mass index

The BMI indicates the prevalence of overweight or obesity and could be used as objective indicator of health status, if weight and height were measured properly. In this study the BMI was calculated based on self reported weight and height. High BMI is considered as a risk factor for certain diseases (Hubert at al. 1983, Wang et al 2005, Renehan et al 2008). Reporting bias is one of the limitations of this study. Measuring height and weight properly will be useful in future research.
In this study it was found that three quarters of the respondents with Russian background were overweight or obese. The educational level, the state of working, the individual income, and age of the Russian participants were not significantly associated with their BMI. These findings can probably be explained by the relatively small sample size and the low dispersion

of the BMI of the Russian participants. Further research would be needed to investigate these associations.

The findings about BMI of the four ethnic groups show that only nearly one quarter of all Sağlik participants have normal weight, the remaining people are overweight or obese (except 2.9% of the Polish men, who have underweight). There was no significant difference between the four nationalities. By comparing the genders significant differences were found: the Russian and the Turkish women have a higher BMI than the corresponding men, but the Polish and the German men have higher BMI than the corresponding women. Although the Russian women pay significantly more attention to healthy nutrition than the Russian men, keep to a free fat diet significantly more often than the men, and limit their food intake in order not to gain weight significantly more often than the men, they have a higher BMI than the men. This finding could reveal insufficient knowledge about the healthy diet.

The results about BMI do not correspond to the German national level (DEGS, GEDA). By comparing the percentage of participants with overweight with the corresponding percentage determined by DEGS and GEDA, it was found, that it was smaller for the Russian men, similar for the Russian women, for the German men, for the German women, and for the Polish men, smaller for the Polish women and for the Turkish men, and higher for the Turkish women (RKI 2010, Mensink at al. 2013). These findings could be explained by cultural and genetic factors, as well as differences in health behavior.

8.1.4.6 Resume for the Russian group

Generally, it can be noticed that the Russian respondents have behavior which could have a negative influence their state of health and lead to chronic diseases: high smoking rate, particularly by the Russian men, probably insufficient level of physical activity, low attention to sufficient physical activity, low fruit and vegetable consumption, high meat consumption, rare consumption of low fat or fat free food, rare limitation of food intake in order not to gain weight, low attention to the healthy nutrition. The high prevalence of overweight and obesity in the Russian participants, especially by the Russian women, also confirm these findings. These results show the need of health promotion programs in the area of healthy nutrition and sufficient physical activity. The Russian interviewees themselves already expressed the wish for additional information about healthy nutrition and sport activities (particularly about gymnastics and water gymnastics) in their communities in Russian language.

8.1.5 Determinants of use of health services

The use of health services was investigated by the frequency of visiting the general practitioner, participation in health promotion programs, and, especially for the Russian respondents, by participation in spa treatment and rehabilitation programs.

It is known that people with poor subjective state of health use the outpatient medical services more often that people with good subjective state of health (Rattay at al. 2013). Also in this study a negative weak correlation was found between the subjective state of health and frequency of GP visit of the Russian respondents: the Russian participants with poorer subjective state of health visit their GP more frequently than the participants with a better state of health. There was also found a significant positive week correlation between age and frequency of GP visits for the Russian participants: the older Russian participants visited their GP more frequently, than the younger ones. This finding corresponds to the result of DEGS (Rattay at al. 2013).

The results for the four ethnic groups show that the Russian respondents visit their GP about five times a year. This is, on the average, significantly less often than the other Sağlik participants. It is also significantly less often than the German national level (Rattay at al. 2013). The Turkish participants visited their GP more often than the other interviewees: on the average, once per month, which is above the national level and similar to the findings of the survey in Hamburg in 1998 (Freie und Hansestadt Hamburg Behoerde fuer Arbeit Gesundheit und Soziales 1998). The German participants visited their GP about seven times a year, the Polish participants about six times a year. The gender difference was not significant.

The results about participation in health promotion programs show that the Russian participants with a poorer subjective state of health participate in such programs significantly more often than those with better state of health. It was also found that the working Russian men participate in health promotion programs significantly more often than those who are not working. The reason could be that fact that the working Russian men have less time for such programs than those who are not working. The state of working of the Russian women, as well as the education, and the income level of all Russian participants was not associated with their participation in health promotion programs. Further research with an adequate sample size could be helpful to investigate these associations.

The findings show that about one third of the Russian and of the Polish interviewees participated in some health promotion programs during the last year, for the German and particularly for the Turkish respondents this percentage was lower. Nearly 90% of the Russian and Polish as well as about 80% of the Turkish and the German interviewees who participated in health promotion programs noticed a positive improvement of their state of health.

The association between participation in spa treatment and rehabilitation programs and the subjective state of health of the Russian respondents was not significant, although about one third of the Russian respondents participated in such programs during the last ten years, and all of them noticed a positive change of their state of health after these programs. The Russian women without higher education participated in spa treatment and rehabilitation programs significantly less often than the Russian women with higher education. This finding could reflect a lack of information about health and health promotion programs. The educational level of the Russian men, the state of working, and individual income of all Russian participants were not associated with their participation in these programs. In order to find the reason for that further research is needed.

Summarizing the findings, it can be noticed that the participants with Russian migration background use health care facilities insufficiently: with relatively low frequency of GP visits and rather low participation in health promotion, spa treatment and rehabilitation programs their subjective state of health is relatively poor. These findings could illustrate insufficient knowledge about health and diseases as well as problems related to access to the health services: poor German knowledge, lack of doctors speaking Russian, need of accompaniment for visiting a doctor etc. Also the fact, that the Russian migrants come to Germany noticeably later than other interviewees with Turkish or Polish migration background, leads to the assumption that the Russian respondents still are not as well integrated in Germany and not as familiar with the German health care system as the other respondents with migration background (Lampert/Voth 2009). Moreover, some of the Russian respondents expressed their demand for information about health promotion and rehabilitation programs and Russian speaking doctors in their quarter. But the findings could also indicate that the health promotion, spa treatment and rehabilitation programs for the target group are not adequate:

not very effective or too broad to cover the special needs. This fact shows the necessity of health promotion programs that are adapted to the needs of the different target groups.

8.2 Limitations of the study

Summarizing, the following limitations should be taken into account by the interpretation of the study results:

- Cross-sectional design gives no possibility to establish causal relationships between variables
- Selection bias: for the study a convenience sampling selection was used (an active recruitment of people in the public together with snowball sampling). This leads to selection bias, because persons, who are not seen in public, are not included in the study, except may be for some, who were recruited by the snowball method
- Generalization of the results is not possible because of selection bias
- Relatively small sample size give no possibility to properly investigate some variables
- Sample size influences the precision of the results: for small samples the results are less precise
- Reporting bias (because of self reporting): possible deliberate underreporting, e.g. about the frequency of alcohol consumption or about the weight
- Recall bias: the frequency of consumption of fruit, vegetable, meat was asked retrospectively, there is the risk of recollection errors

8.3 Strengths of the study

In spite of the above mentioned limitations this study has a lot of strengths:

- The first substantial data base (cross-sectional data) of various aspects of SES, other health related factors, and subjective state of health of elderly people with Russian background
- In the context of the Sağlik project, the possibility to compare the results of components of SES, other health related factors, and subjective state of health of elderly people with Russian background with the results of the other Sağlik participants with migration background (of the Turkish and the Polish respondents)

- It allows to analyze the inconsistency of the socioeconomic status of the Russian migrants
- The questionnaire guided interview is beneficial to a study with a relatively small sample size, because it gives the possibility to collect the data with high quality and completeness.
- The questionnaire guided interviews was conducted by a native Russian speaker, who could give necessary explanation of some questions and help elderly people who had problems with reading and writing
- Minimizing missing data by very careful data collection
- Findings could be used by clinician and researchers as a data base for comparing the results of future researches in the field "migration-age-health", and particularly for investigations of health and health related factors of people with a Russian migration background
- Findings could be used by policy makers and public health authorities for the planning of activities and intervention programs, which aim to promote healthy behavior of elderly migrants and especially for elderly people with Russian background

8.4 Recommendations

The results of the study give reason to the following recommendations.

8.4.1 For further research

- Extensive longitudinal research is needed to explore causality and direction of the relation found
- Deeper research of certain health related factors in migration population (more elaborate and extensive questions for more precise and reliable results)
- Assessment of other health related factors e.g. mental factors (stress, depression etc.), other aspects of eating behavior, e.g. sweet consumption etc.
- Random sampling instead pf convenience sampling
- Getting more objective data, e.g. objective measuring of the anthropometric data (height and weight) for calculation of BMI or measuring of the Hip-Waste-Ratio
- Investigation of objective state of health of migrants (e.g. mortality)

8.4.2 For further health promotion

- Current status analysis of existing services for the Russian migrants should be done in order to obtain an overview of existing health promoting offers related to healthy nutrition, physical activity, and social participation in the selected communities in Hamburg, including structural data of these offers, their accessibility, and their extent of use
- Health promotion programs should be goal-oriented: e.g. courses for healthy nutrition (with collective cooking and a Russian speaking instructor), physical activity programs (Nordic walking, cycling, gymnastics, water gymnastics) in small groups for Russian speaking people
- Adaptation of the Sağlik intervention to the target group of people with a Russian migration background
- Strengthening the social contacts between the Russian people, as well as between the Russians, other migrants, and German population in communities (senior meetings points, choirs, concerts, dancing-party, walking or traveling together etc.)
- Use the resources of existing institutions and programs (MiMi, HAG, senior meetings points etc.)

8.4.3 For policy

- Strengthening the health care services for migrants and especially for the Russian people (translating services etc.)
- Public information about social and medical services in the Russian language
- Increasing the quantity of courses of the German language for the Russian elderly
- Easier acceptance of Russian certificates by German authorities

8.5 Conclusion

The thesis study aimed to assess the subjective health status and certain determinants of health of elderly women and men with Russian background in Hamburg.

The results show that the elderly people with Russian background have relatively poor self reported state of health. Their subjective state of health is similar to the Sağlik participants with Turkish and Polish background and significantly worse compared to that of the members

of the German control group. Assessment of health related factors detected possible reasons for it.

Firstly, an internal social discrepancy was found between components of socioeconomic status (high educational level, but low professional level and low individual income).

Secondly, insufficiently use of social resources as was found (partly poor social networking: fewer social contacts and lower social support than by the other participants with migration background, possible increased risk for isolation for certain subgroups).

Thirdly, a risky health behavior was observed: high smoking rate, particularly by the Russian men, probably insufficient level of physical activity, low attention to sufficient physical activity, unhealthy nutrition (low fruit and vegetable consumption, high meat consumption, rare consumption of low fat or fat free food, rare limitation of food intake in order not to gain weight, low attention to healthy nutrition) and as a result a high prevalence of overweight and obesity.

Fourthly, these findings ere accompanied by inhomogeneous use of health services (relatively low frequency of GP visits, rather low participation in health promotion, spa treatment, and rehabilitation programs).

These findings demonstrate the high need in corresponding target oriented health promotion programs in the areas of healthy nutrition, physical activity, and social networking, which aim to improve the state of health of elderly women and men with Russian background in Hamburg and strengthen their social resources in the future.

In spite of some limitations, this study supplies a valuable data base about health and certain health related factors of the second largest population of people with migration background in Germany. It allows to analyze the inconsistency of the socioeconomic status. It also gives the chance to differentiate between groups of migrants. The results can be used to develop corresponding complex health promotion programs in order to improve the state of health and strengthen social networks of the elderly people with a Russian background. The findings can be also used for the further more profound research in the area Migration-Health-Age as a data base for comparison of the results. Knowledge about comparison of the certain health related factors and behaviour, SES and subjective health status of the Russian respondents with that of the participants with Turkish and Polish background and the elderly members of the German control group in Hamburg can help to develop a joint strategy to battle health inequities.

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10 Appendix

10.1 Content of tables and figures

10.2 Tables

Table 5. *Age of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Ethnicity	Gender	Number of participants	Age			
			Mean	Std. Deviation	Minimum	Maximum
Russian	women	53	70.1	8.2	60.0	91.0
	men	47	70.1	9.0	60.0	90.0
	Total	100	70.1	8.5	60.0	91.0
Turkish	women	54	64.3	3.9	60.0	77.0
	men	46	66.9	5.1	60.0	79.0
	Total	100	65.6	4.7	60.0	79.0
Polish	women	69	69.3	7.4	60.0	83.0
	men	34	68.4	7.1	60.0	82.0
	Total	103	69.0	7.3	60.0	83.0
German	women	54	72.1	7.4	60.0	89.0
	men	47	67.3	6.6	60.0	87.0
	Total	101	69.9	7.4	60.0	89.0

Table 6. *School education of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Ethnicity	Gender	School education in years, %					
		0 years	1- 5 years	6-8 years	9-11 years	12 years and more	No comments
Russian	women	0.0	0.0	15.1	84.9	0.0	0.0
	men	0.0	0.0	27.7	72.3	0.0	0.0
	Total	0.0	0.0	21.0	79.0	0.0	0.0
Turkish	women	14.8	59.3	16.7	7.4	1.9	0.0
	men	6.5	50.0	21.7	17.4	4.3	0.0
	Total	11.0	55.0	19.0	12.0	3.0	0.0
Polish	women	0.0	0.0	30.4	30.4	39.1	0.0
	men	0.0	0.0	17.6	23.5	58.8	0.0
	Total	0.0	0.0	26.2	28.2	45.6	0.0
German	women	0.0	1.9	50.0	37.0	9.3	1.9
	men	0.0	0.0	44.7	40.4	12.8	2.1
	Total	0.0	1.0	47.5	38.6	10.9	2.0

Table 7. *Professional /higher school/ postgraduate (tertiary) education of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Ethnicity	Gender	Professional / Higher school / Postgraduate education, %					
		no professional degree	vocational training (Lehre, Berufsausbildung)	professional school, technical school (Fachschule/Meister-/Technikerschule/Berufs-/Fachakademie)	college degree (Fachhochschulabschluss)	university degree	other education, no comment
Russian	women	3.8	1.9	18.9	43.4	32.1	0.0
	men	2.1	10.6	21.3	31.9	34.0	0.0
	Total	3.0	6.0	20.0	38.0	33.0	0.0
Turkish	women	64.8	5.6	0.0	0.0	1.9	27.8
	men	63.0	15.2	6.5	0.0	2.2	13.0
	Total	64.0	10.0	3.0	0.0	2.0	21.0
Polish	women	20.3	39.1	14.5	13.0	4.3	8.7
	men	0.0	41.2	35.3	11.8	8.8	2.9
	Total	13.6	39.8	21.4	12.6	5.8	6.8
German	women	33.3	59.3	3.7	1.9	1.9	0.0
	men	8.5	72.3	8.5	0.0	10.6	0.0
	Total	21.8	65.3	5.9	1.0	5.0	1.0

Table 7a. *Educational level according to profession/job of the Sağlik participants with Russian background in Hamburg*

Educational level concerning to profession			in Germany			In the former USSR		
			Profession/job		Total	Profession/job		Total
			with low and middle qualification requirement	with high qualification requirement		with low and middle qualification requirement	with high qualification requirement	
educational level	**without higer education**	**Count**	29	0	29	0	0	0
		% within education	100.0%	0.0%	100.0%	0.0%	0.0%	0.0%
	higher education	**Count**	22	8	30	0	41	41
		% within educational level	73.3%	26.7%	100.0%	0.0%	100.0%	100.0%
Total		**Count**	51	8	59	0	41	41
		% within educational level	86.4%	13.6%	100.0%	0.0%	100.0%	100.0%

Table 8. *Reasons for not working of the Sağlik participants with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Ethnicity	Reason for not working, %			
	full-time in household	Old age, disability, early retirement pension	unemployment	other reasons, no comment
Russian	0.0	89.5	10.5	0.0
Turkish	12.8	76.7	3.5	7.0
Polish	6.3	90.0	1.3	2.5
German	4.4	90.0	4.4	1.1

Table 9. *Individual income of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Ethnicity	Gender	Individual income, %				
		until 500 €	500-1500 €	1.501-2.500 €	more than 2.501 €	No comment
Russian	women	86.8	9.4	3.8	0.0	0.0
	men	72.3	17.0	4.3	6.4	0.0
	Total	80.0	13.0	4.0	3.0	0.0
Turkish	women	22.2	55.6	6.0	0.0	16.7
	men	2.2	80.4	6.5	0.0	10.9
	Total	13.0	67.0	6.0	0.0	14.0
Polish	women	30.4	56.5	4.3	0.0	8.7
	men	2.9	52.9	35.3	5.9	2.9
	Total	21.4	55.3	14.6	1.9	6.8
German	women	27.8	53.7	13.0	0.0	5.6
	men	14.9	46.8	23.4	6.4	8.5
	Total	21.8	50.5	17.8	3.0	6.9

Table 10. *Frequency of personal social contacts of the participants of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Personal social contacts, %												
Ethnicity	**Frequency of personal contacts**	**Partner**	**Children**	**Grand children**	**Parents**	**Other relatives**	**Friends**	**Neighbors**	**Colleagues (incl.former)**	**Community members**	**Guests of the meeting points**	**Visitors of the church**
Russian	daily	62.0	21.0	11.0	1.0	2.0	15.0	3.0	21.0	1.0	0.0	0.0
	weekly+monthly	4.0	47.0	42.0	2.0	21.0	72.0	42.0	5.0	43.0	38.0	22.0
	rarely+never	34.0	32.0	47.0	97.0	77.0	13.0	55.0	74.0	56.0	62.0	78.0
	No comments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Turkish	daily	68.0	58.0	24.0	0.0	0.0	15.0	14.0	3.0	3.0	0.0	5.0
	weekly+monthly	0.0	35.0	46.0	12.0	45.0	63.0	50.0	23.0	14.0	13.0	37.0
	rarely+never	30.0	5.0	23.0	76.0	49.0	18.0	35.0	67.0	65.0	81.0	54.0
	No comments	2.0	2.0	7.0	12.0	6.0	4.0	1.0	7.0	18.0	6.0	4.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Polish	daily	66.0	29.1	11.7	0.0	0.0	10.7	20.4	7.8	0.0	0.0	5.8
	weekly+monthly	2.9	48.5	44.7	6.8	19.4	56.3	22.3	12.6	22.3	19.4	65.0
	rarely+never	31.1	21.4	42.7	92.2	80.6	33.0	57.3	79.6	77.7	80.6	29.1
	No comments	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
German	daily	49.5	6.9	2.0	0.0	1.0	5.0	26.7	5.0	0.0	1.0	0.0
	weekly+monthly	2.0	58.4	40.6	11.9	24.8	81.2	33.7	13.9	36.6	31.7	17.8
	rarely+never	48.5	34.7	57.4	88.1	74.3	13.9	39.6	81.2	63.4	67.3	82.2
	No comments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 11. *Spare time activity of the participants of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Spare time activity, % of the participants who do the following activities											
Ethnicity	**Frequency of activity**	**Meeting friends**	**Hobby**	**Restaurant/ Café visit**	**Courses**	**Church services**	**Neighbor help**	**Cultural arrange-ments**	**Senior meeting points**	**Library**	**Political arrange-ments**
Russian	daily	16.0	45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	weekly+monthly	75.0	47.0	26.0	23.0	23.0	8.0	61.0	30.0	24.0	6.0
	rarely+never	9.0	8.0	74.0	77.0	77.0	92.0	39.0	70.0	76.0	94.0
	no comments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Turkish	daily	21.0	7.0	10.0	0.0	6.0	2.0	0.0	0.0	0.0	0.0
	weekly+monthly	70.0	16.0	41.0	12.0	48.0	31.0	4.0	15.0	7.0	5.0
	rarely+never	9.0	77.0	49.0	84.0	44.0	63.0	92.0	80.0	89.0	91.0
	no comments	0.0	100.0	0.0	4.0	2.0	4.0	4.0	5.0	4.0	4.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Polish	daily	5.8	17.5	0.0	0.0	3.9	1.9	0.0	0.0	0.0	0.0
	weekly+monthly	59.2	43.7	28.2	4.9	56.3	12.6	9.7	13.6	1.9	1.0
	rarely+never	35.0	38.8	71.8	94.2	39.8	85.4	90.3	86.4	98.1	99.0
	no comments	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
German	daily	1.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	weekly+monthly	66.3	43.6	65.3	8.9	18.8	9.9	13.9	26.7	12.9	1.0
	rarely+never	32.7	50.5	34.7	91.1	81.2	90.1	86.1	72.3	87.1	99.0
	no comments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 12. *Getting help in household, outside the home and with the basic activities of daily living of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Getting help in household, outside the home and with the basic activities of daily living, %												
Getting help	**Ethnicity**											
	Russian			**Turkish**			**Polish**			**German**		
	women, %	men, %	Total, %	women ,%	men, %	Total, %	women ,%	men, %	Total, %	women ,%	men, %	Total, %
in household	50.9	38.3	45.0	24.1	37.0	30.0	62.3	82.4	68.9	53.7	68.1	60.4
outside the home	37.7	36.2	37.0	27.8	41.3	34.0	34.8	17.6	29.1	25.9	8.5	17.8
with the basic activities of daily living	13.2	10.6	12.0	16.7	37.0	26.0	0.0	2.9	1.0	5.6	2.1	4.0
need of help	20.8	4.3	13.0	25.9	10.9	19.0	24.6	11.8	20.4	25.9	14.9	20.8

Table 13. *Smoking rate of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Smoking rate, %												
Smoking	**Ethnicity**											
	Russian			**Turkish**			**Polish**			**German**		
	women,%	men, %	Total, %	women,%	men, %	Total, %	women,%	men, %	Total, %	women,%	men, %	Total, %
yes	11.3	31.9	21.0	7.4	37.0	21.0	14.5	17.6	15.5	25.9	34.0	29.7
no	88.7	68.1	79.0	90.7	63.0	78.0	85.5	82.4	84.5	72.2	63.8	68.3
no comment	0.0	0.0	0.0	1.9	0.0	1.0	0.0	0.0	0.0	1.9	2.1	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 14. *Frequency of alcohol consumption of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Frequency of alcohol consumption, %												
Frequency of alcohol consumption	**Ethnicity**											
	Russian			**Turkish**			**Polish**			**German**		
	women, %	men, %	Total, %	women, %	men, %	Total, %	women ,%	men, %	Total, %	women, %	men, %	Total, %
never	0.0	2.1	1.0	98.1	82.2	90.8	20.3	11.8	17.5	31.5	21.3	26.7
1x month or less	62.3	25.5	45.0	0.0	4.4	2.0	40.6	29.4	36.9	44.4	27.7	36.6
2-4x month	32.1	46.8	39.0	1.9	4.4	3.1	24.6	32.4	27.2	16.7	27.7	21.8
2-3x week	5.7	21.3	13.0	0.0	4.4	2.0	10.1	14.7	11.7	7.4	17.0	11.9
4x week or more	0.0	4.3	2.0	0.0	4.4	2.0	4.3	11.8	6.8	0.0	6.4	3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 15. *Percentage of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg who engage in regular physical activities.*

Participants who engage in regular physical activities, %												
Doing sports or physical activity	**Ethnicity**											
	Russian			**Turkish**			**Polish**			**German**		
	women ,%	men, %	Total, %	women, %	men, %	Total, %	women, %	men, %	Total, %	women, %	men, %	Total, %
yes	67.9	53.2	61.0	25.9	28.3	27.0	59.4	61.8	60.2	53.7	44.7	49.5
no	32.1	46.8	39.0	74.1	71.7	73.0	40.6	38.2	39.8	46.3	55.3	50.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 16. *Paying attention to sufficient physical activity of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Paying attention to sufficient physical activity, %												
Paying attention to sufficient physical activity	**Ethnicity**											
	Russian			**Turkish**			**Polish**			**German**		
	Women, %	Men, %	Total, %	Women, %	Men, %	Total, %	Women, %	Men, %	Total, %	Women, %	Men, %	Total, %
very much	1.9	0.0	1.0	3.7	2.2	3.0	4.3	11.8	6.8	7.4	6.4	6.9
much	9.4	23.4	16.0	7.4	10.9	9.0	40.6	26.5	35.9	25.9	34.0	29.7
moderate	39.6	29.8	35.0	40.7	56.5	48.0	34.8	35.3	35.0	46.3	34.0	40.6
little	37.7	23.4	31.0	29.6	15.2	23.0	14.5	17.6	15.5	13.0	25.5	18.8
not at all	11.3	23.4	17.0	11.1	6.5	9.0	1.4	8.8	3.9	3.7	0.0	2.0
No comment	0.0	0.0	0.0	7.4	8.7	8.0	4.3	0.0	2.9	3.7	0.0	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 17. *Fruit consumption of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Fruit consumption, %												
Fruit consumption in portions	**Ethnicity**											
	Russian			**Turkish**			**Polish**			**German**		
	Women, %	Men, %	Total, %	Women, %	Men, %	Total, %	Women, %	Men, %	Total, %	Women, %	Men, %	Total, %
no portion	1.9	6.4	4.0	3.9	6.5	5.2	2.9	5.9	3.9	3.8	19.1	11.0
1 portion	62.3	68.1	65.0	58.8	52.2	55.7	30.4	44.1	35.0	30.2	46.8	38.0
2 portions	32.1	23.4	28.0	17.6	23.9	20.6	40.6	38.2	39.8	41.5	21.3	32.0
3 portions	3.8	2.1	3.0	17.6	10.9	14.4	18.8	8.8	15.5	18.9	10.6	15.0
4 portions	0.0	0.0	0.0	0.0	6.5	3.1	5.8	0.0	3.9	5.7	0.0	3.0
5 portions	0.0	0.0	0.0	2.0	0.0	1.0	1.4	0.0	1.0	0.0	2.1	1.0
more than 5 portions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
no comment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	1.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean (number of portions)	1.38	1.21	1.30	1.57	1.59	1.58	1.99	1.68	1.88	1.92	1.32	1.64
Std. Deviation	0.60	0.59	0.59	0.96	1.00	0.98	0.99	1.20	1.07	0.94	1.04	1.03

Table 18. *Vegetable consumption of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Vegetable consumption, %												
Vegetable consumption in portions	**Ethnicity**											
	Russian			**Turkish**			**Polish**			**German**		
	Women, %	Men, %	Total, %	Women, %	Men, %	Total, %	Women, %	Men, %	Total, %	Women, %	Men, %	Total, %
no portion	1.9	42.6	1.0	3.9	15.2	9.3	4.3	5.9	4.9	0.0	2.1	1.0
1 portion	34.0	53.2	38.0	51.0	50.0	50.5	68.1	73.5	69.9	39.6	48.9	44.0
2 portions	52.8	4.3	53.0	19.6	19.6	19.6	17.4	17.6	17.5	45.3	34.0	40.0
3 portions	11.3	0.0	8.0	21.6	2.2	12.4	5.8	0.0	3.9	9.4	10.6	10.0
4 portions	0.0	0.0	0.0	3.9	10.9	7.2	2.9	2.9	2.9	3.8	4.3	4.0
5 portions	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	1.0	1.9	0.0	1.0
more than 5 portions	0.0	0.0	0.0	0.0	2.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0
no comment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean (number of portions)	1.74	1.62	1.68	1.71	1.52	1.62	1.39	1.21	1.33	1.83	1.66	1.75
Std. Deviation	0.68	0.57	0.63	0.99	1.31	1.15	0.89	0.69	0.83	0.89	0.87	0.88

Table 19. *Intake of warm meals and meat by the participants of the Sağlik project with Russian, Turkish, Polish background, and the members of the German control group in Hamburg*

	Intake of warm meals, %				**Intake of meat, %**			
	Ethnicity				**Ethnicity**			
Frequency of intake	**Russian**	**Turkish**	**Polish**	**German**	**Russian**	**Turkish**	**Polish**	**German**
more than 1x day	50.0	29.0	12.6	5.0	11.0	5.0	8.7	7.9
1x day	46.0	66.0	73.8	64.4	36.0	21.0	25.2	8.9
several times x week	4.0	5.0	10.7	30.7	51.0	45.0	51.5	49.5
1x week	0.0	0.0	1.9	0.0	1.0	23.0	12.6	23.8
less than 1x week	0.0	0.0	1.0	0.0	0.0	6.0	1.9	5.0
never	0.0	0.0	0.0	0.0	1.0	0.0	0.0	5.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 20. *Application of low fat or free fat diet of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Application of low fat or free fat diet, %												
Frequency of consuming of low fat or free fat food	**Ethnicity**											
	Russian			**Turkish**			**Polish**			**German**		
	women, %	men, %	Total, %	women, %	men, %	Total, %	women, %	men, %	Total, %	women, %	men, %	Total, %
always	1.9	2.1	2.0	16.7	13.0	15.0	17.4	20.6	18.4	16.7	10.6	13.9
often	34.0	23.4	29.0	27.8	17.4	23.0	43.5	29.4	38.8	37.0	21.3	29.7
sometimes	20.8	14.9	18.0	35.2	52.2	43.0	26.1	26.5	26.2	14.8	27.7	20.8
rarely	26.4	31.9	29.0	16.7	15.2	16.0	7.2	17.6	10.7	20.4	19.1	19.8
never	17.0	27.7	22.0	3.7	2.2	3.0	5.8	5.9	5.8	11.1	21.3	15.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 21. *Deliberate reduction of food in order not to gain weight of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Deliberate reduction of food in order not to gain weight, %												
Frequency of deliberate reduction of food	**Ethnicity**											
	Russian			**Turkish**			**Polish**			**German**		
	women ,%	men, %	Total, %	women, %	men, %	Total, %	women, %	men, %	Total, %	women, %	men, %	Total, %
always	0.0	2.1	1.0	14.8	10.9	13.0	10.1	17.6	12.6	1.9	2.1	2.0
often	17.0	6.4	12.0	31.5	15.2	24.0	36.2	23.5	32.0	29.6	14.9	22.8
sometimes	37.7	29.8	34.0	33.3	45.7	39.0	37.7	26.5	34.0	38.9	25.5	32.7
rarely	15.1	34.0	24.0	18.5	21.7	20.0	10.1	14.7	11.7	14.8	23.4	18.8
never	30.2	27.7	29.0	1.9	6.5	4.0	5.8	17.6	9.7	13.0	34.0	22.8
No comment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 22. *Paying attention to healthy nutrition of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Paying attention to healthy nutrition, %												
Paying attention to healthy nutrition	**Ethnicity**											
	Russian			**Turkish**			**Polish**			**German**		
	women, %	men, %	Total, %	women, %	men, %	Total, %	women, %	men, %	Total, %	women, %	men, %	Total, %
Very much	1.9	2.1	2.0	7.4	17.4	12.0	7.2	17.6	10.7	7.4	8.5	7.9
Much	13.2	4.3	9.0	35.2	17.4	27.0	42.0	23.5	35.9	44.4	36.2	40.6
Moderate attention	49.1	27.7	39.0	37.0	54.3	45.0	37.7	41.2	38.8	33.3	29.8	31.7
A little	28.3	59.6	43.0	18.5	10.9	15.0	11.6	14.7	12.6	14.8	17.0	15.8
Not at all	7.5	6.4	7.0	1.9	0.0	1.0	1.4	2.9	1.9	0.0	4.3	2.0
No comment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 23. *Percentage of the Sağlik participants with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg who have underweight, normal weight or overweight or obesity according to "International Classification of adult underweight, overweight and obesity according to BMI" (WHO, BMI classification)*

Body Mass Index, %												
BMI	**Ethnicity**											
	Russian			**Turkish**			**Polish**			**German**		
	women,%	men, %	Total, %	women,%	men, %	Total, %	women,%	men, %	Total, %	women,%	men, %	Total, %
<18,50 (underweight)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	1.0	0.0	0.0	0.0
18,50-24,99 (normal range)	26.4	34.0	30.0	12.8	39.5	25.6	33.8	17.6	28.4	30.2	19.1	25.0
25,0-29,99 (overweight)	37.7	55.3	46.0	46.8	44.2	45.6	38.2	50.0	42.2	52.8	46.8	50.0
>30,0 (obese)	35.8	10.6	24.0	40.4	16.3	28.9	27.9	29.4	28.4	17.0	34.0	25.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 24. *Number of visits of a general practitioner during the last 2 years of the participants of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Number of visits of a general practitioner during the last 2 years, %				
Number of visits	**Ethnicity**			
	Russian,%	**Turkish,%**	**Polish,%**	**German,%**
Weekly and more often	0.0	7.0	1.0	3.0
every 2-3 weeks	5.0	20.0	3.9	9.9
1x month	18.0	37.0	21.4	23.8
1x quarter	51.0	22.0	48.5	37.6
less than 1x quarter	26.0	6.0	17.5	20.8
no visit (last 2 years)	0.0	0.0	1.9	1.0
no visit (no GP)	0.0	5.0	5.8	3.0
No comment	0.0	3.0	0.0	1.0
Total	100.0	100.0	100.0	100.0

Table 25. *Participation in health promotion programs during the last year of the participants of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Participation in health promotion programs during the last year, %				
Participation in Health promotion programs	**Ethnicity**			
	Russian,%	**Turkish,%**	**Polish,%**	**German,%**
yes	35.0	12.0	34.0	25.7
no	65.0	87.0	66.0	74.3
no comment	0.0	1.0	0.0	0.0
Total	100.0	100.0	100.0	100.0

Table 26. *Subjective current state of health of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Subjective current state of health, %												
Subjective current state of health	**Ethnicity**											
	Russian			**Turkish**			**Polish**			**German**		
	women,%	men, %	Total, %	women,%	men, %	Total, %	women,%	men, %	Total, %	women,%	men, %	Total, %
Excellent	0.0	0.0	0.0	0.0	2.2	1.0	2.9	2.9	2.9	0.0	0.0	0.0
Good	13.2	19.1	16.0	9.3	10.9	10.0	11.6	23.5	15.5	31.5	34.0	32.7
Fair	71.7	68.1	70.0	59.3	67.4	63.0	71.0	64.7	68.9	48.1	55.3	51.5
Poor	15.1	12.8	14.0	24.1	17.4	21.0	11.6	8.8	10.7	18.5	8.5	13.9
Very poor	0.0	0.0	0.0	7.4	2.2	5.0	2.9	0.0	1.9	1.9	2.1	2.0

Table 27. *Change of subjective state of health within the last year of the men and women of the Sağlik project with Russian, Turkish, Polish background, and of the members of the German control group in Hamburg*

Change of subjective state of health within the last year, %												
Change of subjective state of health	**Ethnicity**											
	Russian			**Turkish**			**Polish**			**German**		
	women,%	men, %	Total, %	women,%	men, %	Total, %	women,%	men, %	Total, %	women,%	men, %	Total, %
Much better now than a year ago	0.0	0.0	0.0	0.0	2.2	1.0	4.3	5.9	4.9	1.9	2.1	2.0
Somewhat better now than a year ago	1.9	2.1	2.0	13.0	8.7	11.0	13.0	17.6	14.6	9.3	19.1	13.9
About the same	60.4	70.2	65.0	38.9	50.0	44.0	62.3	47.1	57.3	53.7	53.2	53.5
Somewhat worse now than a year ago	35.8	27.7	32.0	44.4	39.1	42.0	17.4	26.5	20.4	25.9	23.4	24.8
Much worse now than a year ago	1.9	0.0	1.0	3.7	0.0	2.0	2.9	2.9	2.9	9.3	2.1	5.9

Table 28. *Applied questions from the questionnaire*

Number of the question from the questionnaire	Question	Possible answers
0.0	Month and year of birth	open question, if unknown: “until 1950”, “about 1950”, “after 1950”
0	Gender	“female”,“male”
2	If you think about the last two years - how often do you visit your general practitioner (GP) (without acute illnesses or operations)? (Börsch-Supan/Hank 2009):	“weekly and more often”, “every 2-3 weeks”, “monthly”, “quarterly”, “less than once per quarter”, “no visit”, “not specified”
8	There are many health promotion programs, which are offered by different institutions, for healthy nutrition or physical activity. Some of these programs are paid for by insurance companies. Have you participated in health promotion programs during the last 12 months?	“yes”, “no”, “not specified”
9	Which health promotion programs did you participate in during the last 12 months? (multiple answers possible): “weight loss”, “healthy nutrition”, “gymnastics”, “coping with stress”, “fitness”, “smoking refusal”, “other”	“yes”, “no”, “not specified” for every possibility
10	Do you think your state of health improved after participating in these programs?	“yes”, “no”, “not specified”
12	In general, would you say your health is: (SF-36)	“excellent”, “good”, “fair”, “poor” and “very poor”
13	Compared to a year ago, how would your rate your health in general now? (SF-36)	“much better now than a year ago”, “somewhat better now than a year ago”, “about the same”, “somewhat worse now than a year ago”, “much worse now than a year ago”.
50	Do you usually do some sports or physical activity?	“yes”, “no”, “not specified”
52	In general, how much do you pay attention to sufficient physical activity?”	“very much”, “much”, “middle”. “a little”, “not at all”.
53	Do you smoke now, regularly or from time to time? (RKI, Gesundheitsfragebogen 65 +)	“yes”, “no”, “not specified”

Number of the question from the questionnaire	Question	Possible answers
56	How often do you drink alcoholic beverages? (Audit-C)	“never”, “one time a month or less”, ‘2-4 times a month”, “2-3 times a week”, “4 times a week and more” , “not specified”
60	How often do you usually eat warm meals?	“more than once a day”, “once a day”, “several times a week” “once a week”, “less than ones per week”, “never”, “not specified”
61	How many portions of fruit and vegetables do you usually eat per day?	“0”, “1”,”2”,”3”,”4”,”5”, “more than 5” , “not specified”
62	How often do you usually eat meat?	“more than once a day”, “once a day”, “several times a week” “once a week”, “less than ones per week”, “never”, “not specified”
63	Do you deliberately eat the low fat food or do you keep to a diet without fat?	“always”, “often”, “sometimes”, “rarely” “never”, “not specified”
64	Do you limit consciously your food intake, in order not to gain weight?	“always”, “often”, “sometimes”, “rarely” “never”, “not specified”
66	In general, how much do you pay attention to healthy nutrition?”	“very much”, “much”, “middle”. “a little”, “not at all”.
67	Could you please tell your height and weight?	open question, “not specified”
74	I can always manage to solve difficult problems if I try hard enough. (Schwarzer/Jerusalem 1999)	„it’s exactly right”, “it’s rather true”, “it’s rather not true”, and “it’s not true”
75	If someone opposes me, I can find the means and ways to get what I want. (Schwarzer/Jerusalem 1999)	„it’s exactly right”, “it’s rather true”, “it’s rather not true”, and “it’s not true”
76	For me, there are no difficulties to realize my goals and intentions. (Schwarzer/Jerusalem 1999)	„it’s exactly right”, “it’s rather true”, “it’s rather not true”, and “it’s not true”
77	I am confident that I could deal effectively with unexpected events. (Schwarzer/Jerusalem 1999)	„it’s exactly right”, “it’s rather true”, “it’s rather not true”, and “it’s not true”
78	Thanks to my resourcefulness, I know how to handle unforeseen situations. (Schwarzer/Jerusalem 1999)	„it’s exactly right”, “it’s rather true”, “it’s rather not true”, and “it’s not true”
79	For every problem, I can usually find a solution. (Schwarzer/Jerusalem 1999)	„it’s exactly right”, “it’s rather true”, “it’s rather not true”, and “it’s not true”
80	I can remain calm when facing difficulties because I can rely on my coping abilities. (Schwarzer/Jerusalem 1999)	„it’s exactly right”, “it’s rather true”, “it’s rather not true”, and “it’s not true”

Number of the question from the questionnaire	Question	Possible answers
81	When I am confronted with a problem, I can usually find several solutions. (Schwarzer/Jerusalem 1999)	„it's exactly right", "it's rather true", "it's rather not true", and "it's not true"
82	When I am confronted with a new question I know how to deal with it. (Schwarzer/Jerusalem 1999)	„it's exactly right", "it's rather true", "it's rather not true", and "it's not true"
83	I can usually handle whatever comes my way. (Schwarzer/Jerusalem 1999)	„it's exactly right", "it's rather true", "it's rather not true", and "it's not true"
85	a. What people do you communicate with and b. how often do you see them?	a. "Partner", "Children", "Grandchildren", "Parents", "Other relatives", "Friends", "Neighbors", "Colleagues (incl. former colleagues), "Community members", "GP", "Guests of the meeting points", "Visitors of the church", "Other person" b. "once a day", "once a week", "once a month", "rarely", "never"
86	I always find someone to take care of my apartment when I am not there. (F-SozU K-14)	"it is exactly right", "it is right", "it is partly right", "it is rather not right", "it is not right"
87	There are people who take me as I am without restriction.(F-SozU K-14)	"it is exactly right", "it is right", "it is partly right", "it is rather not right", "it is not right"
88	Other persons give me the feeling of understanding and security.(F-SozU K-14)	"it is exactly right", "it is right", "it is partly right", "it is rather not right", "it is not right"
89	There are persons whom I can trust and whose help I always can count on. (F-SozU K-14)	"it is exactly right", "it is right", "it is partly right", "it is rather not right", "it is not right"
90	If necessary, I can borrow something from my friends. (F-SozU K-14)	"it is exactly right", "it is right", "it is partly right", "it is rather not right", "it is not right"
91	I have friends / relatives who are there, when I need them and listen, when I need it. (F-SozU K-14)	"it is exactly right", "it is right", "it is partly right", "it is rather not right", "it is not right"
92	I know many persons together with whom I can do something in my spare time. (F-SozU K-14)	"it is exactly right", "it is right", "it is partly right", "it is rather not right", "it is not right"
93	I have friends / relatives who can embrace me. (F-SozU K-14)	"it is exactly right", "it is right", "it is partly right", "it is rather not right", "it is not right"
94	When I'm sick, I can ask my friends / relatives for help immediately. (F-SozU K-14)	"it is exactly right", "it is right", "it is partly right", "it is rather not right", "it is not right"

Number of the question from the questionnaire	Question	Possible answers
95	In case I feel depressed, I know whom to appeal to. (F-SozU K-14)	“it is exactly right”, “it is right”, “it is partly right”, “it is rather not right”, “it is not right”
96	There are people who share joy and sorrow with me.(F-SozU K-14)	“it is exactly right”, “it is right”, “it is partly right”, “it is rather not right”, “it is not right”
97	Tofether with some friends / relatives I can entirely relax. (F-SozU K-14)	“it is exactly right”, “it is right”, “it is partly right”, “it is rather not right”, “it is not right”
98	I have a confidant, together with whom I feel well and free. (F-SozU K-14)	“it is exactly right”, “it is right”, “it is partly right”, “it is rather not right”, “it is not right”
99	There is a group of people, to which I belong and with which I often meet. (F-SozU K-14)	“it is exactly right”, “it is right”, “it is partly right”, “it is rather not right”, “it is not right”
100	a. Is there somebody who helps you in household, e.g. with cooking, shopping or cleaning? b. who helps you outside your home, e.g. with accompaniyng you to a doctor or to an institution? c. who helps you with the basic activities of daily living?	a, b, c: “yes”, “no”, “not specified”
101	If you get help in your household, outside your home or with the basic activities of daily living, from whom do you get it?	“partner”, ‘children”, “grandchildren”, “sisters/Brothers”, “other relatives”, “friends”, “neighbors”, “unpaid social help”, “cleaner staff”, “paid professional social help”, “other person”.
102	In your opinion, do you need more help and support in your everyday life, than you now have?	“yes”, “no”, “not specified”
103	a. Which activities do you engage in your spare time, b. and how often? (modified by Richard et al. 2008)	a. “meeting friends”, “hobby”, “visiting a restaurant/ café visit”, “tacking courses (language, cooking etc)”, “visiting of the church services”, “helping to the neighbors”, “cultural ivents (concert, theatre, cinema etc)”, “visiting senior meeting points”, “visiting a library”, “political meetings”, “others” b. “once a day”, “once a week”, “once a month”, “rarely”, “never”
104	In which country were you born?	open question

Number of the question from the questionnaire	Question	Possible answers
105	How long have you lived in Germany?	“from birth”, “since ___ ”, “not specified”
108	What is your mother tongue?	open question
109	If German is not your mother tongue, how do you classify your German knowledge?	“very good”, “good”, “fair”, “poor”
110	What is your marital status?	“single”, “living in non-marital partnership”, “married”, “living separated from partner”, “divorced”, “widowed”,“not specified”
111	Do you have children?	“yes”, “if yes - number of children”, “no”, “not specified”
113	Where would you like to live in a few years?	“in Hamburg”, “in your country of birth (or other country before immigration)”, “in Hamburg and in your country of birth (or other country before immigration)”, “in some other place”
114	With whom do you live now?	“alone”, “with partner”, “with other person” “not specified”
115	What are your housing conditions? You live …	“in a rented apartment”, “in your own apartment”, “in a rented house”, “in your own house”, “other”
119	How many years did you attend school?	“0 years”, “1-5 years”, “6 - 8 years”, “9 - 11 years”, “more than 12 year”, “not specified”
121	What level of education or professional training after finishing school do you have?	“no professional degree”, “vocational training” (Lehre, Berufsausbildung), “professional school, technical school” (Fachschule/Meister-/Technikerschule/Berufs-/Fachakademie), “college degree” (Fachhochschulabschluss), “university degree”, “other education”, “not specified”
122	Do you currently work? / Are you currently employed?	“yes”, “no”, “not specified”
124	If you do not work what do you currently do?	“staying at home as a housewife”, “living on old age pension”, “living on early retirement pension”, “living on disability pension”, “looking for a job”, “not working due to other reason”, “not specified”
125	If you work now or worked in the past, what is (was) your occupation? (in USSR or in Germany)	open question
130	What is your religious denomination?	“no religious denomination”, “Muslim”, “Christian”, “other, namely”
132	What is your monthly income (net, after taxes and insurance), (approximate value)?	“less than 500 euros”, “500-750 euros”, “751 – 1000 euros”, “1001 – 1500 euros”, “1501 – 2000 euros”, “2001 – 2500 euros”, “2501 – 3000 euros”, “3001 – 3500 euros”, “3501 – 4000 euros”, “4001 – 4500”, “more than 4500 euros”

Number of the question from the questionnaire	Question	Possible answers
136	If you think over all the questions you have answered, do you have any further comments? Which topics interest you most?	open question
138	There are many spa treatment and rehabilitation programs, which are offered by different institutions. Some of these programs are paid for by insurance companies. Have you participated in such programs during the last 10 years?	"yes, once", "yes, two times and more", "no", "not specified"
139	If yes, in which spa treatment and rehabilitation promotion programs did you participate during the last 10 years?	open question
140	Do you think your state of health improved after participating in these programs?	"yes", "no", "not specified"

Table 29. *Variables and applied kinds of statistic analysis*

Variable	Question	Type of variable	New variables, if necessary	Type of new variable	Kind of statistic analysis
1. Demographic characteristics					
Age	Month and year of birth	interval	no	no	mean, standard deviation, minimum, maximum, Spearman's test, t-test
Gender	Gender	nominal binary	no	no	valid percent, Chi-square, two-factorial ANOVA
Ethnicity	Ethnicity	nominal	no	no	valid percent, Chi-square, two-factorial ANOVA
Country of birth	In which country were you born?	nominal	no	no	valid percent
Living in Germany	How long have you lived in Germany?	nominal	no	no	valid percent
Mother tongue	What is your mother tongue?	nominal	no	no	valid percent
German knowledge	If German is not your mother tongue, how do you classify your German knowledge?	ordinal ranks	no	no	valid percent
Marital status	What is your marital status?	nominal	no	no	valid percent
Children	Do you have children?	nominal; discrete	no	no	valid percent
Desired place of living	Where would you like to live in a few years?	nominal	no	no	valid percent
Living situation	With whom do you live now?	nominal	no	no	valid percent
Religious denomination	What is your religious denomination?	nominal	no	no	valid percent
2. Determinants for social inequality: SES					
Scool education	How many years did you attend school?	ordinal ranks	no	no	valid percent
After scool education	What level of education or professional training after finishing school do you have?	ordinal ranks	higher education (college and university degree) /	nominal binary	valid percent, Chi-square

Variable	Question	Type of variable	New variables, if necessary	Type of new variable	Kind of statistic analysis
			no higher education (no professional degree, vocational training, professional and technical school, other education)		
Employment rate	Do you currently work? / Are you currently employed?	nominal binary	no	no	valid percent, Chi-square
Reason for not working	If you do not work what you currently do?	nominal	no	no	valid percent
Job/profession	If you work now or worked in the past, what is (was) your occupation? (in the USSR or in Germany)	nominal	1. job with low, middle or high qualification requirement in Germany and in USSR, 2. job with low-middle and high requirement in Germany and in the USSR	1. ordinal ranks, interval 2. nominal binary	descriptive, Spearman's rho, Chi-square
Individual income	What is your monthly income (net, after taxes and insurance), (approximate value)?	ordinal ranks	individual income binary: less than 500 euros/ 500 euros and more	nominal binary	valid percent, Chi-square
Housing conditions	What are your housing conditions? You live …	nominal	no	no	valid percent
3. Determinants for social resources					

Variable	Question	Type of variable	New variables, if necessary	Type of new variable	Kind of statistic analysis
3.1. Social networking					
Frequency of social contacts	a. What people do you communicate with and b. how often do you see them?	ordinal ranks	1.contact with relatives (partner, children, grand children, parents, other relatives)/ friends (friends, neighbors, colleagues)/ community (community members, GP, guests of the meeting points, visitors of the church, other person), 2. all contacts (with relatives, friends, community)	interval	valid percent, two-factorial ANOVA, Mann-Whitney U test, Spearman's test
Spare time activity	a. Which activities do you engage in your spare time and b. how often? (modified by Richard et al. 2008)	ordinal ranks	spare time alone (hobby, visiting a library)/spare time together with other people (remaining activities)	interval	valid percent , two-factorial ANOVA, Mann-Whitney U test, Spearman's test

Variable	Question	Type of variable	New variables, if necessary	Type of new variable	Kind of statistic analysis
Help in household, outside the home and with the basic activities of daily living	a. Is there somebody who helps you in household, e.g. with cooking, shopping or cleaning? b. who helps you outside your home, e.g. with accompaniyng you to a doctor or to an institution? c. who helps you with the basic activities of daily living?	nominal binary	accumulating help (sum of a,b,c)	nominal binary	valid percent, Chi-square
Supporting person	If you get help in your household, outside your home or with the basic activities of daily living, from whom do you get it?	nominal	no	no	valid percent
Need of help	In your opinion, do you need more help and support in your everyday life, than you now have?	nominal binary	no	no	valid percent
Social support 1	I always find someone to take care of my apartment when I am not there. (F-SozU K-14)	ordinal ranks	social support (sum of social support 1-14)	interval	two-factorial ANOVA, Mann-Whitney U test, Spearman's test
Social support 2	There are people who take me as I am without restriction.(F-SozU K-14)	ordinal ranks			
Social support 3	Other persons give me the feeling of understanding and security.(F-SozU K-14)	ordinal ranks			
Social support 4	There are persons whom I can trust and whose help I always can count on. (F-SozU K-14)	ordinal ranks			
Social support 5	If necessary, I can borrow something from my friends. (F-SozU K-14)	ordinal ranks			
Social support 6	I have friends / relatives who are there, when I need them and listen, when I need it. (F-SozU K-14)	ordinal ranks			
Social support 7	I know many persons together with whom I can do something in my spare time. (F-SozU K-14)	ordinal ranks			
Social support 8	I have friends / relatives who can embrace me. (F-SozU K-14)	ordinal ranks			

Variable	Question	Type of variable	New variables, if necessary	Type of new variable	Kind of statistic analysis
Social support 9	When I'm sick, I can ask my friends / relatives for help immediately. (F-SozU K-14)	ordinal ranks			
Social support 10	In case I feel depressed, I know whom to appeal to. (F-SozU K-14)	ordinal ranks			
Social support 11	There are people who share joy and sorrow with me.(F-SozU K-14)	ordinal ranks			
Social support 12	Tofether with some friends / relatives I can entirely relax. (F-SozU K-14)	ordinal ranks			
Social support 13	I have a confidant, together with whom I feel well and free. (F-SozU K-14)	ordinal ranks			
Social support 14	There is a group of people, to which I belong and with which I often meet. (F-SozU K-14)	ordinal ranks			
3.2. Self-efficacy					
Self-efficacy 1	I can always manage to solve difficult problems if I try hard enough. (Schwarzer/Jerusalem 1999)	ordinal ranks	self-efficacy (sum of GSE 1-10)	interval	two-factorial ANOVA, Mann-Whitney U test, Spearman's test
Self-efficacy 2	If someone opposes me, I can find the means and ways to get what I want. (Schwarzer/Jerusalem 1999)	ordinal ranks			
Self-efficacy 3	For me, there are no difficulties to realize my goals and intentions. (Schwarzer/Jerusalem 1999)	ordinal ranks			
Self-efficacy 4	I am confident that I could deal effectively with unexpected events. (Schwarzer/Jerusalem 1999)	ordinal ranks			
Self-efficacy 5	Thanks to my resourcefulness, I know how to handle unforeseen situations. (Schwarzer/Jerusalem 1999)	ordinal ranks			
Self-efficacy 6	For every problem, I can usually find a solution. (Schwarzer/Jerusalem 1999)	ordinal ranks			

Variable	Question	Type of variable	New variables, if necessary	Type of new variable	Kind of statistic analysis
Self-efficacy 7	I can remain calm when facing difficulties because I can rely on my coping abilities. (Schwarzer/Jerusalem 1999)	ordinal ranks			
Self-efficacy 8	When I am confronted with a problem, I can usually find several solutions. (Schwarzer/Jerusalem 1999)	ordinal ranks			
Self-efficacy 9	When I am confronted with a new question I know how to deal with it. (Schwarzer/Jerusalem 1999)	ordinal ranks			
Self-efficacy 10	I can usually handle whatever comes my way. (Schwarzer/Jerusalem 1999)	ordinal ranks			
4. Determinants for health behavior					
4.1.Tobacco and alcohol consumption					
Smoking rate	Do you smoke now, regularly or from time to time? (RKI, Gesundheitsfragebogen 65 +)	nominal binary	no	no	valid percent, Chi-square
Frequency of alcohol consumption	How often do you drink alcoholic beverages? (Audit-C)	ordinal ranks	Frequency of alcohol consumption	interval	valid percent, two-factorial ANOVA, Mann-Whitney U test, Spearman's test
4.2. Physical activity					
Physical activity	Do you usually do some sports or physical activity?	nominal binary	no	no	valid percent, Chi-square
Attention to sufficient physical activity	In general, how much do you pay attention to sufficient physical activity?"	ordinal ranks	Attention to sufficient physical activity	interval	valid percent , two-factorial ANOVA, Mann-Whitney U test
4.3. Nutrition and eating behaviour					

Variable	Question	Type of variable	New variables, if necessary	Type of new variable	Kind of statistic analysis
Fruit consumption	How many portions of fruit do you usually eat per day?	discrete	fruit and vegetable consumption (sum of fruit and vegetable consumption)	interval	valid percent, two-factorial ANOVA, Mann-Whitney U test, Spearman's test
Vegetable consumption	How many portions of vegetables do you usually eat per day?	discrete			
Frequency of warm meals	How often do you usually eat warm meals?	ordinal ranks	Frequency of warm meals	interval	valid percent, two-factorial ANOVA, Mann-Whitney U test
Frequency of meat consumption	How often do you usually eat meat?	ordinal ranks	Frequency of meat consumption	interval	valid percent, two-factorial ANOVA, Mann-Whitney U test
Low fat diet	Do you deliberately eat low fat food or do you keep to a diet without fat?	ordinal ranks	Low fat diet	interval	valid percent, two-factorial ANOVA, Mann-Whitney U test
Deliberate reduction of food	Do you limit your food intake consciously, in order not to gain weight?	ordinal ranks	Deliberate reduction of food	interval	valid percent, two-factorial ANOVA, Mann-Whitney U test
Attention to healthy nutrition	In general, how much do you pay attention to healthy nutrition?	ordinal ranks	Attention to healthy nutrition	interval	valid percent , two-factorial ANOVA, Mann-Whitney U test
Height and weight	Could you please tell your height and weight?	nterval (independent category)	BMI (the ratio of weight in kilograms divided by the square of the height in meters)	interval	valid percent, Chi-square, two-factorial ANOVA, t-test, Spearman's test

Variable	Question	Type of variable	New variables, if necessary	Type of new variable	Kind of statistic analysis
5. Determinants for use of health services					
GP visits	If you think about the last two years - how often do you visit your general practitioner (GP) (without acute illnesses or operations)? (Börsch-Supan/Hank 2009)	ordinal ranks	GP visits	interval	valid percent, two-factorial ANOVA, Mann-Whitney U test, Spearman's test
Participation in health promotion programs	There are many health promotion programs, which are offered by different institutions, for healthy nutrition or physical activity. Some of these programs are paid for by insurance companies. Have you participated in health promotion programs during the last 12 months?	nominal binary	no	no	valid percent, Chi-square
Health promotion programs	Which health promotion programs did you participate in during the last 12 months? (multiple answers possible): “weight loss”, “healthy nutrition”, “gymnastics”, “coping with stress”, “fitness”, “smoking refusal”, “other”	nominal binary	no	no	valid percent
Health improvement after the participation in health promotion programs	Do you think your state of health improved after participating in these programs?	nominal binary	no	no	valid percent, descriptive
Participation in spa treatment and rehabilitation programs	There are many spa treatment and rehabilitation programs, which are offered by different institutions. Some of these programs are paid for by insurance companies. Have you participated in such programs during the last 10 years?	nominal binary	no	no	valid percent, Chi-square
Spa treatment and rehabilitation programs	If yes, in which health promotion programs did you participate during the last 10 years?	nominal	no	no	valid percent, descriptive
Health improvement after the participation in spa treatment and rehabilitation programs	Do you think your state of health improved after participating in these programs?	nominal binary	no	no	valid percent, descriptive

Variable	Question	Type of variable	New variables, if necessary	Type of new variable	Kind of statistic analysis
6. Health status					
Subjective state of health	In general, would you say your health is: (SF-36)	ordinal ranks	Subjective state of health	interval	valid percent, two-factorial ANOVA, Mann-Whitney U test, Spearman's test
Change of subjective state of health	Compared to a year ago, how would your rate your health in general now? (SF-36)	ordinal ranks	Change of subjective state of health	interval	valid percent, two-factorial ANOVA
7. Ideas, expressed wishes					
Wishes	If you think over all the questions you have answered, do you have any further comments? Which topics interest you most?	nominal	no	no	descriptive

SAGLIK - Ориентированное на социальное пространство укрепление здоровья пожилых женщин и мужчин с миграционным прошлым 60 +

Участник № ☐☐ ☐☐

Гамбургский Университет прикладных наук в настоящее время проводит научно-исследовательский проект SAĞLIK. Мы хотим изучить имеющиеся предложения для пожилых людей турецкого, польского и русского происхождения с миграционным прошлым, чтобы улучшить качество Вашей жизни в отношении здоровья. Мы нуждаемся в Вашей поддержке и, особенно, в Ваших знаниях, потому что Вы, конечно, лучше всех можете рассказать о состоянии Вашего здоровья и Ваших потребностях.

Меня зовут Яна Кузнецова, студентка Гамбургского Университета прикладных наук, работаю в проекте в качестве научного сотрудника, и хотела бы задать Вам несколько вопросов. Ваши ответы будут конфиденциальными и анонимными, Вам не нужно называть свое имя. Кроме того, все Ваши ответы являются добровольными: если Вы не хотите отвечать не вопрос, это не будет иметь для Вас никаких последствий.

Мы будем благодарны за любую информацию, и я благодарю Вас уже сейчас за вашу помощь!

➢ ***Указание для интервьюера: при данном символе предложить соответствующую карточку***

Назовите, пожалуйста, месяц и год Вашего рождения ➢

☐☐☐☐

Месяц Год

➢ ***Указание для интервьюера: май 1946 → 03 46***

Если неизвестно: до 1950 ☐

примерно 1950 ☐

после 1950 ☐

Без указаний ☐

➢ ***Указание для интервьюера: о поле не спрашивать, только отметить!***

Пол женский ☐

мужской ☐

SAGLIK - Ориентированное на социальное пространство укрепление здоровья пожилых женщин и мужчин с миграционным прошлым 60 +

Участник № ☐☐ ☐☐

I Состояние здоровья – врачебное обслуживание и его качество

Сначала я хотела бы задать несколько вопросов о врачебном обслуживании.

1. У вас есть свой лечащий домашний врач, к которому Вы обращаетесь при возникновении проблем со здоровьем? [1]

Да ..... ☐ ➲ далее к вопросу 2

Нет..... ☐ ➲ далее к вопросу 4

Без указаний ..... ☐ ➲ далее к вопросу 4

2. Если Вы подумаете о последних 2-х годах – как часто Вы посещали Вашего домашнего врача? (без острых состояний или операций)

1 и более раз в неделю ..... ☐

Каждые 2-3 недели ..... ☐

1 раз в месяц ..... ☐

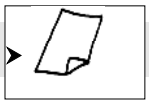
1 раз в квартал..... ☐

Реже, чем раз в квартал ..... ☐

Не посещал..... ☐

Без указаний ..... ☐

3. Как часто происходит, что Ваш домашний врач



	каждый раз	иногда	никогда
a…спрашивает, как часто Вы занимаетесь физическими упражнениями?	☐	☐	☐
b…говорит Вам, что Вы должны регулярно заниматься физическими упражнениями	☐	☐	☐
c…спрашивает, легко ли Вы теряете равновесие и падаете?	☐	☐	☐
d…контролирует, есть ли у Вас проблемы при хождении или поддержанием	☐	☐	☐

1 Вопросы 1-3: Börsch-Supan/Hank 2009

равновесия?			
	каждый раз	иногда	никогда
e…контролирует Ваш вес?	☐	☐	☐
f…спрашивает, принимаете ли Вы медикаменты, которые Вам прописал другой врач, или Вы купили без рецепта?	☐	☐	☐

4.Имеете ли Вы инвалидность?

Да ..... ☐ ➲ далее к вопросу 5, 6 и 7

Нет ..... ☐ ➲ далее к вопросу 8

Без указаний ..... ☐ ➲ далее к вопросу 8

5.Какую степень инвалидности Вы имеете?

☐

Не известно ..... ☐

Без указаний ..... ☐

6.У Вас есть свидетельство об инвалидности?

Да ..... ☐ ➲ признак: _____

Нет ..... ☐

Без указаний ..... ☐

7.Чем обусловлена Ваша инвалидность?

➢ ***указания для интервьюера: дать возможность ответить, или уточнить***

Влияние вредных факторов на работе.... ☐

Несчастный случай на работе ..... ☐

Инвалид детства..... ☐

Заболевание пожилого возраста ..... ☐

Хроническое заболевание ..... ☐

Другое:_____

Без указаний ..... ☐ .....

8.Существует множество мероприятий и программ по укреплению здоровья, которые проводятся различными учреждениями, например, для разрядки, здорового питания и двигательной активности. Частично такие предложения оплачиваются страховыми компаниями. Участвовали ли Вы в такой программе за последние 12 месяцев?

Да ..... ☐ ➲ далее к вопросу 9 и 10

Нет ..... ☐ ➲ далее к вопросу 11

Без указаний ..... ☐ ➲ далее к вопросу 11

9.Какие мероприятия по укреплению здоровья Вы посещали за последние 12 месяцев? (возможно несколько ответов)

		Вид финансирования	
	Да, участвовал за последние 12 месяцев	Оплачивал полностью самостоятельно	Оплачивал частично самостоятельно
По снижению веса	☐	☐	☐
По здоровому питанию	☐	☐	☐
Гимнастика	☐	☐	☐
Разрядка и борьба со стрессом	☐	☐	☐
Фитнес или сбалансированный спорт	☐	☐	☐
Отвыкание от курения	☐	☐	☐
Другое, а именно...	☐	☐	☐

10.Как Вам кажется, Ваше самочувствие или состояние Вашего здоровья улучшилось после участия в этих программах?

Да ..... ☐

Нет ..... ☐

Без указаний ..... ☐

11.Если Вы хотите узнать что-либо о здоровье (рекомендации по лечению, домашних лечебных средствах), к кому Вы обращаетесь, и как часто это происходит?

- ***Указания для интервьюера: дать возможность ответить, или уточнить***
- ***Указание для интервьюера: Графа «не подходит», если напр., нет детей***

	всегда	часто	иногда	редко	никогда	не подходит
К супругу или партнеру/супруге или партнерше	☐	☐	☐	☐	☐	☐
К детям	☐	☐	☐	☐	☐	☐
К внукам	☐	☐	☐	☐	☐	☐
К родителям	☐	☐	☐	☐	☐	☐
К другим родственникам	☐	☐	☐	☐	☐	☐
К друзьям	☐	☐	☐	☐	☐	☐
К знакомым	☐	☐	☐	☐	☐	☐
К соседям	☐	☐	☐	☐	☐	☐
К врачу	☐	☐	☐	☐	☐	☐
К аптекарю	☐	☐	☐	☐	☐	☐
К работнику места встреч	☐	☐	☐	☐	☐	☐
К посетителю места встреч	☐	☐	☐	☐	☐	☐
К сотруднику русской общины	☐	☐	☐	☐	☐	☐
К посетителю русской общины	☐	☐	☐	☐	☐	☐
К работнику церкви	☐	☐	☐	☐	☐	☐
К посетителю церкви	☐	☐	☐	☐	☐	☐
К другому человеку…	☐	☐	☐	☐	☐	☐

Я ни у кого не спрашиваю совета ☐

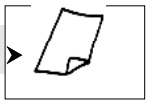
Продолжение на следующей странице

Я нахожу информацию в другом месте, например …

	всегда	часто	иногда	редко	никогда
В интернете	☐	☐	☐	☐	☐
В книгах/брошюрах	☐	☐	☐	☐	☐
Звоню в страховую компанию	☐	☐	☐	☐	☐
Другое:	☐	☐	☐	☐	☐

II Качество жизни, определяемое состоянием здоровья [2]

12.В целом как бы Вы оценили состояние Вашего здоровья?



отличное	очень хорошее	удовлетворительное	плохое	очень плохое
☐	☐	☐	☐	☐

13.Как бы Вы в целом оценили свое здоровье сейчас по сравнению с тем, что было год назад?

Значительно лучше, чем год назад	Несколько лучше, чем год назад	Примерно так же, как год назад	Несколько хуже, чем год назад	Гораздо хуже, чем год назад
☐	☐	☐	☐	☐

Следующие вопросы касаются физических нагрузок, с которыми Вы, возможно, сталкиваетесь в течение своего обычного дня. Ограничивает ли Вас состояние Вашего здоровья в настоящее время в выполнении перечисленных ниже физических нагрузок? Если да, то в какой степени?

	Да, значительно ограничивает	Да, немного ограничивает	Нет, совсем не ограничивает
14.Тяжелые физические нагрузки, такие как бег, поднятие тяжестей, занятие силовыми видами спорта.	☐	☐	☐
15. Умеренные физические нагрузки, такие как передвинуть стол, поработать пылесосом,	☐	☐	☐

[2] SF-36 v. 2

Продолжение на следующей странице…

собирать грибы или ягоды.			
16. Поднять или нести сумку с продуктами.	☐	☐	☐
	Да, значительно ограничивает	Да, немного ограничивает	Нет, совсем не ограничивает
17.Подняться пешком по лестнице на несколько пролетов.	☐	☐	☐
18.Подняться пешком по лестнице на один пролет.	☐	☐	☐
19.Наклониться, встать на колени, присесть на корточк	☐	☐	☐
20.Пройти расстояние более одного километра.	☐	☐	☐
21.Пройти расстояние в несколько кварталов (несколько сот метров).	☐	☐	☐
22.Пройти расстояние в один квартал (100 м).	☐	☐	☐
23.Самостоятельно вымыться, одеться	☐	☐	☐

Как часто бывало за последние 4 недели, что Ваше физическое состояние вызывало затруднения в Вашей работе или другой обычной повседневной деятельности, вследствие чего:

	всегда	часто	иногда	редко	никогда
24.Пришлось сократить количество времени, затрачиваемое на работу или другие дела.	☐	☐	☐	☐	☐
25.Выполнили меньше, чем хотели.	☐	☐	☐	☐	☐
26.Вы были ограничены в выполнении какого-либо определенного вида работ или другой деятельности.	☐	☐	☐	☐	☐
27.Были трудности при выполнении своей работы или других дел (например, они потребовали дополнительных усилий).	☐	☐	☐	☐	☐

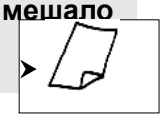
Как часто бывало за последние 4 недели, что Ваше эмоциональное состояние вызывало затруднения в Вашей работе или другой обычной повседневной деятельности, вследствие чего:

SAGLIK - Ориентированное на социальное пространство укрепление здоровья пожилых женщин и мужчин с миграционным прошлым 60 +

Участник № ☐☐ ☐☐

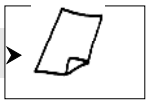
	всегда	часто	иногда	редко	никогда
28.Пришлось сократить количество времени, затрачиваемого на работу или другие дела.	☐	☐	☐	☐	☐
29. Выполнили меньше, чем хотели.	☐	☐	☐	☐	☐
30.Выполняли свою работу или другие дела не так аккуратно, как обычно.	☐	☐	☐	☐	☐

31.Насколько Ваше физическое и эмоциональное состояние в течение последних 4 недель мешало Вам проводить время с семьей, друзьями, соседями или в коллективе?



Очень сильно	Сильно	Умеренно	Немного	Совсем не мешало
☐	☐	☐	☐	☐

32.Насколько сильную физическую боль Вы испытывали за последние 4 недели?



Очень сильную	сильную	умеренную	слабую	очень слабую	совсем не испытывал (а)
☐	☐	☐	☐	☐	☐

33.В какой степени боль в течение последних 4 недель мешала Вам заниматься Вашей нормальной работой (включая работу вне дома или по дому)?

очень сильно	сильно	умеренно	немного	совсем не мешала
☐	☐	☐	☐	☐

Следующие вопросы касаются того, как Вы себя чувствовали и каким было Ваше настроение в течение последних 4 недель. Пожалуйста, на каждый вопрос дайте один ответ, который наиболее соответствует Вашим ощущениям.

SAGLIK - Ориентированное на социальное пространство укрепление здоровья пожилых женщин и мужчин с миграционным прошлым 60 +

Участник № ☐☐ ☐☐

Как часто за последние 4 недели Вы чувствовали себя...	всегда	часто	иногда	редко	никогда
34. …бодрым (ой)?	☐	☐	☐	☐	☐
35. …сильно нервничали?	☐	☐	☐	☐	☐
36. …таким (ой) подавленным (ой) что ничто не могло Вас взбодрить?	☐	☐	☐	☐	☐
37….спокойным (ой) и умиротворенным (ой)?	☐	☐	☐	☐	☐
38…полным (ой) сил и энергии?	☐	☐	☐	☐	☐
39. …упавшим (ой) духом и печальным(ой)?	☐	☐	☐	☐	☐
40. …измученным (ой)?	☐	☐	☐	☐	☐
41. …счастливым (ой)?	☐	☐	☐	☐	☐
42. …уставшим(ей)?	☐	☐	☐	☐	☐

43. Как часто за последние 4 недели Ваше физическое или эмоциональное состояние мешало Вам активно общаться с людьми (навещать друзей, родственников и т. п.)?

всегда	часто	иногда	редко	никогда
☐	☐	☐	☐	☐

Насколько ВЕРНЫМ или НЕВЕРНЫМ представляются по отношению к Вам каждое из ниже перечисленных утверждений?

Участник № ☐☐ ☐☐

	Определенно верно	В основном верно	Не знаю	В основном неверно	Определенно неверно
44. Мне кажется, что я более склонен к болезням, чем другие	☐	☐	☐	☐	☐
45. Мое здоровье не хуже, чем у большинства моих знакомых	☐	☐	☐	☐	☐
46. Я ожидаю, что мое здоровье ухудшится	☐	☐	☐	☐	☐
47. У меня отличное здоровье	☐	☐	☐	☐	☐

III Движение – физическая активность и спорт

В следующем разделе речь идет о Вашей физической активности и спорте.

48. Вспомните о вчерашнем дне - (день недели) – сколько времени Вы занимались следующей деятельностью?[3]

➢ ***Указания для интервьюера: оценить в часах, в сумме должно быть 24 часа***

Сон и лежание, в час.

Сидение, в час.

Легкая двигательная активность: приготовление пищи, покупки, уход за телом, прогулк вытирание пыли, в час.

Средняя двигательная активность: уборка квартиры, велопрогулка, плавание, в час.

Напряженная двигательная активность: передвижение тяжелых предметов, тяжелый садовый труд, быстрый бег, колка дров, в час.

☐ без указаний

3 в привязке к Mensink 2003

49. Относительно Вашей физической активности – вчера был обычный или необычный день?

Нормальный ..... ☐

Повышенная физическая активность..... ☐

Пониженная физическая активность..... ☐

Без указаний ..... ☐

50. Вы обычно занимаетесь спортом или выполняете физические упражнения?

Да ..... ☐ ➲ далее к вопросу 51

Нет ..... ☐ ➲ далее к вопросу 52

Без указаний ..... ☐ ➲ далее к вопросу 51

51. Каким спортом Вы занимаетесь или какие упражнения выполняете и как часто?

➢ ***Указания для интервьюера: дать возможность ответить, или уточнить***

Вид спорта, вид движений	Менее чем 1 час в неделю	регулярно 1-2 часа в неделю	Регулярно 2-4 часа в неделю	Регулярно более чем 4 часа в неделю
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

Без указаний ☐

52. В общем и целом, насколько сильно Вы обращаете внимание на достаточную физическую активность?

очень сильно	сильно	умеренно	немного	совсем нет
☐	☐	☐	☐	☐

Без указаний ☐

IV Употребление табака 4 / алкоголя 5

53. Курите ли Вы в настоящее время, в т.ч. временами?

Да ..... ☐ ➲ далее к вопросу 54 и 55

Нет ..... ☐ ➲ далее к вопросу 56

Без указаний ..... ☐ ➲ далее к вопросу 56

54. Как часто Вы курите в среднем? (возможно несколько вариантов)

➤ Указания для интервьюера: дать возможность ответить, или уточнить: количество в неделю или в день вычислить самостоятельно

	Количество в сутки	Количество в неделю
сигареты		
сигары		
трубку		
кальян		
Другое:		

Без указаний ☐

55. Вы хотите бросить курить?

Нет, не имею планов ..... ☐

Да, я думаю об этом ..... ☐

Да, я твердо решил..... ☐

Без указаний ..... ☐

56. Как часто Вы употребляете алкогольные напитки?

Никогда ..... ☐ ➲ далее к вопросу 59

1 раз в месяц или реже ..... ☐ ➲ далее к вопросу 57 и 58

---

4 в привязке к RKI Gesundheitsfragebogen 65+, не полностью

5 Audit-C

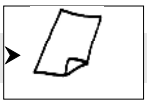
2-4 раза в месяц ..... ☐ ➲ далее к вопросу 57 и 58

2-3 раза в неделю ..... ☐ ➲ далее к вопросу 57 и 58

4 раза в неделю или чаще..... ☐ ➲ далее к вопросу 57 и 58

Без указаний ..... ☐ ➲ далее к вопросу 57 и 58

57. Если вы употребляете алкоголь, сколько бокалов обычно в сутки?



	пиво 0,3 l	вино/ шампанское 0,2 l	водка / ликер 0,02 l
Вообще не принимаю	☐	☐	☐
1-2 бокала в день	☐	☐	☐
3-4 бокала в день	☐	☐	☐
5-6 бокала в день	☐	☐	☐
7-9 бокала в день	☐	☐	☐
10 или более бокалов в день	☐	☐	☐

Без указаний ☐

58. Как часто Вы употребляете 6 или более бокалов по праздникам или на ужин?

Никогда..... ☐

Реже 1 раза в месяц ..... ☐

Каждый месяц..... ☐

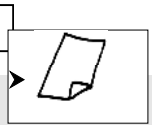
Каждую неделю..... ☐

Почти каждый день..... ☐

Без указаний ..... ☐

V Питание

В следующем разделе речь идет о Вашем обычном питании.

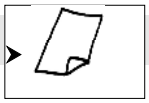


59. Какие приемы пищи для Вас обычны?

	регулярно	нерегулярно	никогда
завтрак	☐	☐	☐
обед	☐	☐	☐
ужин	☐	☐	☐
Другое, а именно	☐	☐	☐

Без указаний ☐

60. Как часто Вы принимаете горячую пищу?



Чаще чем 1 раз в день ..... ☐

1 раз в день..... ☐

Несколько раз в неделю..... ☐

1 раз в неделю ..... ☐

Реже чем 1 раз в неделю ..... ☐

никогда ..... ☐

Без указаний ..... ☐

61. Сколько порций овощей и фруктов Вы едите в сутки?

➢ ***указания для интервьюера: 1 порция соответствует 1 пригоршне, выбрать из списка примеров, если неясно.***

➢ ***указания для интервьюера: дать возможность ответить, или уточнить:***

1 порция овощей соответствует	**1 порция фруктов соответствует**
1 небольшая репа или 1 сладкий перец или 3 помидора · 2 горсти салата или нарезанная морковь · 1 маленькая банка овощей (около 125 г) · 2 горсти замороженной брокколи, шпинат или грибы (около 125 г) · 1 горсть сухих бобовых, таких как чечевица или горох · 1 горсть квашеной капусты или маринованные овощи · 1 стакан томатного или морковного сока	· 1 яблоко,1 банан,1 апельсин или 1 персик · 2 горсти клубники, малины или винограда · 4 столовые ложки компота без сахара или слегка сладкий · 2 горсти смеси замороженных ягод · 5 штук чернослива или кураги · 1 стакан фруктового сока 100% или 1 фр.йогурта · 1/2 горсть орехов (около 25 г)

Участник № ☐☐ ☐☐

	Овощи	Фрукты
Вообще без	☐	☐
1 порция	☐	☐
2 порции	☐	☐
3 порции	☐	☐
4 порции	☐	☐
5 порций	☐	☐
Более чем 5 порций	☐	☐

Без указаний ☐

62. Как часто Вы едите мясо?

Чаще чем 1 раз в день .... ☐

Каждый день .... ☐

Несколько раз в неделю .... ☐

1 раз в неделю ..... ☐

Реже чем 1 раз в неделю ..... ☐

Никогда .... ☐

Без указаний .... ☐

63. Питаетесь ли Вы сознательно обезжиренной пищей или пищей с малым содержанием жира?

всегда	часто	иногда	редко	никогда
☐	☐	☐	☐	☐

Без указаний ☐

64. Ограничиваете ли Вы себя сознательно в еде, чтобы не прибавить в весе?

всегда	часто	иногда	редко	никогда
☐	☐	☐	☐	☐

Без указаний ☐

65. Сколько жидкости и что именно Вы принимаете в сутки?

1 стакан воды или 1 чашка кофе/чая = 0,2l.

➢ ***указания для интервьюера: дать возможность ответить, при необходимости спросить про отдельные напитки и дополнить:***

	Вообще нет	0,2 – 0,5l	0,5 – 1l	1 – 1,5l	1,5 – 2l	более 2l
Кофе (также эспрессо, капуччино…)	☐	☐	☐	☐	☐	☐
Чай (черный, фруктовый,травяной)	☐	☐	☐	☐	☐	☐
Соки фруктовые или овощные	☐	☐	☐	☐	☐	☐
Кола, фанта, спрайт и.т.п.	☐	☐	☐	☐	☐	☐
Молоко, какао и.т.п.	☐	☐	☐	☐	☐	☐
Вода	☐	☐	☐	☐	☐	☐
Другое_____	☐	☐	☐	☐	☐	☐

Без указаний ☐

66. В целом, как сильно Вы уделяете внимание здоровому питанию?

очень сильно	сильно	умеренно	немного	совсем нет
☐	☐	☐	☐	☐

Без информации ☐

67. Не могли бы Вы сообщить Ваш рост и вес?

Рост (см): _____ **Вес (кг):** _____

Без указаний ☐

68. Думаете ли Вы, что Вы…?[6]

…слишком худощавые? ..... ☐

…немножко худощавые?..... ☐

6 RKI Gesundheitsfragebogen 65+

…как раз оптимального веса? ..... ☐

…немного полные?..... ☐

…слишком полные? ..... ☐

Без указаний ..... ☐

69. Кто готовит в Вашем доме?

➢ ***указания для интервьюера: дать возможность ответить, при необходимости уточнить и дополнить***

Я ..... ☐

Моя жена/муж ..... ☐

Мои дети ..... ☐

Моя мама/теща..... ☐

Мой отец/свекор ..... ☐

Мои соседи..... ☐

«Еда на колесах»..... ☐

Другое:_____

Без указаний ..... ☐

70. Кто покупает Вам продукты чаще всего?

➢ ***указания для интервьюера: дать возможность ответить, при необходимости уточнить и дополнить***

Я ..... ☐

Моя жена/муж ..... ☐

Мои дети ..... ☐

Моя мама/теща..... ☐

Мой отец/свекор ..... ☐

Мои соседи..... ☐

«Еда на колесах»..... ☐

Другое:_____

Без указаний ..... ☐

71. В каких магазинах Вы обычно покупаете продукты? Чем Вам они особенно нравятся, и как Вы туда добираетесь?

⇨ Название магазина ⇨		
Я покупаю там продукты, т.к.…		
Я добираюсь туда…		
…пешком	☐	☐
…на велосипеде	☐	☐
…на машине	☐	☐
…на автобусе/поезде	☐	☐

➲ далее к вопросу 73

➲ далее к вопросу 72

Без указаний ☐

72. По какой причине Вы не ходите пешком или не ездите на велосипеде? (возможно несколько ответов)

➢ ***указания для интервьюера: дать возможность ответить, при необходимости уточнить и дополнить***

По причине наличия болей ..... ☐

У меня нет желания ..... ☐

Это очень напряженно для меня ..... ☐

Это для меня очень далеко..... ☐

Я не могу ездить на велосипеде ..... ☐

Другое:_____

Без указаний ..... ☐

73. Пользуетесь ли Вы службой доставки?

всегда	часто	иногда	редко	никогда
☐	☐	☐	☐	☐

Без указаний ☐

Участник № ☐☐ ☐☐

VI Оценка индивидуальной эффективности

В следующем разделе речь идет о том, насколько Вы убеждены, что можете самостоятельно оказывать влияние на трудные обстоятельства.

Насколько следующие высказывания соответствуют Вашему мнению?[7] 

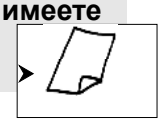
	Полностью соответствует	Скорее соответствует	Скорее не соответствует	Не соответствует
74. Решение трудных проблем удается мне всегда, если я постараюсь	☐	☐	☐	☐
75. Если мне кто-то оказывает сопротивление, я найду средства и пути, чтобы настоять на своем	☐	☐	☐	☐
76. Для меня не существует трудностей осуществить свои цели и намерения	☐	☐	☐	☐
77. Также при непредвиденных ситуациях я верю, что хорошо с ними справлюсь	☐	☐	☐	☐
78. При неожиданных обстоятельствах я всегда знаю, как себя вести	☐	☐	☐	☐
79. Для каждой проблемы я найду решение	☐	☐	☐	☐
80. Трудности я рассматриваю с невозмутимостью, Потому что я могу всегда положиться на свои способности	☐	☐	☐	☐
81. Если я столкнусь с какой-либо проблемой, я всегда найду много способов ее решения	☐	☐	☐	☐

7 Jerusalem/Schwarzer 1986

82. Если я столкнусь с каким - либо новым вопросом, я знаю, как себя вести	☐	☐	☐	☐
83. Чтобы ни случилось, я всегда с этим справлюсь.	☐	☐	☐	☐

VII Ущемление интересов и удовлетворенность в Германии

84. Многие люди в Германии сталкиваются с дискриминацией. Мне бы хотелось узнать, имеете ли Вы такой опыт?[8]



Чувствовали ли Вы, что по причине Вашего происхождения с Вами неравно обращались…	Да, многократно	Да, однократно	Никогда	Не сталкивался
…в магазине/ в ресторане	☐	☐	☐	☐
…Ваши соседи	☐	☐	☐	☐
…на работе	☐	☐	☐	☐
…при поиске работы	☐	☐	☐	☐
…при поиске места жительства	☐	☐	☐	☐
…в полиции	☐	☐	☐	☐
…в учреждениях	☐	☐	☐	☐
…в других местах, а именно:	☐	☐	☐	☐

VIII Социальные связи

Социальные связи могут помочь пожилым людям радоваться жизни и поддерживать здоровье. Поэтому в следующем разделе несколько вопросов касаются социальных контактов.

8 в привязке к Meschede et al. 2010

85. С какими людьми Вы общаетесь и как часто Вы их видите?

➤ ***Указания для интервьюера: дать возможность ответить, при необходимости уточнить и дополнить***

	ежедневно	еженедельно	ежемесячно	редко	никогда
Муж/жена или партнер/партнерша	☐	☐	☐	☐	☐
Дети	☐	☐	☐	☐	☐
Внуки	☐	☐	☐	☐	☐
Родители	☐	☐	☐	☐	☐
Другие родственники	☐	☐	☐	☐	☐
Друзья	☐	☐	☐	☐	☐
Знакомые	☐	☐	☐	☐	☐
Соседи	☐	☐	☐	☐	☐
Коллеги по обществу	☐	☐	☐	☐	☐
Коллеги по работе (в т.ч.прошлые)	☐	☐	☐	☐	☐
Врач	☐	☐	☐	☐	☐
Работник места встреч	☐	☐	☐	☐	☐
Посетитель места встреч	☐	☐	☐	☐	☐
Сотрудник русской общины	☐	☐	☐	☐	☐
Посетитель русской общины	☐	☐	☐	☐	☐
Работник церкви	☐	☐	☐	☐	☐
Посетитель церкви	☐	☐	☐	☐	☐
Другой человек…	☐	☐	☐	☐	☐

В следующих вопросах речь идет о социальной поддержке, которую Вы получаете. Насколько следующие высказывания соответствуют Вашему мнению?[9]

9 Опросник по социальной поддержке – краткая форма (F-SozU K-14)

SAGLIK - Ориентированное на социальное пространство укрепление здоровья пожилых женщин и мужчин с миграционным прошлым 60 +

Участник № ☐☐ ☐☐

	Полностью соответствует	Скорее соответствует	Частично соответствует	Скорее не соответствует	Не соответствует
86. Я всегда найду кого-нибудь, кто присмотрит за моей квартирой в мое отсутствие	☐	☐	☐	☐	☐
87. Есть люди, которые принимают меня таким, какой я есть	☐	☐	☐	☐	☐
88. Я испытываю от других чувство понимания и защищенности	☐	☐	☐	☐	☐
89. У меня есть люди, которым я доверяю, на помощь которых я всегда могу рассчитывать	☐	☐	☐	☐	☐
90. При необходимости я могу без проблем взять у друзей что-либо взаймы	☐	☐	☐	☐	☐
91. У меня есть друзья/родственники, которые могут найти для меня время и выслушать, если мне это необходимо	☐	☐	☐	☐	☐
92. Я знаю много людей, с которыми я могу что-либо предпринять	☐	☐	☐	☐	☐
93. У меня есть друзья/родственники, которые могут просто меня обнять	☐	☐	☐	☐	☐
94. Если я заболею, я могу без промедлений обратиться за помощью к друзьям/родственникам	☐	☐	☐	☐	☐
95. Если я почувствую себя подавленным, я знаю, к кому я могу без проблем обратиться	☐	☐	☐	☐	☐
96. У меня есть люди, которые делят со мной радость и горе	☐	☐	☐	☐	☐
97. С некоторыми друзьями/родственника					

ми я могу позволить себе расслабиться	☐	☐	☐	☐	☐
98. У меня есть человек, которому я доверяю и в близости которого я чувствую себя свободно	☐	☐	☐	☐	☐
99. Существует группа людей, к которой я принадлежу и с которой я часто встречаюсь	☐	☐	☐	☐	☐

100.В следующих вопросах речь идет о помощи и поддержке, которую Вы, вероятно, получаете, и о том, кто Вам ее оказывает.

	Да	Нет
Получаете ли Вы помощь по хозяйству, например, при приготовлении пищи, покупке продуктов или при уборке?	☐	☐
Получаете ли Вы помощь вне дома, например, для сопровождения к врачу или в учреждения?	☐	☐
За Вами ухаживают?	☐	☐
	➔ далее к вопросу 101	➔ далее к вопросу 102

101. Если да, от кого Вы получаете помощь и поддержку или кто за Вами ухаживает?

➢ ***Указания для интервьюера: дать возможность ответить, при необходимости уточнить и дополнить***

	Помощь по хозяйству	Помощь вне дома	Уход
Муж/жена или партнер/партнерша	☐	☐	☐
Дети	☐	☐	☐
Внуки	☐	☐	☐
Сестры/братья	☐	☐	☐

Другие родственники	☐	☐	☐
Друзья	☐	☐	☐
Знакомые	☐	☐	☐
Соседи	☐	☐	☐
Добровольные помощники (социальные службы)	☐	☐	☐
Оплаченные помощники (уборщики)	☐	☐	☐
Оплаченные профессиональные работники (службы по уходу, социальная служба)	☐	☐	☐
Другие, а именно	☐	☐	☐

102. Нуждаетесь ли Вы по Вашему мнению в большей помощи в Вашей повседневной жизни, по сравнению с тем, что Вы сейчас имеете?

Да ..... ☐

Нет ..... ☐

Без указаний ..... ☐

103. Чем Вы занимаетесь в Ваше свободное время вне дома и как часто[10] (возможно несколько ответов)

➢ ***Указания для интервьюера: дать возможность ответить, при необходимости уточнить и дополнить***

	ежедневно	еженедельно	ежемесячно	редко	никогда
Встречи с друзьями	☐	☐	☐	☐	☐
Любимое занятие (хобби)	☐	☐	☐	☐	☐

10 вопросы модифицированы по Richard et al. (2008)

Участник № ☐☐ ☐☐

Посещение ресторана, кафе, чайной*	☐	☐	☐	☐	☐
Посещение курсов (например, вечерняя школа)	☐	☐	☐	☐	☐
Посещение религиозных мероприятий (служба в церкви)	☐	☐	☐	☐	☐
Помощь соседям (полить цветы…)	☐	☐	☐	☐	☐
Добровольная работа	☐	☐	☐	☐	☐
Посещение культурных мероприятий (танцы, концерты, представления)	☐	☐	☐	☐	☐
Участие в группах самопомощи	☐	☐	☐	☐	☐
Посещение центра встреч для пожилых людей	☐	☐	☐	☐	☐
Посещение культурных центров	☐	☐	☐	☐	☐
Участие в политических встречах	☐	☐	☐	☐	☐
Посещение библиотеки	☐	☐	☐	☐	☐
Другое, а именно:	☐	☐	☐	☐	☐

** Неподходящее вычеркнуть*

IX Социально-демографические данные

Я хотела бы задать Вам несколько персональных вопросов, при этом еще раз напоминаю, что Ваши ответы анонимны.

104. В какой стране Вы родились?

В _____

Без указаний .....☐

105. С какого года Вы живете в Германии?

С рождения ..... ☐

С _____..... ☐

Без указаний ..... ☐

106. У вас немецкое гражданство?

Да ..... ☐ ➲ далее к вопросу 108

Нет..... ☐ ➲ далее к вопросу 107

Без указаний .... ☐ ➲ далее к вопросу 107

107. Вы имеете бессрочное разрешение на пребывание?

Да ..... ☐

Нет..... ☐

Без указаний ..... ☐

108. Какой Ваш родной язык?

_____ если не немецкий ➲ далее к вопросу 109, иначе ➲ 110

Без информации..... ☐ ➲ далее к вопросу 109

109. Если немецкий язык не Ваш родной, как Вы оцениваете Ваши знания немецкого?

Очень хорошо	Хорошо	Удовлетворительно	Плохо
☐	☐	☐	☐

Без информации ☐

110. Каково Ваше семейное положение?

➢ ***Указания для интервьюера: дать возможность ответить, при необходимости уточнить и дополнить***

Холост/не замужем ..... ☐
Гражданский брак ..... ☐
Женат/замужем ..... ☐
Раздельное проживание с супругом ..... ☐
Разведен (а) ..... ☐
Вдовец (вдова) ..... ☐

Без указаний ..... ☐

111. У Вас есть дети?

Да ..... ☐ в количестве_____ ➲ далее к вопросу 112
Нет ..... ☐ ➲ далее к вопросу 113

Без информации ..... ☐ ➲ далее к вопросу 113

112. Где живут Ваши дети? (возможно несколько вариантов)

➢ ***Указания для интервьюера: дать возможность ответить, при необходимости уточнить и дополнить***

Вместе с Вами в доме ..... ☐
В той же части города ..... ☐
В другой части Гамбурга ..... ☐
В другой части Германии ..... ☐
В России ..... ☐
В другом городе ..... ☐

Без указаний ..... ☐

113. Где бы Вы хотели жить через несколько лет?

➢ ***Указания для интервьюера: дать возможность ответить, при необходимости уточнить и дополнить***

Я бы хотел остаться в Гамбурге..... ☐

Я бы хотел вернуться в Россию..... .....☐

Я бы хотел жить в Гамбурге и в России ....☐

Я бы хотел жить в другом месте, а именно _____

Без указаний.....☐

X Жилищные условия

114. Каковы Ваши жилищные условия? Вы живете…

…один (одна) ..... ☐

…с партнером/супругом ..... ☐

…с другим человеком, а именно: _____

Итого _____ человек *(указать количество)*

с _____ домашним животным *(указать количество)*

Без указаний ..... ☐

115. Каковы Ваши жилищные условия? Вы живете …

…в квартире: - в съемной..... ☐

- в собственной ..... ☐

…в доме - в съемном..... ☐

- в собственном ..... ☐

…В квартире с обслуживанием..... ☐

…В доме престарелых ..... ☐

прочее _____ *(указать)*

Без указаний ..... ☐

116. На каком этаже Вы живете?

Полуподвал ..... ☐

Партер ..... ☐

1.этаж (или высокий партер) ..... ☐

2. этаж ..... ☐ с лифтом..... ☐

3. этаж ..... ☐ без лифта ..... ☐

4. этаж или выше ..... ☐

Без указаний ..... ☐

117. В отношении Вашей квартиры Вы бы сказали, что она …[11]

	Да	Нет
…слишком маленькая?	☐	☐
…слишком дорогая?	☐	☐
…слишком темная?	☐	☐
недостаточно отапливаема/климатизирована?	☐	☐

118. Что Вы думаете о непосредственном окружении Вашего дома – Вы бы сказали, что …

	Да	Нет
…в непосредственной близости имеются достаточно аптек, врачей, магазинов.?	☐	☐
…имеется хорошее транспортное сообщение?	☐	☐
…имеется загрязнение воздуха, шум, другие проблемы загрязнения окружающей среды?	☐	☐
…имеется высокий уровень вандализма и криминогенной обстановки?	☐	☐

11 Вопросы 116 und 117: RKI Gesundheitsfragebogen 65+

XI Образование

Далее речь пойдет о Вашем образовании и профессиональной деятельности.

119. Сколько лет Вы учились в школе?

➢ ***Указания для интервьюера: дать возможность ответить, при необходимости уточнить и дополнить***

Не посещал (а) ..... ☐

1 - 5 лет ..... ☐

6 - 8 лет ..... ☐

9 - 11 лет ..... ☐

> 12 лет ..... ☐

Без указаний ..... ☐

120. Какой уровень школьного образования Вы имеете?

➢ ***Указания для интервьюера: дать возможность ответить, при необходимости уточнить и дополнить***

Не имею ..... ☐

Начальная школа..... ☐

Неполная средняя школа ..... ☐

Средняя школа/реальное училище ..... ☐

Аттестат зрелости/гимназия..... ..... ☐

Другой вид, а именно: _____

Без указаний ..... ☐

121. Какое профессиональное образование Вы имеете?

➢ ***Указания для интервьюера: дать возможность ответить, при необходимости уточнить и дополнить***

Без профессионального образования ..... ☐

ПТУ ..... ☐

Среднее специальное учебное заведение, техникум ..... ☐

Специальное высшее учебное заведение, диплом ..... ☐

Университет, диплом ..... ☐

Другое учреждение, а именно:_____

Без указаний ..... ☐

XII Профессиональная деятельность

122. Вы в настоящее время работаете?

Да ..... ☐ ➲ далее к вопросу 123

Нет ..... ☐ ➲ далее к вопросу 124

Без указаний ..... ☐ ➲ далее к вопросу 123 или при необходимости 124

123. Если Вы работаете, сколько часов в неделю?

➢ ***Указания для интервьюера: дать возможность ответить, при необходимости уточнить и дополнить***

До 5 часов в неделю ..... ☐

6 - 14 часов в неделю ..... ☐

15 - 34 часов в неделю ..... ☐

35 - 40 часов в неделю ..... ☐

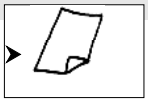
41 - 50 часов в неделю ..... ☐

> 50 часов в неделю ..... ☐

Без указаний ..... ☐

➲ далее к вопросу 125

124. Если Вы не работаете, чем Вы в настоящее время занимаетесь?



В основном хозяйством ..... ☐

Пенсионер (ка) ..... ☐

Пенсионер по причине неработоспособности..... ☐

Ранняя пенсия ..... ☐

Безработный (ая)..... ☐

Не работая по другим причинам..... ☐

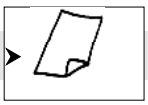
Без указанием..... ☐

125. Если Вы работаете или ранее работали, кем Вы работаете (работали) в последнее время?

_____ (указание деятельности)

Без указаний ☐

126. Насколько Вы довольны Вашим последним местом работы?



Очень недоволен	Скорее недоволен	Ни то, ни другое	Скорее доволен	Очень доволен
☐	☐	☐	☐	☐

Без указаний ☐

XIII Уход за родственниками[12]

127. Ухаживаете ли Вы в настоящее время за родственником?

Да ..... ☐ ➲ далее к вопросу 128 и 129

Нет..... ☐ ➲ далее к вопросу 130

Без указаний ..... ☐ ➲ далее к вопросу 130

12 в привязке к RKI Gesundheitsfragebogen 65+

128. Если Вы ухаживаете ли Вы в настоящее время за родственником, то как часто?

Несколько раз в день	Раз в день	Несколько раз в неделю	Раз в неделю	Несколько раз в месяц	Раз в месяц	Реже чем раз в месяц
☐	☐	☐	☐	☐	☐	☐

Без указаний ☐

129. Насколько обременительна для Вас нагрузка по уходу?

Очень сильно обременительна	Сильно обременительна	Умеренно обременительна	Не сильно обременительна	Вообще не обременительна
☐	☐	☐	☐	☐

Без указаний ☐

XIV Религия, религиозность

130. К какой религии Вы принадлежите?

Ни к какой..... ☐

Мусульманской ..... ☐

Христианской ..... ☐

Другой..... ☐ а именно_____

Без указаний ..... ☐

131. Какое значение занимает религия в Вашей жизни?

Очень большое	Скорее большое	Небольшое	Не имеет значения
☐	☐	☐	☐

Без указаний ☐

XV Доход

132. Какова сумма Вашего месячного дохода (нетто, после выплаты налогов и страховок), (примерное значение)?

Менее чем 500 Euro..... ☐
500 – 750 Euro..... ☐
751 – 1.000 Euro..... ☐
1.001 – 1.500 Euro..... ☐
1.501 – 2.000 Euro..... ☐
2.001 – 2.500 Euro..... ☐

2.501 – 3.000 Euro ..... ☐
3.001 – 3.500 Euro ..... ☐
3.501 – 4.000 Euro ..... ☐
4.001 – 4.500 Euro ..... ☐
Более чем 4.500 Euro ☐

Не известно..... ☐

Без указаний ☐

133. Считаете ли Вы Ваш месячный доход в основном достаточным?

Всегда	В основном	Иногда	Редко	Никогда
☐	☐	☐	☐	☐

Без указаний ☐

134. Сколько средств (нетто, после выплаты налогов и страховок) у Вас имеется ежемесячно Вас для ведения хозяйства (примерное значение)?

Менее чем 500 Euro..... ☐
500 – 750 Euro..... ☐
751 – 1.000 Euro..... ☐
1.001 – 1.500 Euro..... ☐
1.501 – 2.000 Euro..... ☐
2.001 – 2.500 Euro..... ☐

2.501 – 3.000 Euro..... ☐
3.001 – 3.500 Euro..... ☐
3.501 – 4.000 Euro..... ☐
4.001 – 4.500 Euro..... ☐
Более чем 4.500 Euro ☐

Не известно..... ☐

Без указаний ..... ☐

135. Считаете ли Вы Ваш месячный доход для ведения домашнего хозяйства в основном достаточным?

Всегда	В основном	Иногда	Редко	Никогда
☐	☐	☐	☐	☐

Без указаний ☐

XVI Идеи, инициативы, пожелания

136. Если Вы еще раз подумаете обо всех разделах данного опроса, по которым Вы высказывали свое мнение, есть ли у Вас дальнейшие замечания? Какие темы заинтересовали Вас лично более всего?

Из области...	
…питания	
…двигательной активности	
…социальной жизни, например, социальные связи в Вашей части города, по соседству, в кругу друзей	

Без указаний ☐

137. Какие виды предложений Вас бы заинтересовали?

	Очень	Скорее	Не очен	не
	Интересно			
Доклад	☐	☐	☐	☐
Доклад с дискуссией	☐	☐	☐	☐
Рабочая группа, в т.ч. проработка определенной темы в группе	☐	☐	☐	☐
Группа взаимопомощи	☐	☐	☐	☐
Спортивные предложения	☐	☐	☐	☐
Другое, а именно:	☐	☐	☐	☐

Без указаний ☐

XVII. Дополнение к разделу I «Состояние здоровья – врачебное обслуживание и его качество»

138. Существует программы по реабилитационному и курортному лечению. Частично такие предложения оплачиваются страховыми компаниями. Участвовали ли Вы в такой программе за последние 10 лет?

Да, 1 раз ..... ☐ ➲ далее к вопросу 139 и 140

Да, 2 и более раз ..... ☐ ➲ далее к вопросу 139 и 140

Нет ..... ☐

Без указаний ..... ☐

139. В каких программах Вы участвовали за последние 10 лет? (возможно несколько ответов)

		Вид финансирования	
	По причине… (указать заболевание или другую причину)	Оплачивал полностью самостоятельно	Оплачивал частично самостоятельно
Реабилитационное лечение		☐	☐
Курортное лечение		☐	☐

140. Как Вам кажется, Ваше самочувствие или состояние Вашего здоровья улучшиось после участия в этих программах?

Да ..... ☐

Нет ..... ☐

Без указаний ..... ☐

Благодарю Вас за помощь!

Заполнено : _____(Дата)

В : _____(Район города)

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