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„Reproductive Health of Indian women in Austria and in
India”

„(Reproduktive Gesundheit der Indischen Frauen in
Österreich und in Indien)“

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Preface

According to many surveys which have been carried out over the last three decades, many health problems among migrants in Europe have been shown. A large number of chronic diseases linked with obesity, stress and social or environmental changes like diabetes, high blood pressure or cardiovascular diseases are common among people living in developed countries and migrants.

Having all these aspects in my mind, I compared the health situation of Indian migrants living in Vienna with women living in India. I chose women from the state of Punjab in India, because they constitute a minority group of north Indian migrants in Austria. Many surveys have been done in relation to the topic of migration and women's health in India and worldwide.

The problem I wanted to deal with was to find out whether the women living in Punjab were healthier than their relatives, families and friends who are living in Vienna. The assumption should prove that the cultural and environmental changes have effects onto eating habits, life style and play a big role in the health situation of Indian women.

Abstract

The aim of this study was to analyze the reproductive health situation of Indian migrants living in Vienna and to compare their health status with women living in India. 115 women between the age of 17 and 80 years were analyzed with the help of standardized questionnaires. Questions were asked to find out about the economic and health situation, eating habits, living conditions etc. The average age of the women was 38.7 years. 50 of these women live as migrants in Vienna, and 65 of them are from two villages (Sarai Khas and Kotla) and two cities (Kartarpur and Kapurthala) in the district of Jalandhar in Punjab. Most of the data in Austria was collected in temples; the Hindu Temple in the 15th district and the Sikh Temple in the 12th district. Further, two qualitative interviews with general practitioners in Punjab and one in Vienna were done with various general practitioners.

In this survey, the matter of price was important for most of the migrants when it comes to buying their daily food. Most of them were not vegetarian, although due to their religious belief, they should not be eating meat. The cultural influences of their host country have effects onto their eating habits.

But results indicate that there is no correlation between the eating habits and Body Mass Index in the migrants in Austria. However, the group of obese women with 66.7% is vast within the non-vegetarian group.

Additionally there is a significant correlation between the Body Mass Index groups and eating habits relating to side dishes ($\chi^2=12.94$; $p=0.043$). Further, the cultural and environmental changes have certain effects onto migrants concerning period of breastfeeding, amount of children and age of the mother at first birth. The women in India had a higher average period of lactation of about 2 years, which declines to approximately 1 year in Austria. The average amount of children in Austria within the migrants decreases and the age for giving birth to the first child increases. Most migrant families in Austria have about 2 children. Body Mass Index increases with the subjects getting older in this study. There is a high correlation between the BMI groups and age groups ($\chi^2=16.47$; $p=0.011$). The largest group of overweight and obese women were between the age of 30 and 50 years. The percentage of women with overweight in Austria was, as expected, higher than in India. Mostly women younger than 30 years do sports on a daily basis. There is a correlation between the age groups and daily exercise. In this study a statistically significant correlation between education and financial dependency was found ($\chi^2=14.59$; $p=0.042$). It was proofed that women who are dependent on their families are mostly illiterate and unemployed. Financial dependency decreases with a

higher education level. Further, this survey showed that place of residence, inadequate infrastructure and living status have a high influence on education. Women born in villages are not able to receive suitable education compared to the women in cities. The correlation between education and birthplace in this study shows a significant result ($\chi^2=24.27$; $p=0.001$). Subjects born in the city had a higher education than the ones born in a village.

Zusammenfassung

Das Ziel dieser Studie war es, die reproduktive Gesundheitssituation der indischen Migranten in Wien zu analysieren und ihren Gesundheitszustand mit Frauen in Indien zu vergleichen. 115 Frauen zwischen 17 und 80 Jahren wurden mit Hilfe von standardisierten Fragebögen befragt. Die Fragebögen beinhalteten Fragen über die wirtschaftlichen und gesundheitlichen Situation, Ernährungsgewohnheiten, Lebensumstände etc. Das Durchschnittsalter der Frauen betrug 38,7 Jahre. Zur Zeit der Umfrage lebten 50 Frauen als Migrantinnen in Wien, und 65 kamen aus zwei Dörfern (Sarai Khas und Kotla) und zwei Städte (Kartarpur und Kapurthala) aus dem Bezirk Jalandhar in Punjab. Die meisten Daten wurden in Österreich im Tempel gesammelt; die Hindu-Tempel im 15. Bezirk und die Sikh-Tempel im 12. Bezirk. Ferner wurden zwei qualitative Interviews in Punjab und eines in Wien mit verschiedenen praktischen Ärzten durchgeführt.

Diese Studie zeigte, dass beim Kauf der täglichen Lebensmittel für die Migrantinnen in Österreich die Preisfrage wichtiger war als die Qualität der Nahrung. Die meisten von ihnen gaben zu, dass sie keine Vegetarier sind, obwohl aufgrund ihrer religiösen Überzeugung, sie kein Fleisch essen dürfen. Die kulturellen Einflüsse des Gastlandes zeigen Auswirkungen auf ihre Essgewohnheiten. Aber die Ergebnisse zeigen, dass es keine Korrelation zwischen den Ernährungsgewohnheiten und dem Body Mass Index zwischen den Migranten in Österreich gibt. Allerdings befindet sich eine große Gruppe der adipösen Frauen mit 66,7% innerhalb der Nicht-Vegetarier-Gruppe. Zusätzlich gibt es eine signifikante Korrelation zwischen dem Body Mass Index Gruppen und Essverhalten im Zusammenhang mit Beilagen ($\chi^2 = 12,94$, $p = 0,043$). Ferner zeigten sich die Einflüsse der kulturellen Veränderungen auf bestimmte Migranten bei der Laktationsdauer, Anzahl der Kinder und das Alter der Mutter bei der Geburt des ersten Kindes. Die Frauen in Indien hatten einen höheren durchschnittlichen Laktationsperiode von etwa 2 Jahren, die auf ca. 1 Jahr in Österreich reduziert wird. Die durchschnittliche Anzahl der Kinder in Österreich innerhalb der Migranten Familien sinkt, und das Alter für die Geburt des ersten Kindes steigt.

Die meisten Familien mit Migrationshintergrund haben in Österreich etwa 2 Kinder. Body Mass Index steigt mit dem Alter in dieser Studie. Es besteht eine hohe Korrelation zwischen dem BMI-und Altersgruppen ($\chi^2 = 16,47$; $p = 0,011$). Die größte Gruppe der übergewichtigen und adipösen Frauen war im Alter zwischen 30 und 50 Jahren. Der Anteil der Frauen mit Übergewicht in Österreich war, wie erwartet, höher als in Indien. Vor allem Frauen jünger als

30 Jahre treiben regelmäßig Sport. Es gibt eine Korrelation zwischen den Altersgruppen und regelmäßigem Sportverhalten.

Weiteres gibt es eine statistisch signifikante Korrelation zwischen Bildung und finanzieller Abhängigkeit ($\chi^2 = 14,59$, $p = 0,042$). Es konnte bewiesen werden, dass meistens Analphabeten und arbeitslose Frauen von ihren Familien abhängig sind. Finanzielle Abhängigkeit nimmt mit einem höheren Bildungsniveau ab. Weiterhin zeigte diese Studie, dass Wohnort, unzureichende Infrastruktur und schlechte Lebensbedingungen einen hohen Einfluss auf die Bildung haben. Die Korrelation zwischen Bildung und Geburtsort in dieser Studie zeigen ein hohes signifikantes Ergebnis ($\chi^2 = 24,27$, $p = 0,001$). Frauen, die in der Stadt geboren wurden, hatten eine höhere Bildung als Frauen in den Dörfern.

Theoretical approach

1. Introduction

Almost 55% of the total world's population consists of women and the percentage is still increasing. In the year 2003, the life expectancy of women in Europe was 81.1 years compared to 74.8 years for men. This shows that the life expectancy of women is increasing and is greater than that of men. Worldwide women's lives are changing rapidly. There are changing trends in family lives, social attitudes and values, gender roles and work situations. The way of living is influenced by economical, social, political and cultural trends. (Eurohealth)

Changes have occurred for example in the topic of marriage and divorce. The marriage rates are decreasing and the divorce rates are increasing all over Europe. In 2001, the rate of marriages in the countries that make up the European Union was estimated at 5.1 per 1,000 population compared to 1980 where it was at 6.3 per 1,000. At the same time, the average age of first marriage continues to rise, as well as the average age for first birth. But the number of children is decreasing. These are trends which have important consequences for women's health and quality of life. (Eurohealth)

There are still differences worldwide concerning contraception and abortion. Women living in the older European Union countries use more contraceptives than the women in the new member States. In the same time, the abortion rates are much higher in many of the new member countries than in the old European Union Member States. The lack of advisory services and high cost of adequate contraceptives lead to abortions as the only way of fertility regulation. (Eurohealth)

Still, women in Europe represent the largest group of non-employed and under-employed skilled workers. Part time job is the only way of sharing the responsibility for childcare and housework. (Eurohealth)

In addition to these trends, the prevalence of obesity in the European countries has increased over the last decade. Obesity, associated with numerous health complications, has major health and economic consequences and it is increasing the burden of chronic non-communicable diseases. (Eurohealth)

(Report of Eurohealth: http://www.eurohealth.ie/pdf/WomenshealthinEurope_FINALpdf.pdf 24.11.2010)

The European Union is also facing challenges concerning migration health. In 2005, women were counted to be around half of the people migrating to Europe. With these rates, they have achieved similar rates to men for the past 40 years of migration. (Adanu R. M., 2009)

Migration brings along many health issues, especially for women. They face such issues due to their inferior social status and also because of a unique biological characteristic. (Carballo M., 1996)

Next to the health problems, discrimination and sexual abuse are other factors that women have to deal with especially as migrants. (Adanu R. M., 2009; Carballo M., 1996)

The sexual abuse coheres with HIV/AIDS and sexually transmitted diseases within migrants. The living and working conditions of migrants specify their health situation. The determining factors can be education, housing, employment, income, working conditions and access to health services. Keeping in mind, that poverty diseases, like tuberculosis, hepatitis and respiratory diseases are linked to poor housing and nutrition conditions. Research has shown that people who continuously live in poverty are more likely to be exposed to more diseases, such as in some European countries for example: the Netherlands, Austria, France, Italy, Spain and Portugal. (Fernandes A. / Miguel P. J., 2009)

Therefore, it is important for the receiving countries to develop certain rules and policies to improve the health of female migrants. The European countries are considering health policies and programs for the migrants in six issues, such as communication and understanding; mother and child care; health indicators among migrants; occupational health; violence; and control of infectious diseases. (Adanu R. M., 2009; Mohammadi M. R., 2006)

Today, women face embarrassing situations all over the world. They find themselves in lower positions to men, which makes them socially, culturally, and economically dependent on them. Being subordinated to men in South Asian countries, exclude the women from making decisions. They have mostly limited access to resources and are limited in their mobility. (Fikree F. F., 2004)

In some parts of the Indian subcontinent gender discrimination has predominated. The sex ratio has fallen as low as 770 women per 1000 men. Sex selective abortions, neglect of female babies, reproductive mortality, and poor access to health care for girls and women are some of the reasons for this result. Further, adolescent women are facing great challenges to their health due to early marriage and pregnancy, anaemia, sexual violence and poor educational opportunities. South Asian mothers are too young, receive minimal prenatal care and are undernourished or anaemic during their pregnancy. (Fikree F. F., 2004)

2. Migration

2.1. Definition:

An immigrant is a person who moves from one country to another. He becomes the citizen of that locality. He can come to the country legally through immigration programs or illegally by crossing the country boarder without a visa. (The Texas Guide to school health programs, chapter 11)

2.2. Types of Migration:

Migration under voluntary movement: It is a matter of economical situation. About 200 million people migrate every year to find work and to have a better life. The intentions of migrants about the period can be different, like one can move to other countries with the intention of staying long enough to earn sufficient money. Some people also leave their country with the intention of settling and beginning new lives. Whatever reasons there are to migrate, leaving the country comes with a great deal of health challenges. (Carballo M. /Mboup M., 2005)

Migration under compulsion: Over the last century a great number of people have been forced to move for reasons of conflict and political repression from their countries. Many people could get help and become refugee with UN protection but at the same time many others fled without any international or national assistance from their homes but remain within their own borders. (Carballo M. /Mboup M., 2005)

2.3. Migration in Austria:

According to the 2001 census, eight million people are living in Austria. The percentage of inhabitants of foreign residents was about 9.1 percent (730,000). Out of this, 62.8 percent of them are from the successor states of the former Yugoslavia and from Turkey. In 2001 Austria's proportion of foreign-born residents was even higher than that of the United States, reaching a level of 12.5 percent. (Jandl M. /Kraler A., 2003)

Officially it remains that Austria is still not a traditional country of immigration like Canada, the United States and Australia. (Kirchengast S., 2006; Kilaf E., 2004)

Over the last two centuries, Austria has participated in various forms of international migration, including immigration, emigration, and transit migration. Between 1945 and 1989 about two million people fled the communist regimes during the Cold War in Eastern and Central Europe and found temporary shelter in Austria and in other Western states. For example: in 1956 as a result of the political problems in Hungary, over 180,000 Hungarian refugees entered Austria. The majority of them were quickly resettled in other Western countries and about 20,000 of these transit migrants were granted asylum and got integrated into the Austrian society. (Jandl M. / Kraler A., 2003)

After the Second World War Austria's economy boomed and the demand of Labour increased. In 1960s Austria began to recruit temporary so-called "Gastarbeiter" largely from Yugoslavia (1966) and Turkey (1964). In 1969, the number of foreign workers from Turkey and Yugoslavia stood at 76,500. By 1973, numbers had almost tripled to 227,000 (178,000 from Yugoslavia and 27,000 from Turkey). The political crisis in the disintegrating Yugoslavia after 1990 and the beginning of the war in 1992 again increased the number of Yugoslavs residing in Austria. However, these migration reasons had its lasting effect on the composition of the foreign resident population in Austria and subsequent migration inflows. 2001, 62.8 percent of the total foreign resident population came from the former Yugoslavia and Turkey. (Jandl M. /Kraler A., 2003)

In 1970s and 80s the oil crisis and ensuing recession radically reduced the demand for guest workers. The number of people who came to Austria as migratory workers depends mainly on the requirements of the economy, and since 1993 this is regulated through quotas. After the decrease of active labour recruitment other forms of migration became more important, for example: family reunification, spontaneous labour migration and, by the late 1980s, clandestine migration and asylum (from Iran, Bangladesh and Pakistan). (Jandl M. /Kraler A., 2003)

Therefore, the Immigration policy was faced with new challenges, like in the topic of civil rights for immigrants or integration in the school system for children whose mother tongue was not German. Many of the problems have not been solved until today. Today, the majority of migrants are living in industrialized countries because of the demand for migrant labour, which offers many dreams and aspirations to people in poorer countries. People, who work or get better payment, seek to realize their dreams and want to protect the lives of their families and escape the dismal economic situation in their home countries. Political crises and instability in the countries of origin are frequently associated with economic crises. (Demokratiezentrum Wien, 2006; Jandl M. /Kraler A., 2003)

(<http://www.demokratiezentrum.org/en/knowledge/stations-a-z/austria-land-of-immigration.html> 18.12.2010)

Nowadays, the demand for immigrant labour got more complex and specific. Particularly highly qualified and skilled workers are still needed for various economic sectors, like seasonal workers in agriculture during the harvest months, well qualified workers for the industry or elderly care nurses for the service sector. (Haidinger B., 2007)

A review of the International Centre for Migration and Health (ICMH), which was assigned by the European Commission in 1997, specifies the health implications of migration into EU countries. The review deals with matters of health issues and problems ranging from communicable diseases to mental health and family formation. (Carballo M., 2007)

3. Migration and Health

3.1. Tuberculosis:

This is a communicable disease that is characterised with a group of people facing malnutrition, limited access to medical and educational services and insufficient housing. In Western Europe the problem of Tuberculosis has decreased within 50 years but due to migration from less to more developed regions some Western European countries are facing new challenges. Denmark is one of these countries where new cases of Tuberculosis have increased over the past five years; the proportion of foreign born cases has risen from 18% in 1986 to 60% in 1996. (Carballo M., 2007/ 2005)

However, Denmark has the screening system for refugees arriving from countries with a high prevalence of tuberculosis. In case of a positive profile, the migrants receive treatment. Austria, Hungary, Italy and Spain do not have specific screening policies (Eurosurveillance, 2007; Carballo M., 2005)

The problem of Tuberculosis still remains a very big issue within the migrants due the poor life style such as substandard housing and social environments with poor sanitation like in the Netherlands, Austria or France. (Carballo M., 2005)

3.2. HIV/AIDS:

A review of European Centre for Disease Prevention and Control (ECDC) mentions numbers and facts of HIV worldwide. It is said that the global HIV/AIDS pandemic reflects the gross socio-economic and health inequalities between industrialised and non-industrialised countries. More than 96% of new HIV infections took place in low- and middle-income countries. After the Sub-Saharan Africa and the Caribbean, there is Eastern Europe, with 0.9% prevalence as the third more affected area. In the year 2006, 192 million (3% of the world's population) people have been counted as international migrants according to International Organization for Migration (IOM). 95 million of those were women. (ECDC, 2009)

In 2006, the largest group of people who migrated to USA, Russia, Germany, Ukraine and France were from China, India and the Philippines, which makes these countries to the top five countries receiving migrants. About 64 million (8.8%) migrants, with substantial heterogeneity among countries choose the EU. (ECDC, 2009)

Migrants in the EU have to deal with severe integration problems. One of the common reasons for this is social exclusion, which leads to high vulnerability to HIV/AIDS and their related complications. HIV is one of the biggest health issues in Europe as the highest number is the group of heterosexuals (53% of new HIV reports in 2006), followed by a smaller circle

of men who have sex with men (MSM) (37%), by injecting drug users (IDU) (9%) and there are also known 204 cases of HIV infection through mother-to-child transmission (MTCT) in 2006. (ECDC, 2009)

(http://www.ecdc.europa.eu/en/publications/Publications/0907_TER_Migrant_health_Background_note.pdf 15.12.2010)

3.3. Cardiovascular diseases (CVD):

It is mentioned as a non-communicable disease, which is commonly linked to lifestyle factors such as ethnic pre-disposition, diet, stress and the coping mechanisms that people use to deal with their problems. (Carballo M., 2005)

Cardiovascular diseases are the main cause of death worldwide. Men and women are equally affected by this illness. Environment and Health Information System (ENHIS) mentions that the reason for about 50% of all deaths and 33% of disabilities in the EU are cardiovascular diseases (CVDs), mainly coronary heart disease and stroke. (WHO)

(<http://www.who.int/mediacentre/factsheets/fs317/en/> 16.09.2010)

Surveys show that there is a higher morbidity and mortality factor for immigrants from the Indian subcontinent (South Asians) in England and Wales. There is no religious disposition because this seems to take place in both Hindu and Muslim communities. (Carballo M. 2005; Mc Keigue P. M., 1988)

A mortality analysis related to the cardiovascular disease in England and Wales among regional and religious groups originating from the Indian subcontinent was first published in 1984, based on national data from the 1971 census.

Overall there only exists data about the mortality occurring through ischemic heart disease and cerebrovascular disease among immigrants between the years of 1979 and 1983.

(Balarajan R., 1991)

In relation to these numbers Asian immigrants in Canada show very similar statistics, where the risk of myocardial infarction among people of Asian origin has been 2-5 times higher than among non-Asian immigrants and native-born Canadians (Carballo M., 2005)

3.4. Cancer:

The migrant contribution to the topic of cancer is not well known. Mc Dermott et al. reported after a cohort study that immigrants in Canada have a lower overall cancer risk than the Canadian-born population. The study involved 128,962 refugees and 241,010 non-refugees.

But now breast cancer is one of the leading causes of death among women in Europe (Geddes, 1993; Carballo M., 1998).

National background, length of residence and lifestyle-related factors are issues which have a very strong relation to the origin of breast cancer. (Carballo M., 1998)

3.5. Psychological Problems:

Migration with its psychological patterns is a great concern. Many studies have shown how social and cultural adaptation to the host culture has far-reaching effects in the issues of mental health, employment and lost benefits for the whole society. (Maydell-Stevens E., 2007)

A group of psychiatrists from the Psycho-pathological and Psycho-social Assistance Service (SAPPIR) in Barcelona describes a disease called *Chronic and Multiple Stress Syndrome* in immigrants (or *Ulysses syndrome*) and proposes that it should constitute an autonomous category situated in between adjustment disorders and Posttraumatic stress disorder. (Carta M. G., 2005)

Ulysses Syndrome refers to the Greek hero who suffered countless adversities and dangers in lands far from his family and friends. The psychological and psychosocial basis of this disease is formed through a combination of loneliness, the failure to achieve one's objectives, the experiencing of extreme hardships and terror. (Achotegui J., 2004)

Immigrants affected by this syndrome present depressive symptoms with atypical characteristics, where depressive symptoms are mixed with anxious, somatoform and dissociative symptoms. (Carta M. G., 2005)

Carta M. G. describes the experience of migration as a process of seven grief, it can also be explained as losses, such as, loss of family and friends, language, culture, homeland, loss of status, loss of contact with the ethnic group, and exposure to physical risks.

There is a close relationship between psychosocial well being and physical health and it is often described in the context of migration. (Carballo M., 2005)

Statistics show that in Europe schizophrenia is frequent in people of Caribbean, Irish and Polish background and for people from India and Pakistan in United Kingdom. Migrants from Morocco, Surinam and Antilles suffer most from schizophrenia in the Netherlands and East African people in Sweden. Suicide rates of young women immigrants from the Indian subcon-

continent are consistently high in UK. Family problems appears to be a common factor in many suicides, whilst, mental illness is often not cited as a cause. Depression, sorrow, trouble and domestic violence may contribute to the high rates. Scientists have the opinion that affective disorders may be underdiagnosed in this population. (Carta M. G., 2005)

High rates of suicide and attempted suicide among migrants in EU countries have been linked to their high rates of depression. (Carballo M., 2005)

Further, in the Netherlands the prevalence of ulcers among migrants from the Antillies, Morocco, Turkey and Surinam is up to 10 times higher than among other people, and they are 5-10 times more likely to suffer from chronic tension headaches than their Dutch counterparts. (Carballo M., 2005)

Migrant children have to face hard social environmental circumstances due problems of culture conflict. Children are able to learn the foreign languages of their host countries more quickly and efficiently than their parents, and this often creates a perceptible gap between them and their parents. Therefore, many family conflicts and parent-child stress emerge in situations, and as such these may be precursors to low self-esteem, feelings of guilt and psychosocial morbidity among the children of migrants. (Carballo M., 2005)

3.6. Obesity:

Many studies have been done related to migration and overweight and childhood obesity worldwide. In Austria, Kirchengast S. and Schober E. documented the prevalence of overweight and obesity among migrant children and showed in their survey that children and adolescents from the former Yugoslavia and Turkish girls have high rates of overweight and obesity.

Health interventions are necessary to prevent immigrant families' health concerns like overweight and obesity. Because studies showed that childhood overweight disproportionately affects low-income and minority families, including the children of immigrants. (Greves H. M., 2007)

Many aspects of biosocial and cultural factors are discussed like cultural beliefs, resources, diet and lifestyle to have an effect to this topic. (Greves H. M., 2007; Kirchengast S., 2006)

Most of the low-income families, especially the children of immigrants face food insecurity and limited access to nutritious foods in their communities and have less access to physical activity. (Greves H. M., 2007; Kirchengast S., 2006; Kilaf E. 2004)

In the USA born Asian-American and Hispanic adolescents are more than twice as likely to be obese as are first generation residents of the 50 states. (Popkin B. M., 1997)

4. Reproductive health

“Within the framework of WHO’s definition of health as a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity, reproductive health addresses the reproductive processes, functions and system at all stages of life. Reproductive health, therefore, implies that people are able to have a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. ...” (WHO)

On the whole, reproductive health stands for the right to give proper information to men and women about having access to safe, effective, affordable and acceptable methods of fertility regulation of their choice. It also gives access to appropriate health care services to facilitate women through a safe period of pregnancy and childbirth and provides couples with the best chance of having a healthy infant. (WHO) (http://www.who.int/topics/reproductive_health/en/ 16.09.2010)

Today, reproductive health of migrants is still one of the main concerns. Several surveys from the United Kingdom, Belgium and Germany have shown similar results concerning migrant’s reproductive health. For example, in these countries prenatal and post neonatal mortality rates are higher among babies born to immigrants than the Europeans and they tend to have lower birth weight. (Carballo M., 1998)

Reproductive health can only be effective if it properly starts from childhood. A female child who is undernourished from birth or faced harmful traditional practices might enter adolescence with anaemia, physical anomalies and possible psychosexual trauma related to the traditional practice and this can increase the probability of obstetric problems during pregnancy and childbirth. (WHO, 2001)

Further, it can lead to sexual problems, fear and abuse in a relationship. Proper reproductive health care faces such concerns with appropriate and culturally sensitive education and health care programmes. The lack of proper sexual knowledge about reproduction and access to reproductive health services including contraception may lead adolescents to contracting various diseases during pregnancy or STI/HIV. (WHO, 2001)

(http://whqlibdoc.who.int/hq/2001/WHO_RHR_00.13.pdf, page 7, 16.09.2010)

4.1. Reproductive health in India:

Indian women's health is actually linked with their status in the society. Further, most of the health concerns are linked to or aggravated by high levels of fertility. Just like many centuries back, Indian women mostly still do not have enough rights for themselves, as they still have to live under the control of first their fathers, then their husbands, and finally their sons.

In addition, there is a high infant mortality and a strong son preference in India, as sons are expected to care for parents as they grow older. As a result, women are motivated to bear many children in an attempt to have a son survive to adulthood. But numerous pregnancies, child bearing at a young age and closely spaced birth periods can have negative effects on child as well as on mothers' health. Unsafe terminations of pregnancies often put women's life in danger: In 1993 India had a high maternal mortality ratio of approximately 453 deaths per 100 000 births. The majority of these deaths could be prevented if women had proper health services. Well educated women living in urban areas are more likely to receive prenatal care. Further, mothers' education is linked with their children's health. Uneducated mothers often have to cope with their children being malnourished compared to children, whose mothers have completed at least high school. (Rao A. J., 2001; Velkoff V. A. / Adlakha A., 1998)

4.2. Use of contraceptives:

Although India is taking many actions for the knowledge of family planning for years, only 36 percent of married women, aged 13 to 49, use modern contraception. Female sterilization is still one of the main forms of contraception among married women. Contraceptive use depends on place of residence, education, and religion. In comparison to uneducated women, more than half of married women with at least a high school education are more likely to use contraceptives. Muslims have the highest total fertility rate and the lowest contraceptive use in India. (Velkoff V. A. / Adlakha A., 1998)

Meanwhile studies show that the mean ideal family size of young people declined from six children per woman in the 1960s to 3 Children (Mean: 2.85 children). The average age at marriage for women is 19 years, which is not unified all over India. There are regional variations with some states having an average of only 16 years of age. About 50% of all women give nearly at the age of 20. (WHO)

The contraceptive use in India among married women is 48.3% (in the year 2000). Still sterilization is the most common method (about 85%), which is used among women, even among married adolescents. The use of traditional contraceptive methods and male dependent meth-

ods are limited. Pills, IUD and condoms are only used by less than 7% of married women. (WHO)

Meghalaya (20%), Bihar (25%), and Uttar Pradesh (28%) are states, which show the lowest number of contraceptive use. Beside methods like female sterilization, male sterilization, the IUD, oral contraceptive pills and condoms, two new methods are being put forward to decrease the unwanted births and unsafe abortions in the last 10 years. The CopperT-380A enables protection for a period of 10 years and the emergency oral contraception, which is available by prescription. (WHO)

(http://www.searo.who.int/linkfiles/family_planning_fact_sheets_india.pdf 07.12.2010)

According to the Population Reference Bureau, the contraceptive use among Austrian married women (all methods included) between 15 and 49 years is about 67%. About 65% of all Austrian married women between 15 and 49 years use modern methods of contraceptives.

(<http://www.prb.org/Countries/Austria.aspx> 01.12.2010)

The fertility rate in Austria is very low with 1.5 children per woman. The uses of contraceptive methods among the Austrian women depend on their age, education level, the religious status and the living place. The higher the job qualification, the more frequently the anti baby pill is taken and the fewer unwanted pregnancies occur. Unreliable methods are often used by women with poor incomes. (Perner R. A., 2004)

In the 1970s, the contraceptive preference and use changed dramatically. The use of hormonal contraceptives spread rapidly. The anti baby pill is still the most used contraceptive among 42% percent of all sexually active and fertile women between the ages of 15 and 44 years in Austria. Birth control is still something left to women, although, since the appearance of AIDS, contraceptives are advertised by public authorities. The rate of contraceptive use decreases as Austrian women get older. Students and religious women take the pill less often, followed by 18% of the women, who do not use or take any kind of contraceptives. 12% are used to unreliable contraceptive methods like withdrawal or coitus interruptus. Condom, coil IUD, spermicides and diaphragms are also used by a small group. (Perner R. A., 2004)

(<http://www2.hu-berlin.de/sexology/IES/index.html> 01.12.2010)

4.3. Abortion:

Abortion is the interruption of a pregnancy, either by drug-initiated uterine contractions, or by an instrumental-operative action. There are two types of abortion; it can be spontaneous or induced. Induced abortions are intentionally carried out legally or illegally. Spontaneous abortions can be further categorized into threatened, inevitable, incomplete, complete, missed and septic abortions. Spontaneous abortion rates are influenced by age at menarche and smoking rate. Higher parity of woman and history of previous abortions, genetic factors, maternal infections, uterine abnormalities or hormonal defects lead to most spontaneous abortions.

(Kapilashrami M.C)

(http://aiims.aiims.ac.in/aiims/events/Gynaewebsite/ma_finalsite/report/1_1_2.htm 17.12.2010)

In 2001, The Tribune newspaper of Chandigarh India, reported that the estimated number of sex-selective abortions between 1996 and 1998 was 62,000 in Haryana (81% of total abortions) and 51000 in Punjab (26%). Punjab and Haryana are the wealthiest states of India.

Earlier laws like the Indian Penal Code 1862 and the Code of Criminal Procedure 1898 made abortion punishable for the women and the abortionist. Exceptions were limited to saving the life of the mother in case of diseases or complications. But in 1960s and 1970s the abortion laws become more liberal worldwide. This process lead to high maternal mortality due to unsafe abortions carried out by unskilled practitioners. (Hirve S.S., 2004)

In 1994, the Indian government passed the PNDT Act (Pre-Natal Diagnostic Technique Act) in order to prevent the abortion of foetuses because of their gender. The law requires hospitals to notify the acquired ultrasonic device and to register every abortion. This law is fulfilled only by a small number of medical centres. Few hospitals in India are officially registered. Equally great is the number of illegally operating hospitals. The birth rate of girls is still very low in cities with a large number of privately-run clinics. (Passano P., 2002)

(<http://www.indiatogether.org/manushi/issue126/abortion.htm> 17.12.2010)

Statistics show that women who are familiar with contraceptives were to do more abortions in comparison to women who have never practised family planning. One possible reason could be the fact that women who use contraception other than sterilisation do not want to become pregnant and therefore tend to do an abortion.

(Foeticide hits Punjab, Haryana sex ratio, New Delhi, October 16, 2001)

(<http://www.tribuneindia.com/2001/20011017/nation.htm#1> 16.09.2010)

In the 18th Century aborting a child was still under death penalty in Austria. In 1787 the law was removed from the “*Josephinisches Strafgesetzbuch*” (Penal Code of Emperor Joseph II), and displaced with a long prison punishment.

In the 1960s, only a group of few cases were actually punished by law. It is estimated that about 30,000 to 100,000 abortions per year were done. In addition, abortion was carried out in Great Britain and Holland, because they had already more liberal laws.

Today in Austria abortion can be legally carried out within the first three months after implantation or after the fourth month if a medical reason is presented, or if the mother is still a minor. The abortion has to take place in a public hospital, clinic, or private practice, normally under anaesthesia by aspiration. The national health system covers for the costs only if there is a medical necessity. (Perner R. A., 2004)

(<http://www2.hu-berlin.de/sexology/IES/index.html> 01.12.2010)

4.4. Abortion and religion:

Hinduism is against any kind of violence. The term “Ahimsa” means non-violence and teaches not to kill any living beings. The classical Hindu texts consider many penalties for people who kill their embryos. Therefore, Hinduism generally opposes to abortion except where it is necessary to save the mother's life. However, this religion concept is overruled by the cultural preference for giving birth to sons. (BBC)

(http://www.bbc.co.uk/religion/religions/hinduism/hinduethics/abortion_1.shtml 16.09.2010)

In Islam and in Christianity abortion is forbidden. It can be only permitted if the pregnancy would put the mother's life in real danger. There are many opinions about the time period of pregnancy in case of abortion. The knowledge about birth control has existed in the Islamic world for many centuries. But a contraceptive method that can cause a very early abortion or has the aim of having a permanently child-free marriage is not allowed. Sterilisation is not accepted just as well. The Roman Catholic Church does not accept contraception because it is against the human nature. Since 1869, according to the Roman Catholic Church, every abortion from the time of fertilization incurs an automatic penalty of excommunication. But in matters of family planning the Protestant churches go a step ahead and allows the use of contraception within marriage. (Perner R. A., 2004, BBC)

(http://www.bbc.co.uk/religion/religions/islam/islamethics/abortion_1.shtml

<http://www.bbc.co.uk/religion/religions/islam/islamethics/contraception.shtml> 22.09.2010)

In Sikhism it is forbidden to abort a child. It is said that life begins at conception and abortion interferes in the creative work of God. In Sikhism it is believed that God created everything and is present in every being. (BBC)

(<http://www.bbc.co.uk/religion/religions/sikhism/sikhethics/abortion.shtml> 16.09.2010)

5. Nutrition

There is a relationship between diet, nutrition, health and disease. The type of food that is consumed in various cultures is based on physical and cultural availability.

In the United States the differences in diet and acculturation can be seen. Migrants, whose food consumption remains enduring with their traditional culture show the similar disease patterns of people of their home country. But immigrants like the Japanese, who become acculturated and change their typical Asian diet to the North American diet show an increase in body weight and prevalence of coronary heart disease, stroke, and certain types of cancer. They more likely suffer from the same kind of diseases like the North Americans. (Lee M. M., 2001)

Obesity rates increases among 11% of the immigrants in the United States after 15 years living in the country. Study data were based on a 2000 national health survey of 32,374 participants, of whom 14% were immigrants. People are getting obese due to sedentary life style through advanced technology, such as remote controls, driving through fast food restaurants and having high availability of rich-calorie foods. They were also able to find a link between obesity and the number of years spent in the United States among white, Hispanic, and Asian immigrant groups. Doctors advise immigrants to look out for their health by including fruits and vegetables to their diet. (Farley S., 2005)

5.1. The nutritional situation of women in India:

In India over 30 % of women of all age groups are underweight. Most of these women belong to groups with low education and live in rural areas. Some surveys have shown deficiencies in micronutrient, Vitamin A, riboflavin etc. Anaemia is still common among women of lower socio-economic status. Concurrently, overweight and obesity are increasing among women in urban areas with higher levels of education and standard of living compared to their more socially disadvantaged opponents. (WHO)

Although India is one of the seven largest economies in the world, it is estimated that 35-40 per cent of the population live below the poverty line, and 53 per cent live on less than \$1 per day. (WHO, 2007)

Table 1: Weight for height of Indian women aged 15-49, NFHS 1998-1999

	% Underweight	% Overweight	% Obese	% Anaemia
Age (years)				
15-19	38.8	1.7	0.1	56
20-24	41.8	3.6	0.4	53.8
25-29	39.1	7.3	1.2	51.4
30-34	35	11.7	2.4	50.5
35-49	31.1	16.8	3.9	50.5
Marital status				
Currently married	35.6	10.6	2.2	51.5
Not currently married	39.3	10.3	2.1	55.5
Residence				
Urban	22.6	23.5	5.8	45.7
Rural	40.6	5.9	0.9	53.9
Education				
Illiterate	42.6	5.1	0.9	55.8
Literate, < middle school complete	32.6	12.9	2.7	50.1
Middle school complete	28	15.7	3.2	48
High school complete and above	17.8	26	6.4	40.3
Religion				
Hindu	36.9	9.6	2	52.4
Muslim	34.1	12.4	2.8	49.6
Christian	24.6	17.6	3.4	47.1
Sikh	16.4	30.1	8	39.6
Jain	15.8	33.7	9.8	42.5
Buddhist/Neo-Buddhist	33.3	10.5	2.8	48.6
Other	49.4	7.0	0.4	75.7
No religion	34.5	13.8	3.4	59.5
Caste/tribe				
Scheduled caste	42.1	5.8	0.9	56
Scheduled tribe	46.3	3.3	0.5	64.9
Other backward class	35.8	9.4	1.7	50.7
Other	30.5	15.4	3.7	47.6
Work status				
Working in family farm/business	41.9	5.2	0.8	53.1
Employed by someone else	44.3	6.4	1.2	54.9
Self-employed	35	12.1	2.5	52.2
Not worked in past 12 months	31.6	13.1	2.9	50.4
Standard of living index				
Low	48.1	2.6	0.3	60.2
Medium	35.6	8.6	1.5	50.3
High	17.3	27.2	6.8	41.9
Total	35.8	10.6	2.2	51.8

Underweight = BMI < 18.5 kg/m², overweight = BMI of 25.0 kg/m² or more, Obese = BMI of 30 kg/m² or more

(Table 1: www.who.int/entity/social_determinants/resources/gkn_hawkes.pdf 07.12.2010)

Table 2: Per capita consumption of food items - India (kg/person/annum)

Item	1977	1987	1993	1999
RURAL				
Rice	86.5	88.1	85.4	81.0
Wheat	49.4	61.6	53.5	53.9
Coarse cereals	56.7	29.8	24.1	17.7
Total cereals	192.6	179.5	163.0	152.6
Pulses	8.7	11.5	9.2	10.1
Milk & milk products	24.6	58.0	51.4	50.5
Edible oils	2.7	4.3	4.6	6.0
Vegetables	24.7	50.8	53.2	66.0
Fruits	2.6	10.3	9.8	17.0
Meat, eggs, fish	2.7	3.3	4.1	5.0
Sugar and gur	13.5	11.0	9.2	10.1
URBAN				
Rice	67.6	68.1	64.2	62.5
Wheat	64.6	60.4	57.4	55.4
Coarse cereals	14.8	10.6	7.7	7.1
Total cereals	147.0	139.1	129.3	125.0
Pulses	11.7	12.2	10.5	12.0
Milk & milk products	39.7	64.9	68.3	72.4
Edible oils	4.8	6.8	6.3	8.6
Vegetables	39.7	66.4	63.1	70.0
Fruits	5.9	18.8	20.1	19.0
Meat, eggs, fish	4.8	4.9	6.3	6.8
Sugar and gur	17.1	12.3	11.8	12.0

(Table 2: www.who.int/entity/social_determinants/resources/gkn_hawkes.pdf 07.12.2010)

Table 3: Ever-married women consuming foods at least once a week (%), India 1998-1999

	Milk or curd	Pulses	Green leafy veg	Other veg	Fruits	Eggs	Chicken, Meat, Fish
Age							
15-24	53.3	88.1	85.5	92.7	30.8	28.2	31.3
25-34	55.4	87.7	85.5	93.2	34	28.6	32.5
35-49	55.8	87.6	84.8	93.3	33.7	26.7	31.8
Residence							
Urban	65.3	92.8	88.4	95	53.9	39.7	41.7
Rural	51.3	86	84.1	92.4	25.6	23.6	28.5

	Milk or curd	Pulses	Green leafy veg	Other veg	Fruits	Eggs	Chicken, Meat, Fish
Education							
Illiterate	46.5	85	83.8	91.6	20.8	22.5	25.9
Literate, < middle school complete	57.3	90.1	85.6	94.5	37.6	34.4	41.2
Middle school complete	65.4	91.8	87.8	95.3	47.5	35.9	41.5
High school complete and above	80.2	93.8	89.3	96.3	68.4	36.1	38.5
Standard of living index							
Low	35	81.4	82.1	91.6	17	23.8	29.1
Medium	58.1	89.4	85.3	93.1	31.5	28.6	33.1
High	80	94.3	90	95.7	62	32.3	33.6

(Table 3: www.who.int/entity/social_determinants/resources/gkn_hawkes.pdf 07.12.2010)

There are distinct differences among women living in urban and in rural areas. Data from the National Family Health Survey (NFHS) 1998-1999 of over 90 000 ever-married women age 15-49 years from 26 states in India (IIPS 2000) show that women are more likely to consume pulses and vegetables if they live in an urban area, have a higher level of education and a higher standard of living index. (WHO)

Through rapid urbanization and growing wealth in India the trend towards increased consumption of fats and processed foods will continue among wealthier groups but the poor will remain at risk from under-nutrition. (WHO)

5.2. Breastfeeding:

Worldwide, the prevalence of breastfeeding was high in nearly all societies until 1940s. Soon the feeding of manufactured milk and baby food prevailed in Europe and North America. (Riordan J., 2004; Shannon E. W., 2002)

In the course of this process the health factors of breastfeeding have been neglected, although mother's milk is the healthiest and natural type of nutrition for almost all infants. Breast milk supports the development of the infant and protects it against diseases. It has health benefits for mothers as well. Breastfeeding is recommended by the WHO for at least 6 months. Studies have shown that from 1986 to 2005, breastfeeding rates have increased in Germany.

In general mothers of a socially lower group or mothers who had been smoking during the pregnancy show a lower rate of breastfeeding. Also with problems after birth, the breastfeeding reduces. Children of migrated families are more ever-breastfed compared to children of non-migrated families. (Lange C., 2007)

On the other hand studies also show a decrease of breastfeeding among Indochinese mothers who migrated from Cambodia and Laos to a city in northern California. In Indochina 97 percent of women are breastfeeding their last child. In comparison, only 26.1% and 22.4% do the same in the US. Mothers limited the breastfeeding of their last born infant to an average of 20.4 months in Indochina and to 8.7 months in the United States. A possible explanation for this kind of difference would be a difference in cultural traditions and cultures.

(Romero-Gwynn E., 1989)

For some cultural groups, migration to a new country is associated with a reduction in the initiation and duration of breastfeeding. (McLachlan H. L., 2006)

Studies show that India is facing a great challenge in having very high rates of undernourished children and a high infant and child mortality. Initiation of breastfeeding within one hour of birth, breastfeeding for the first six months of life and introduction of appropriate and adequate complementary food at 6-9 month of age, could prevent undernourished children and improve children's survival. In India 96% of children less than five years of age have ever been breastfed, but only one quarter started breastfeeding within one hour of birth. Statistics show, that breastfeeding helps in preventing childhood morbidity. Studies made in the United Kingdom show that about 53% of diarrhoea patients would not have to be hospitalized if breastfed. 31% cases could have been prevented by partial breastfeeding. Also, 27% of hospitalizations due to an infection of the lower respiratory tract can be prevented by breastfeeding and 25% also by partial feeding. (Gupta A., WHO)

Also, obesity in children can be decreased with consistent breastfeeding. (Arenz S., 2004)

(http://www.searo.who.int/LinkFiles/Nutrition_for_Health_and_Development_Breastfeeding_scene_SEAR.pdf
02.12.2010)

6. Punjab



(Figure 1: http://schema-root.org/region/asia/south_asia/india/states/punjab/punjab_map.gif 22.09.2010)

Punjab is a state in the northwest of India. The name ‘Punj-ab’ means the land of five rivers, which comes from the Persian word. The rivers are Jhelum, Chenab, Ravi, Beas and Sutlej. In 1947, during the partition of India and Pakistan, Punjab was divided into the state of the Indian Punjab and the Punjab province of Pakistan. Due to later reorganization and fragmentation in 1955 and 1966 the Indian Punjab decreased to one fifth of its former size during the British Empire. (Tatla D. S., 1995)

Further, Punjab is India’s oldest cultural area with an important prehistoric background. Around 3000 BC, the area of Punjab was ruled by one of world’s ancient civilization: The Harappan Civilization. The Aryan race settled there around 1500 BCE. (Gaede P. M., 2006)

Summarizing the history, it shows that Punjab has been a rich cultural area, which was ruled by various cultures, religions and empires. Therefore, the influences of all these cultures made this area as multicultural as it is today.

Punjab has its highest income from agriculture production resulting from the green revolution in mid-1960s. (Tatla D. S., 1995)

It is the largest single provider of wheat in India. It has the lowest level of poverty in India according to the “India State Hunger Index 2008”.

But due to educational differences there is still a large disagreement in living conditions, following women rights and health conditions between the people living in villages and in cities.

6.1. Religion:

Out of 1028 million people in India, 80% of the population are Hindus, 13.4% are the followers of Islam, 2.3% Christians, 1.9% Sikh, 0.8% Buddhists and 0.4% are Jain. In addition, over 6 million have reported professing other religions and faiths including tribal religions, different from six main religions. (Census of India)

(http://censusindia.gov.in/Census_And_You/religion.aspx 29.09.2010)

In the Indian Punjab the Sikhs constitute a minority group with 10 Million members. (Gaede P. M., 2006)

You will also find small members of Moslems, Christians, Jainis and Buddhists besides the major community of Sikhs and Hindus in Punjab.

6.1.1. Sikhism

The word comes from Hindi, which means “Student”. Sikhism is a monotheistic religion and has its root at the beginning of the fifteenth century in the teachings of Guru Nanak and his nine successors. (Gaede P. M., 2007)

Guru Nanak Dev’s attempt was to bring the Moslems and Hindus together.

The religion became popular as it rose from the North Indian Hindu bhakti tradition with its focus on personal devotion. Its aim was to secure deliverance from the cycle of transmigration. (Tatla D. S., 1995)

Under the fourth Guru the golden temple was built in Amritsar, as a repository of the "Adigrantha", the Holy Scriptures of the Sikhs. Sikhism stands for the principle of equality of all humans and against discrimination of caste, creed, and gender. Sikh values do not believe in attaining salvation through asceticism. The last Guru Gobind Singh (* 1675, + 1708) levies the Adigranth to the Guru (Guru Granth Sahib). He gave the Sikhs a taut military organization and ordered all male Sikhs to add the word Singh (lion) to their last names. Guru Gobind tried to abolish the caste system and founded the Khalsa (The Association of the Pure Sikhs). Since then all members wear a sword, and uncut hair under their Turbans. (Gaede P. M., 2007)

Due to political and financial crisis many Sikhs migrated to various parts of the world. Today, there are about 23.3 Million Sikhs living worldwide. The Sikh community in Nord America consists of about 530,000 Sikhs and in United Kingdom about 23,000. Smaller communities are spread all over the world like in Hong Kong, Germany, Austria, etc. According to the “Österreichischen Integrationsfond” about 3000 Sikhs live in Austria.

6.1.2. *Hinduism*

More than 80% of Indian people are Hindus. The word 'Hindu' was derived from the river, the Sindhu, which originates from Sanskrit. The term itself was used by Muslims in the 15th Century and “ism” was added in the 19th century by the British Empire. Hinduism arose without a certain founder or scripture. There is no commonly agreed set of Hindu teachings, which is why it is defined as the world’s most complex and oldest living tradition on earth. (Gaede P. M., 2007; BBC) (<http://www.bbc.co.uk> 16.09.2010)

Hinduism includes a variety of religious practices, literal and philosophical traditions, and regional cults. However, there are no traditions for all current basic texts, no binding for all Hindus 'faith' and no church that represents the faith institutionally. Hinduism can be viewed as the "eternal religion" (Sanskrit: sanatana dharma). It has always existed and has been repeatedly proclaimed in new forms of saints, seers such as avatars (divine incarnations). The beginning of Hinduism dates to the time of the Upanishads around 600 BC. (Gaede P. M., 2007)

One of the strongest beliefs of the Hindus is in Karma, which means deed. Over all Karma describes a cycle of birth, death, and rebirth, where the soul never vanishes but lives through a cycle of successive lives. Every incarnation depends on the deeds of the previous life. (BBC) (<http://www.bbc.co.uk/religion/religions/hinduism/ataglance/glance.shtml> 22.09.2010)

Further, one of its main characteristics is the caste system, which is the ideal of social order. Brahmans or Brahmins (the priests), Kshatriya (warriors), Vaishyas (farmers or merchants), Shudras (workers, servants, artists) and the Parias (untouchables), who do not belong to any cast. They are workers like street cleaners, morticians or tanners. (Gaede P. M., 2006)

6.1.3. *Islam*

Muslims are in the second place after Hindus in the distribution of various religions in India and their population is increasing. The highest number of Muslim population can be seen in Uttar Pradesh followed by West Bengal and Bihar. (Murthy P. K., 2009).

Islam, a monotheistic religion, was deeply influenced by Sufi traditions in Punjab. Islam arrived in Punjab/India in the 8th century through the efforts of an array of Sufi saints. (Bahadur K., 2007)

Today, Muslims are a minority in the state of Indian Punjab because in 1947, during the partition of India and Pakistan, Punjab was divided into the state of the Indian Punjab and the Punjab province of Pakistan. Therefore, most of the Indian Muslims moved to the Punjab province of Pakistan. (BBC)

The word 'Islam' comes from the Arabic and means submission to the will of God. Islam found its origin in Mecca, Arabia over 1400 years ago through a man called Mohammad, who is believed by to be the last prophet sent by God (Allah). Muslims believe that Christianity and Judaism are religions sent by the same God, which is why Mohammad is called the last prophet who was sent to earth, to show to mankind that there exists a higher being. (BBC)

(<http://www.bbc.co.uk/schools/religion/islam/> 22.09.2010)

6.1.4. Christianity

According to census 2001, Christians are in the third place in the distribution of various religions in India with about 24000000 believers. In Nagaland, Mizoram and Meghalaya Christianity dominates. But there are many Christian populations in various other states of India like Manipur (34.0%), Goa (26.7%), Andaman & Nicobar Islands (21.7%), Kerala (19.0%), and Arunachal Pradesh (18.7%).

(http://censusindia.gov.in/Census_Data_2001/India_at_glance/religion.aspx 29.09.2010)

http://censusindia.gov.in/Census_And_You/religion.aspx 29.09.2010)

Christians follow the life and teachings of Jesus Christ, who is believed to be the Son of God. The Christian holy book is the Bible. It is divided into the Old and New Testament. (BBC)

(http://www.bbc.co.uk/religion/religions/christianity/beliefs/basics_1.shtml 29.09.2010)

Hypotheses

The main hypothesis is that the women living in Punjab are healthier than their relatives, families and friends, who are living in Vienna. For the confirmation or rejection of this hypothesis, the topic is divided in sub hypotheses due to the various aspects and reasons that could be linked with the topic of health in this survey.

- *The cultural- environmental changes have effects onto eating habits, life style and play a big role in the health situation of Indian migrants in Austria.*
- *Body Mass Index is higher within the migrants in Austria.*
- *Women in India are able to do more sports or yoga compared to their relatives in Austria.*
- *Women who are dependent on their families are mostly illiterate and unemployed.*

Empirical Approach

1. Material and Methods

1.1. Probands and data collection:

Data collection for this study has started in February 2010 and lasted until May 2010 in Austria and in India. In India, the data collection took place for three weeks in April 2010. Women were asked to fill out questionnaires. Each of the questionnaires was filled out with the help of the author personally. In addition, body height and body weight were also registered.

Most of the data in Austria was collected in temples; the Hindu Temple in 15th district and the Sikh Temple in 12th district. In India the data was collected from two villages (Sarai Khas and Kotla) and two cities (Kartarpur and Kapurthala) in the district of Jalandhar in Punjab.

Further, two qualitative interviews in Punjab and one in Vienna were done with various general practitioners.

1.2. The control sample:

The control sample contains data of 115 women. 50 of these live in Austria as migrants and 65 of them were questioned in Punjab in India. The women are between the age of 17 and 80 years. (Mean: 38.7; SD: 14.49)

1.3. Quantitative data sampling:

The study was done with the help of standardized questionnaires, which were created by the author herself. They were arranged in both languages, German for the subjects in Austria as well as English for India. Further, both questionnaires were explained in Hindi and Punjabi for the subjects in Austria and in India. Each of the questionnaires was filled out with the help of the author personally. Questions were asked to find out about the economic and health situation, eating habits, living conditions etc.

The questionnaire was divided into the following topics:

Socio-demographic issue:

In addition to age, body-weight and height, probands were asked about their religious believe, place of birth, marital status, employment, financial dependency and living conditions. Besides these issues, some other questions were also asked concerning breastfeeding, miscarriages and the number and age of children still alive.

Education:

In this section of the questionnaire subjects were asked about their education level, as well as the one of their husbands and their children.

Nutritional habits:

This part of the questionnaire deals with questions like the importance of healthy food, whether the subject cooks by herself or if she is vegetarian, what kind of food she eats and how often she drinks coffee, tea, or alcohol.

Health situation:

Data about health concerns like blood pressure, chronic diseases, operations, abortions, diabetes, cholesterol level and vaccination were taken. Each subject was asked about their physical activities, whether practising sports or yoga.

1.4. Qualitative interviews:

The qualitative interview is an important data collection method of qualitative social survey methods. It is the common term for several survey methods.

It is a process of finding out what others feel and think about a special issue. There are different types of interviews depending on the degree of openness for the respondent. Mainly Interviews are useful for getting the information behind a participant's experiences.

For this study two narrative interviews in India and one in Vienna with various general practitioners were carried out. The interview with Dr. Jaintika Randev in India was recorded with a tape and the other two interviews with Dr. Sharma and Dr. Med. Univ. Zinat Vatanparast were held by taking notes.

In Vienna:

- Dr. Med. Univ. Zinat Vatanparast
General practitioner and gynaecologist
Millergasse 25/4
1060 Wien

In Punjab:

- Dr. Sharma
(B.A.M.S Bachelor of Medicine and Surgery)
Jalandhar (near Sarai Khas)

- Dr. Jaintika Randev
(B.A.M.S Bachelor of Medicine and Surgery) worked in a Surgical and Maternity Hospital, Kapurthala.

1.5. Somatometric parameters:

Body weight and height were measured by the author to assess the Body Mass Index (BMI). Weight was measured with a balance, which was put on a flat surface. Height was measured with a measuring tape, which was fixed onto the wall. The subjects were measured without shoes and socks. Body weight and height are measured for the Body Mass Index (BMI), which gives the possibility to make statements on the weight status.

1.5.1. Body Mass Index (BMI)

The BMI is a simple measure of body weight which is associated with body fat and health risk. It is the relationship between weight and height. It is defined as the weight in kilograms divided by the square of the height in metres (kg/m^2) and is commonly used to classify underweight, overweight and obesity in adults. (WHO)

Table 4: Body Mass Index chart

Classification	BMI(kg/m ²)	
	Principal cut-off points	Additional cut-off points
Underweight	<18.50	<18.50
Severe thinness	<16.00	<16.00
Moderate thinness	16.00 - 16.99	16.00 - 16.99
Mild thinness	17.00 - 18.49	17.00 - 18.49
Normal range	18.50 - 24.99	18.50 - 22.99
		23.00 - 24.99
Overweight	≥25.00	≥25.00
Pre-obese	25.00 - 29.99	25.00 - 27.49
		27.50 - 29.99
Obese	≥30.00	≥30.00
Obese class I	30.00 - 34.99	30.00 - 32.49
		32.50 - 34.99
Obese class II	35.00 - 39.99	35.00 - 37.49
		37.50 - 39.99
Obese class III	≥40.00	≥40.00

Source: Adapted from WHO, 1995, WHO, 2000 and WHO 2004

The BMI indications are given for all ages and both sexes. But because of different body proportions BMI may have a different correspondence to the same degree of fatness in different populations. (WHO)

1.6. The Statistical Analysis:

The statistical analysis of the data was performed with SPSS (Statistical Package for Social Sciences) for Windows Version 15.0. The Graphs were created with this program and the tables with Microsoft office excel 2007.

For analysing and describing the data, frequency tables and crosstabs were done. The test of significance level for independent samples was performed using the chi-square test after Pearson. A significant result could only be presented when the p - value is below 0.05

The significance level is:

$p < 0,05$: significant

$p < 0,01$: high significant

$p < 0,001$: highest significant

For the bivariate correlation, Pearson's correlation coefficient, Spearman's rho and Kendall's tau-b were calculated.

Further, t-test and Mann Whitney U- test was applied to analyze a difference between the empirically found mean values of two groups. The t-test uses the population parameters of the distribution and the arithmetic mean, which can be estimated with the data and shows significant differences between the two examined Groups. The applied t-test and the Mann Whitney U- test (non-parametric test) are a hypothesis test.

2. Results

2.1. *Sociodemographic parameters:*

2.1.1. *Age* (Mean 38.7; SD 14.49)

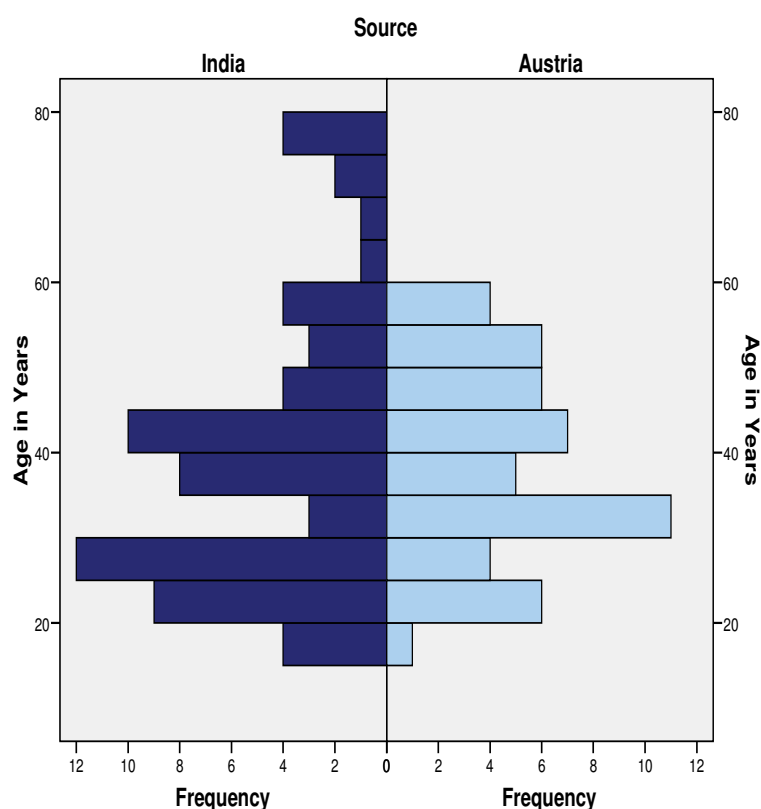


Figure 2: Age distribution of women in India and in Austria

In the data, the women who live in Austria are between the age of 19 and 58 years (Mean 38.22; SD 10.84) and in India between 17 and 80 years (Mean 39.07; SD 16.85). Most of the Indian women living in villages or very old women do not know about their exact age, which is why their age was estimated by the age of their children. The t-test (p-value 0.744) was not significant for the age distribution. There is no discrepancy identifiable.

2.1.2. Reason for Migration

90.7 % of women, who migrated to Austria, did so because of their families. Mostly their husbands migrated first, found work and settled down. After some years, their wives and children joined them in Austria. 9.3% of the women living in Austria admitted that they migrated by themselves due to financial reasons.

2.1.3. Living situation

There is a big difference in the living situations between India and Austria. The average area per person in Austria is about 18 m² and in India 34.9 m². Up to 15 people are living in the same household in India which shows that big families still exist. In Austria the probands live mostly in small families.

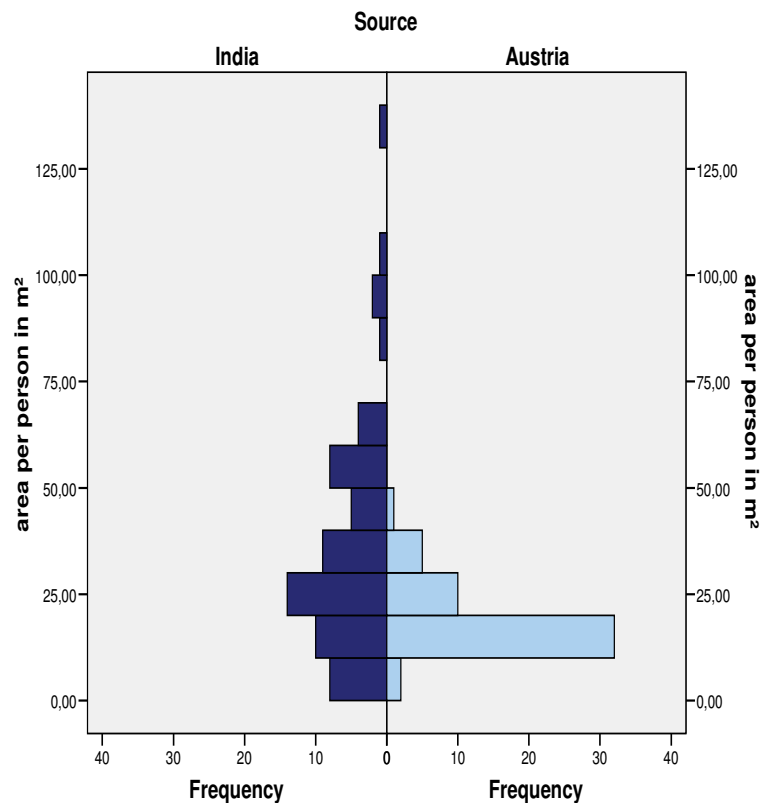


Figure 3: Distribution of area per person in m² in Austria and in India

2.1.4. Financial dependency

	India		Austria	
	Financial dependency on family		Financial dependency on family	
	Amount	%	Amount	%
yes	55	84.60%	31	62.00%
no	10	15.40%	19	38.00%

Table 5: Financial dependency on family

Most of the women are financially dependent on their families, especially in India 84.6% of women admitted that they are dependent on their families for their financial matters.

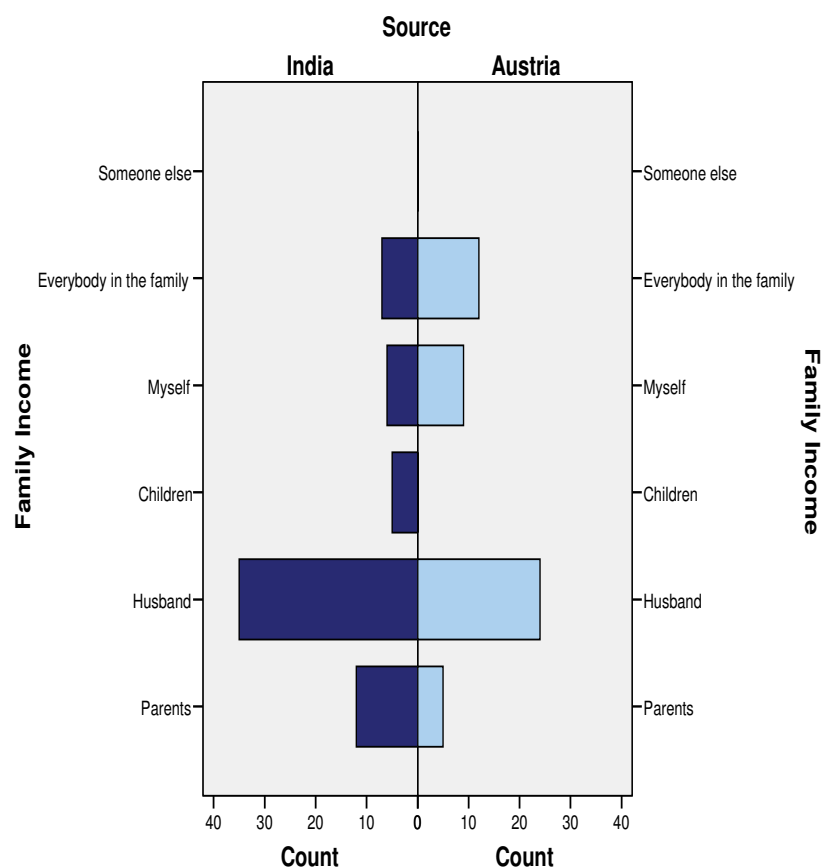


Figure 4: Persons responsible for family income in Austria and in India

In India the financial dependency of women is determining. First they depend on their fathers and then on their husbands due to lack of education and job possibilities. When women in India get old they are dependent on their sons.

In Austria there is a small group of women of about 18% who can manage their household also in financial matters but in India almost every subject was financially dependent on their families although many of them have small jobs like day labourer on fields for plucking vegetables. They earn very little and can hardly make ends meet.

2.1.5. Educational Level

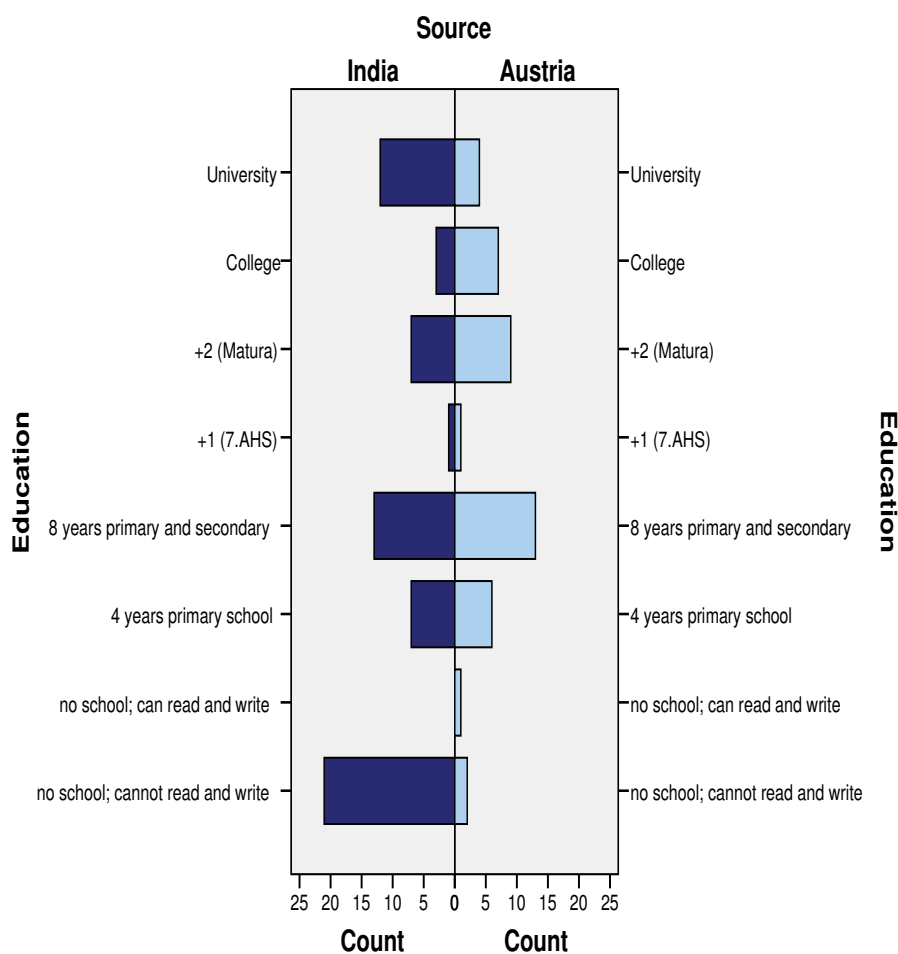


Figure 5: Education of women in Austria and in India

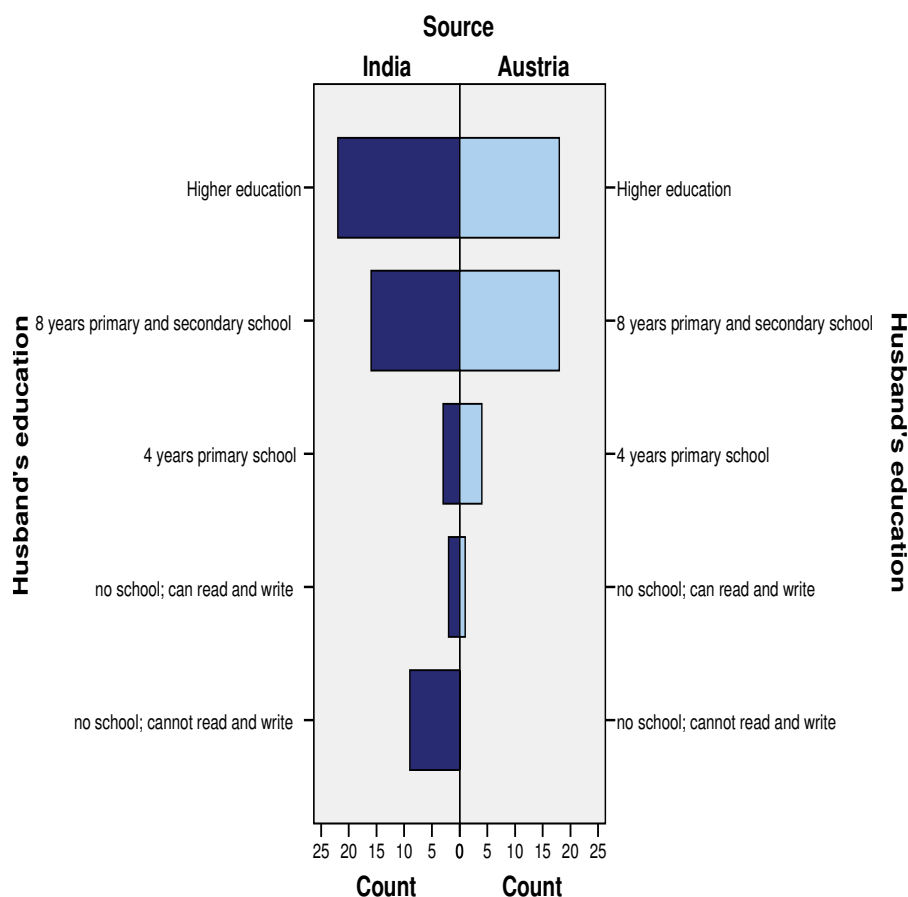


Figure 6: Education of their husbands in Austria and in India

Access to educational facilities seems to be easier in Austria. The schools are complimentary, which gives you many possibilities for higher education. In India everyone has to pay school fee, which is not consistent everywhere. Not every family can afford sending their children to school. In this study the group of illiterate women could only be found by subjects in India. About 32.8% are not able to read and write because they never went to school. Mostly their husbands are also illiterate. 17.3 % of the probands admitted that their husbands are unable to read and write.

2.3% of women living in Austria can read and write although they were not able to attend any kind of school as a child. Mostly they are able to read and write German because they attended language schools when they migrated to Austria.

In general, the percentage of well-educated women is higher between the migrants living in Austria than the women in India. 30.2% of women in Austria have completed 8 years of secondary education. In India, only 20.3% of the probands visited a secondary school.

20.9% of the subjects in Austria and 10.9% in India have a higher school certificate, which is called Matura in Austria and +2 (plus two) in India. This is a general qualification for a uni-

versity entrance. In the following only 4.7% of the subjects in India and 16.3% in Austria went to college. But the percentage of women having a university diploma or studying is higher in India. About 19 % of the women living in India admitted that they went to or still visit a university. In Austria it is only about 9% of the subjects.

24% of women can read German very well due to their education status. Only 2% of them are not able to speak and 4% to read German. About 36% of the women living in Austria need help to go to a doctor, because they feel insecure talking in German.

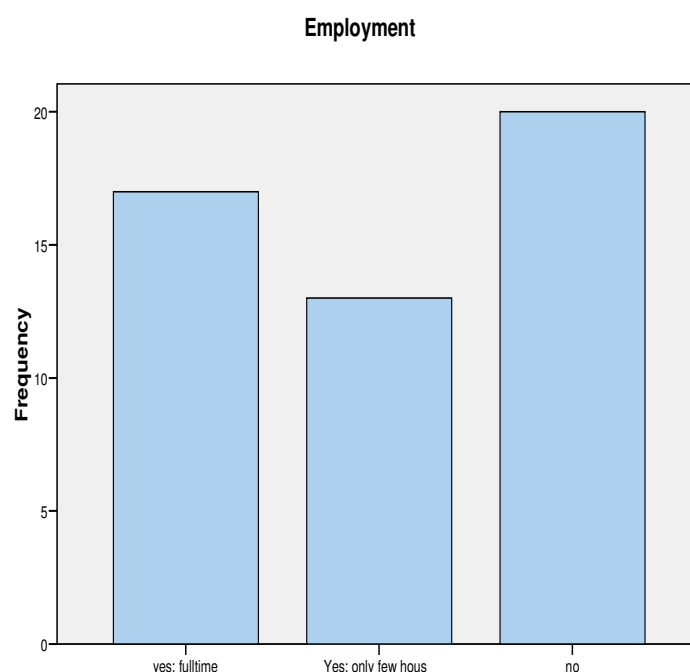


Figure 7: Employment of the women in Austria

About 34% of the subjects have a fulltime job and 26% are doing part time work. Most of them have a standing job and are quite happy with it and do not want to change their work situation. About 40% of women do not work. Most of them are housewives.

2.1.6. Marriages

About 68 % of subjects in Austria and 60% in India are married and their marriages were arranged. 10% of women in Austria and only 1.5% in India admitted that they had love marriages and were able to choose their husbands by themselves. Arranged marriages are still very common in India.

The average years for being married in India are 21.64 years (SD 17.07) and in Austria 17.48 years (SD 9.61). The longest period of being married is admitted by a proband in India with 62 years.

2.1.7. Religion

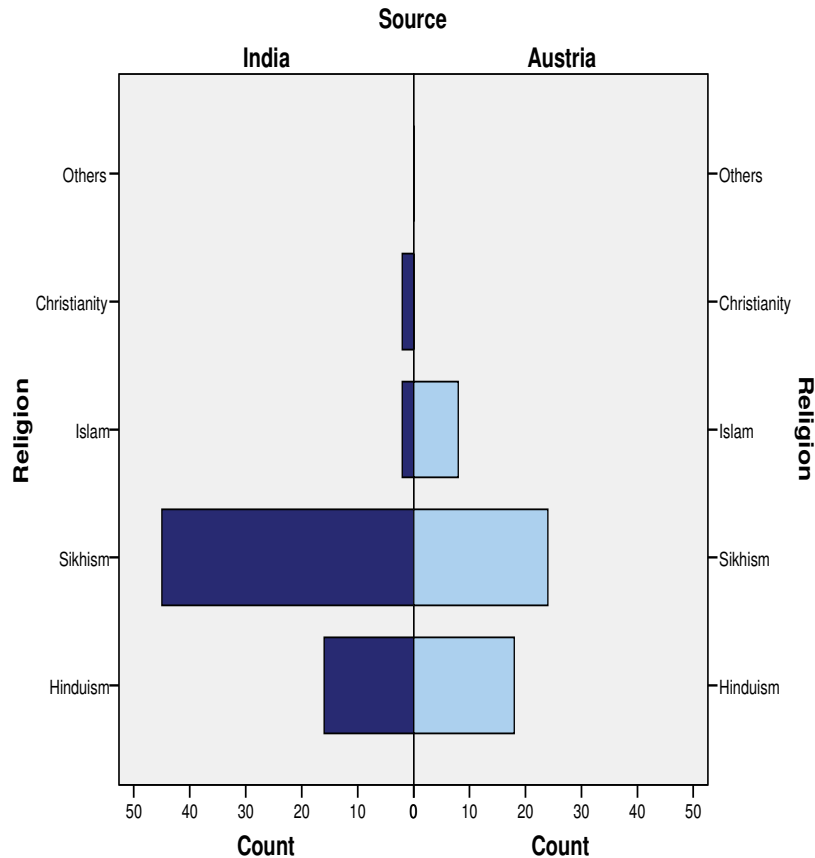


Figure 8: Distribution of religious belief between the subjects in Austria and in India

The four religions, Hinduism, Sikhism, Islam and Christianity, were considered by the probands. In India 69.2% of the subject women belong to Sikhism, 24.6% to Hinduism and 3.1% each to Islam and Christianity.

In Austria, 48% of the women admitted that they are Sikhs, 36% are Hindus and 16% of the subjects are Muslims. There are also many other religions in India like Buddhism, Jainism,

Judaism, etc. But none of the subjects belonged to other religions except the ones mentioned above.

2.2. Somatometric parameters:

2.2.1. Stature height (Mean 1.61; SD 0.68)

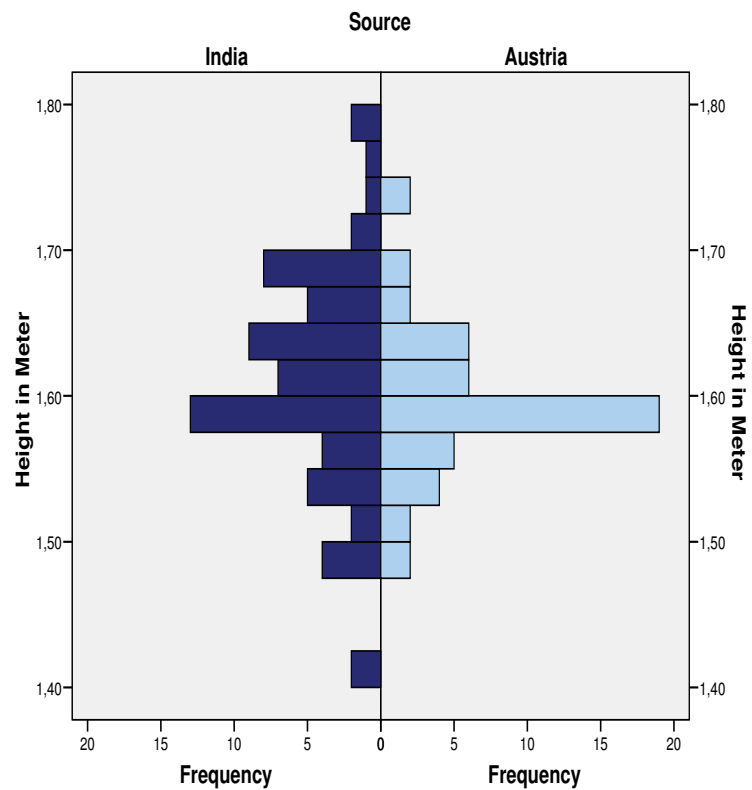


Figure 9: Stature height of women in India and in Austria

The minimum for height in India was 1.41m and 1.50 m in Austria. The maximum for height in India was 1.80 m and 1.75 in Austria.

Austria: Mean 1.60, SD 0.05

India: Mean 1.61, SD 0.08

2.2.2. *Body weight* (Mean 61.40; SD 12.57)

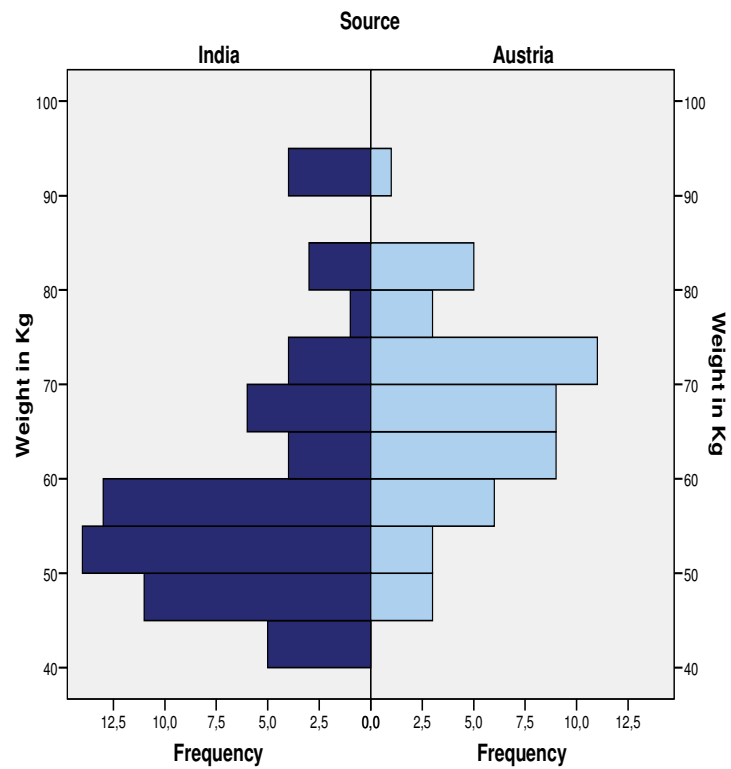


Figure 10: *Body weight of women in India and in Austria*

In India, minimum weight was 40 kg and the maximum weight was 95 kg. In Austria the body weight started from 45 kg (minimum weight) to 95 kg (maximum weight).

Austria: Mean 65.58, SD 9.98

India: Mean 58.18, SD 13.45

2.2.3. The Body Mass Index (BMI) (Mean 23.76; SD 4.83)

Body weight and height are necessary to measure the BMI. It is a reliable system to measure overweight and obesity. The average of BMI for women in India is 22.34 (SD: 5.02) and for women in Austria is 25.62 (SD: 3.89).

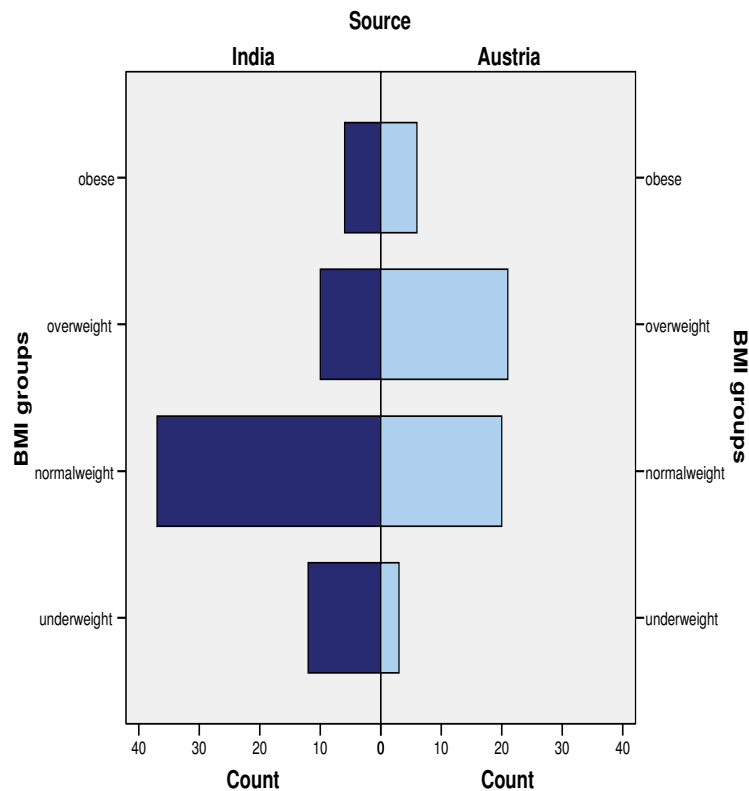


Figure 11: BMI of women in India and in Austria

According to the WHO, BMI is divided into groups in the following way:

BMI < 18.50 underweight

BMI 18.50-24.99 normal weight

BMI 25.00-29.99 overweight

BMI $\geq$ 30.00 obese

The group of underweighted women is larger in India. 18.5 % of probands in India and 6% in Austria belong to the group of underweight according to the BMI table. About 60% of the subjects in India and 40% in Austria have a normal weight. The percentage of women with overweight in Austria is, as expected higher than in India. 42% of the pobands in Austria and 15.4% in India fall in the category overweight. 12% of the subjects in Austria and 9.2% in India are obese.

2.3. Nutritional habits:

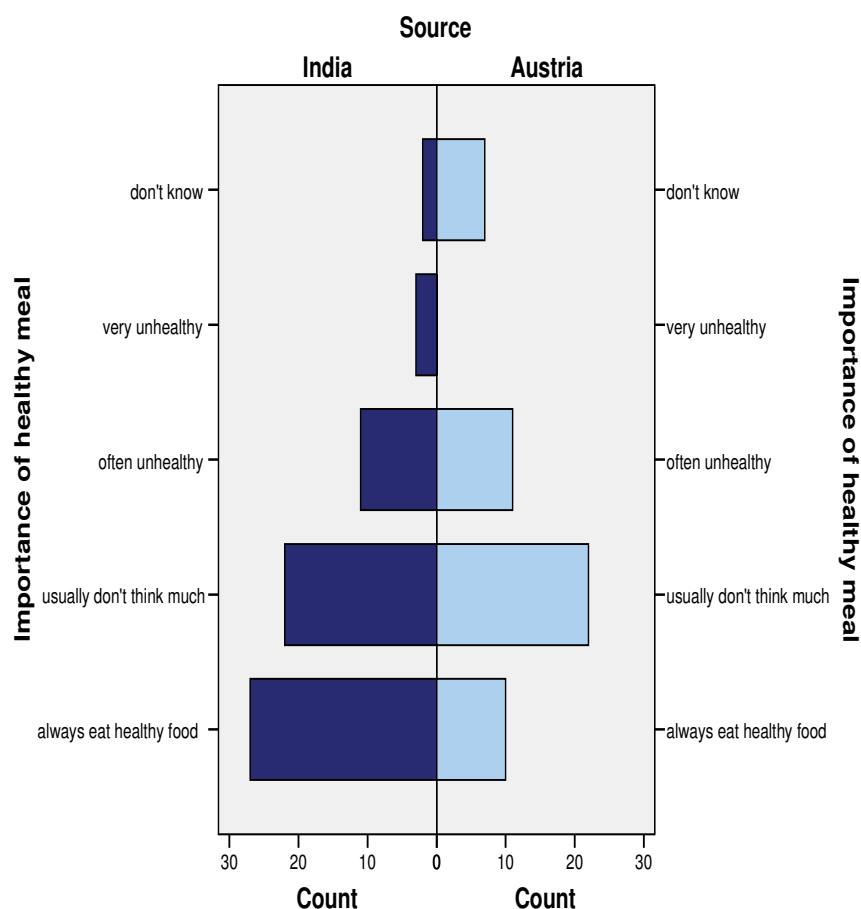


Figure 12: Importance of healthy meal for the probands

Comparing to Austria, women in India are more aware of eating healthy food. About 41.5% of them try to eat healthy food. In Austria it decreases to 20%. In India only 3.1 % do not know anything about healthy food relating to good health, in Austria it is about 14% of the subjects. A small group of subjects (4.6%) in India admitted that they eat very unhealthy food although their daily food consists of milk, wheat, vegetables and pulses.

Almost 80% of women in India and 82% in Austria cook their food by themselves. The dispersion between the probands in India and in Austria in cooking habits is very similar.

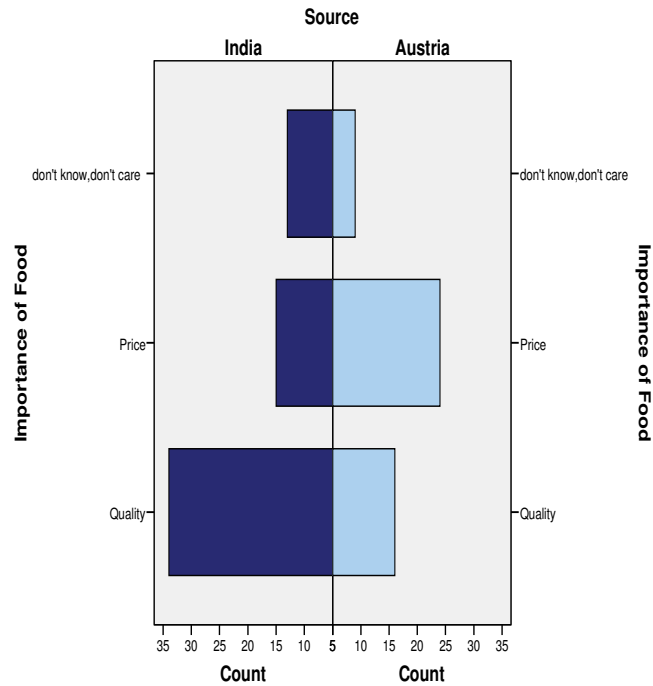


Figure 13: Price and Quality comparison

There is a difference in price and quality of food consumption. In India, for 54.8 % of the subjects the quality of food is very important. Especially the need for fresh vegetables and fruits is required. About 24% of the women admitted that the price plays a more important role than the quality of food. 21% don't care about the price and quality.

In Austria, the matter of price is much important. 49% of the probands in Austria firstly think about the price while buying their daily food. For 32.7% of the women quality of their food is very important and 18.4% do not care about their food in price and quality matters.

Most of the subjects are not vegetarian although due to their religious belief, as in Hinduism and in Sikhism you are not allowed to eat meat. About 42% of women in India and 36% in Austria are vegetarian. Most of the women started eating meat as children. In India it can be seen that about 34% started eating meat after their marriages due to their new families.

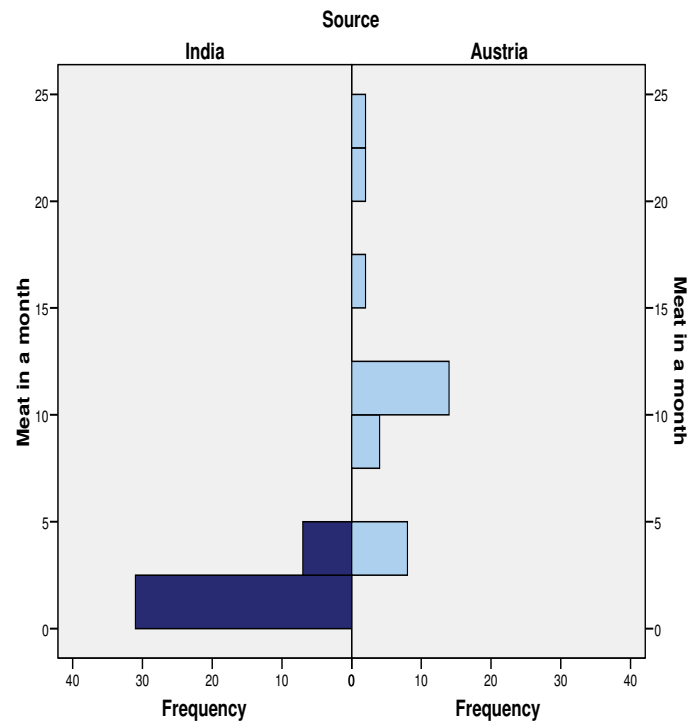


Figure 14: meat consumption per month

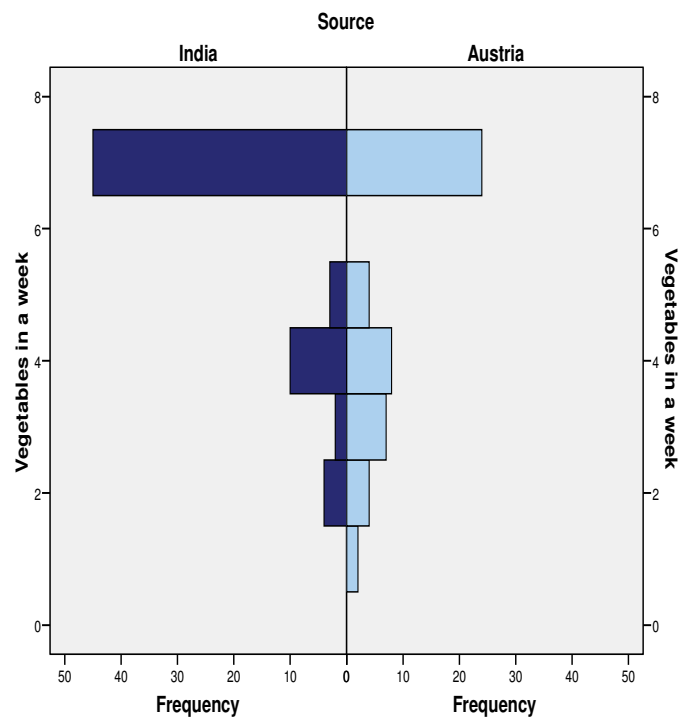


Figure 15: vegetable consumption per week

In India, the majority of the subjects (65.8%) are able to eat meat once a month. The maximum consumption for meat is four times a month, which is the minimum consumption for the probands in Austria. The maximum consumption for Austria is twenty four times a month. The average for the probands in Austria is eleven times and in India two times a month. Mostly, the probands in India eat vegetables daily. They are used to eat seasonal vegetables and fruits. Tomatoes and potatoes are required throughout the year.

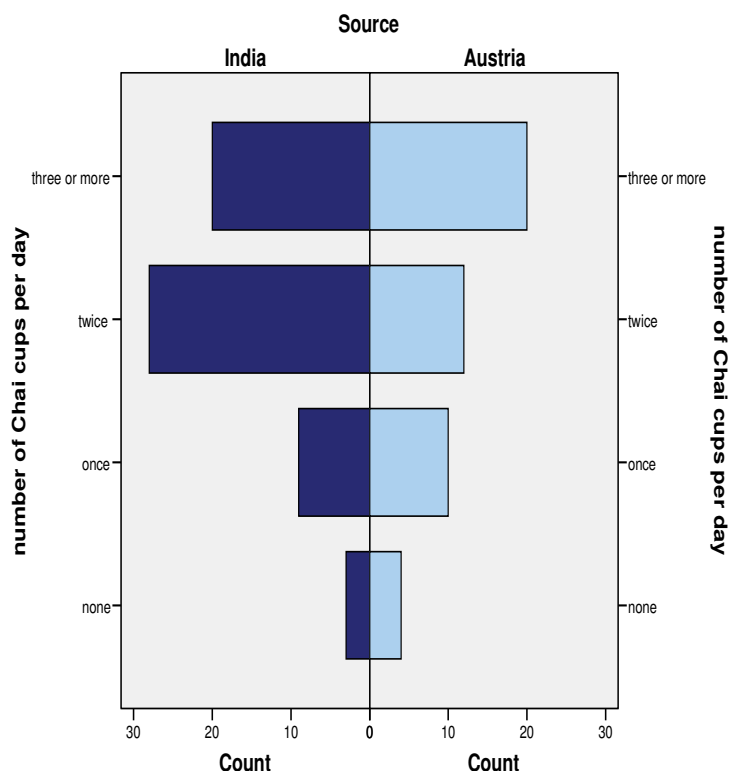


Figure 16: Number of chai cups per day

Indians are used to drink black tea with milk, so called chai, with sugar. In India about 46.7% of the subjects drink two cups of tea a day, one in the morning and one in the evening. 33.3% of them drink three or more cups a day. Most of them (93.5%) drink their tea with sugar. The migrants in Austria usually drink more cups a day. 43.5% of the subjects in Austria drink three or more cups of tea. 26.1% of the women drink chai twice a day. The use of sugar in tea in Austria is less than the women in India. 76.1% of the subjects admitted that they use sugar in their tea. For people with health concerns like diabetes, chai with sugar is like their worst enemy. But being a tradition for many years, most of the probands drink chai with sugar without caring about possible diabetes. In case of coffee, in India they are used to drink it

without sugar. Only 37.5 % of the subjects in India and 66.7% in Austria drink their coffee with sugar.

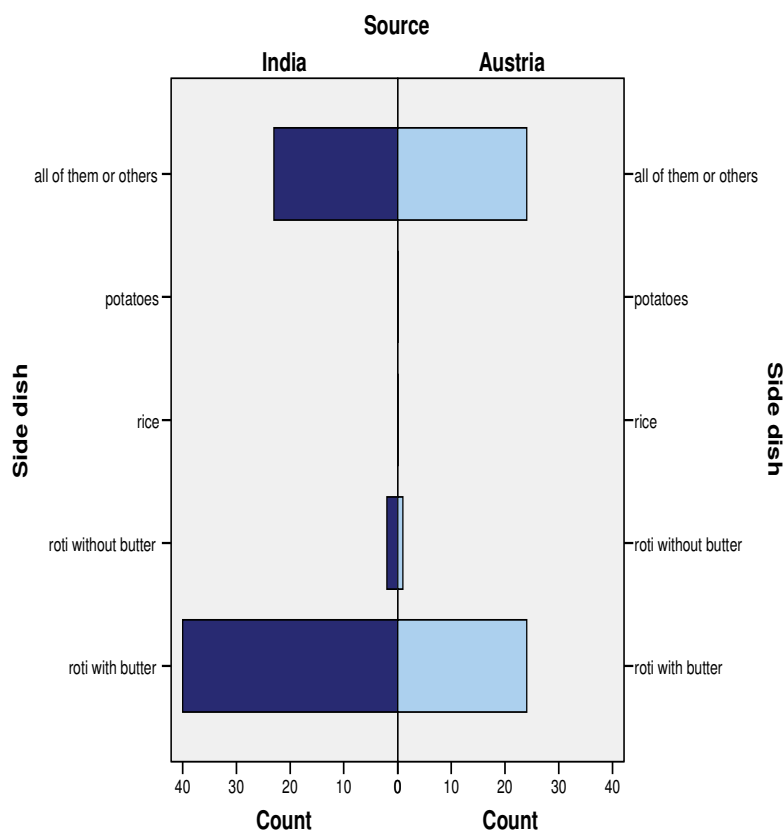


Figure 17: Consumption of side dish in Austria and in India

Further, a homemade bread called roti is a very common side dish in northern India. They usually smear butter on it, which leads to further health issues of the Indian women (high cholesterol level). 61.5% of subjects in India and 49% of women in Austria eat only roti as a side dish mainly with butter on it. Only 3.1% of the subjects in India and 2% in Austria are used to rotis without butter as a side dish. In north India only rice or only potatoes are not being served as a side dish. It is more common in south and east part of India. In Punjab usually potatoes and rice are cooked as a main dish.

But still about 35% of the subjects in India and 49% in Austria eat roti, rice, potatoes and many other things as a side dish in order to give a variety to their daily meal.

2.4. Reproductive health:

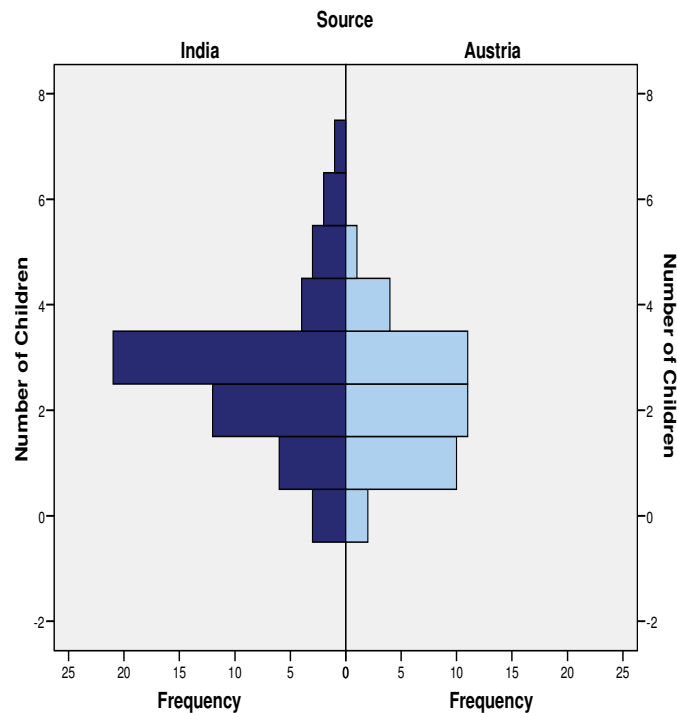


Figure 18: Number of children in Austria and in India

The average amount of children for the probands is in India about 3 (mean 2.75; SD 1.47). Mostly families in Austria have about 2 children (mean 2.21; SD 1.17). The maximum number of children was 7 in a family in India. The average for desired number of children is 2 in Austria and 1 in India. This shows a big change in the family system because today women have better access to education and precaution. They are getting more aware of their rights and make efforts for their financial independency. Another reason for this kind of change could be the decrease of infant mortality.

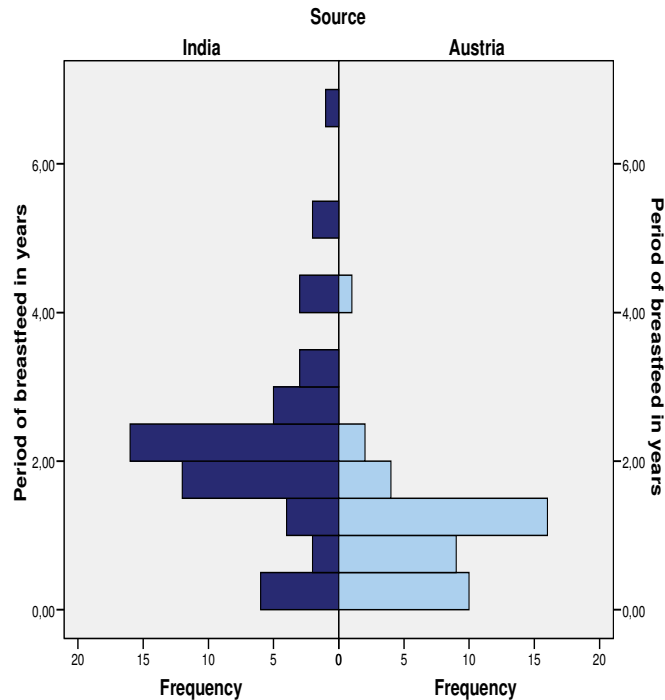


Figure 19: Lactation continuity in Austria and in India

The average of breastfeeding years for the whole group (India-Austria) is 1.47 with a standard deviation of 1.24. The maximum breastfeeding years are in India about 7 years.

Comparing the two groups, there are remarkable differences. The probands in India have a higher period of lactation (mean: 1.96 years; SD 1.33). In Austria the average for period of lactation decreases to 0.84 years (SD 0.74) due to easy availability of baby food. In Punjab not everyone has access to or can afford baby milk or baby food products. So mother's milk remains the only diet for a longer period of time.

There is a age difference for giving birth to the first child. The average in Austria is at 24.49 (SD 2.76) years and in India is at 21.21 (SD 3.19) years.

	India	Austria
	Amount in %	Amount in %
yes	30.50%	22.70%
no	69.50%	77.30%

Table 6: Use of contraceptive in Austria and in India

In Austria only 27.2 % of my subjects, whereas 30.5% in India admitted are using contraceptive mostly in form of the anti baby pill. According to the WHO report in India, sterilization is

the most commonly used method, even among married adolescents and it accounts for roughly 85% of all modern contraceptive methods use.

23.4 % of the subjects in India and 22.4% in Austria reported that they had miscarriages.

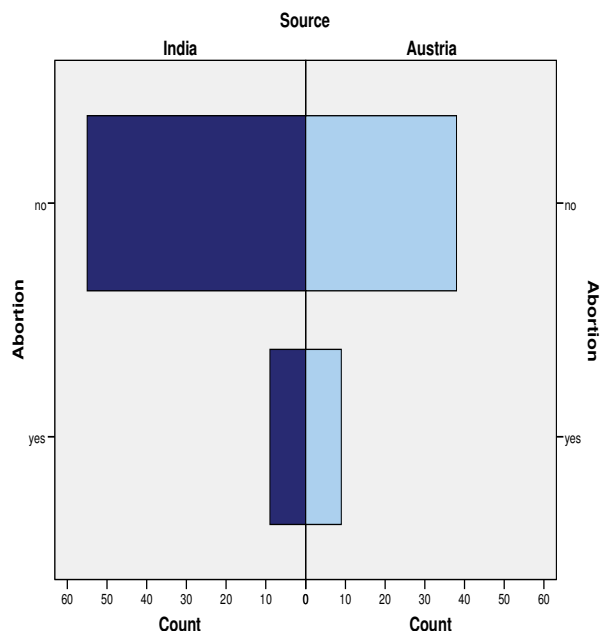


Figure 20: Abortion among the women in Austria and in India

About 14.1 % of my probands in India and 19.1% in Austria reported that they had an abortion. In India there is still a big preference for sons as they are believed to be backups when parents get old. Many families accept one or two daughters and after that they like to have at least one son.

2.5. General health situation:

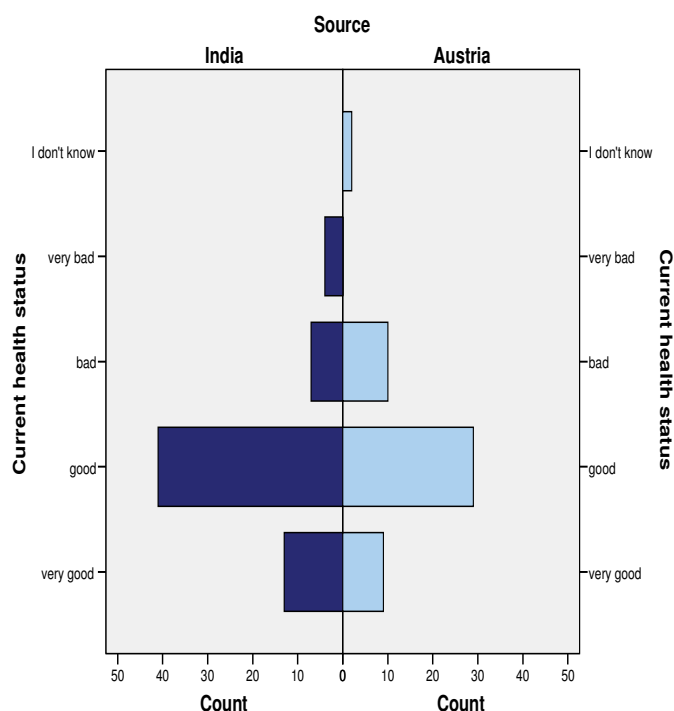


Figure 21: Current health status of the women in Austria and in India

Most of the women had a good health situation. In Austria few (4%) of them did not know about their health status. “Very bad” health situation has only been marked with 6.2% of the women in India. 63.1% of the subjects in India and 58% in Austria marked their health status as “good”. 20% of the women India and 18% in Austria felt “very good” and had no health complaints. 20% of the women in Austria were feeling “bad” about their health status, which is a larger group comparing to women in India with only 10.8%. Health complaints were mostly about head-, joint and stomach aches, diabetes, high blood pressure, rheumatoid symptoms and cardiovascular diseases.

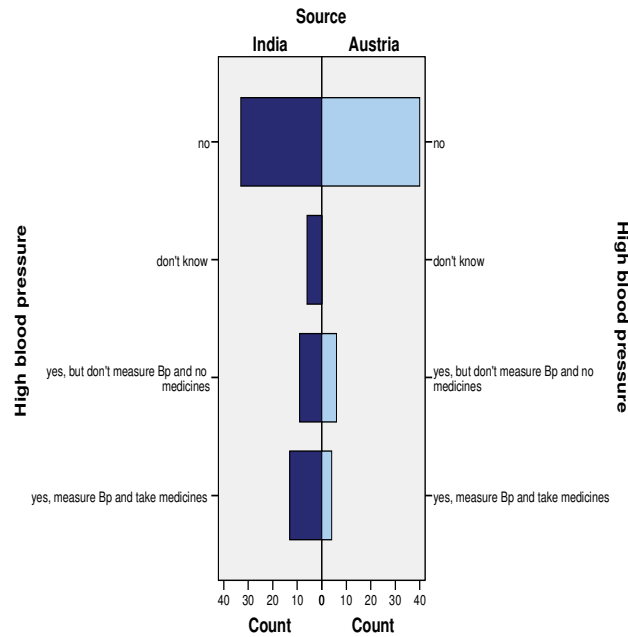


Figure 22: Blood pressure status

High blood pressure occurs in 36% of the subjects in India and 20% in Austria. The allocation for having high blood pressure and taking no medicines against it is quiet similar within both countries. But still a larger group of about 21% in India measure their blood pressure daily and also take medicines, in Austria it is only about 8%. About 9.8% of the women in India did not know whether they have a high blood pressure or not.

	India		Austria	
	<i>visit a doctor</i>	<i>visit a gynaecologist regularly</i>	<i>visit a doctor</i>	<i>visit a gynaecologist regularly</i>
	Amount in %	Amount in %	Amount in %	Amount in %
<i>yes</i>	75.0%	44.4%	76.0%	42.0%
<i>no</i>	25.0%	55.6%	24.0%	58.0%

Table 7: regular visits of a doctor and gynaecologist

Most of the subjects go to a general practitioner when they fall ill. But many of them avoid visiting a gynaecologist, except when there is a strong need for it. The allocation is very similar within the countries.

General check up is regularly done in Austria because the doctors mostly make women aware of it. In India a general check up is only done related to some other diseases. Vaccination is not done regularly by the probands, except for the immunisation of the flu in Austria or

FSME vaccine. Only 7.7% of the subjects in India and 20% in Austria reported that they go for regular vaccination.

In the issue of diabetes, it can be seen that only 4.6% of the probands in India and 14% in Austria know about their diabetes disease. 15.4% of the women in India and 12% in Austria do not know whether they suffer from diabetes or not.

There is a similarity between the subjects in India and in Austria in terms of diabetes, cholesterol problems and osteoporosis. A very small group is linked with these issues. 6.2% of the subjects in India and 12% in Austria know that they their cholesterol level is high. The question about bone fractures and how often this has occurred was asked to find out about the problem of osteoporosis. 20% of the women in India and 8% in Austria admitted that they have broken their bones more than twice.

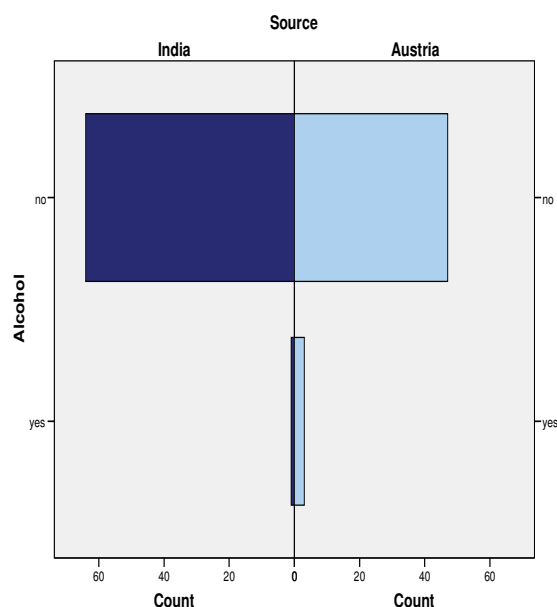


Figure 23

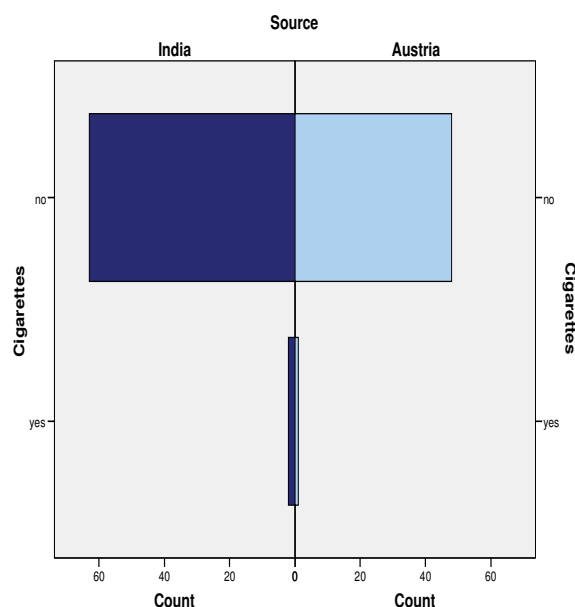


Figure 24

Figure 23: Alcohol consume of women in India and in Austria

Figure 24: Cigarette consume of women in India and in Austria

Alcohol and cigarette use is very low. In India about 1.5% of women and in Austria about 6% drink alcohol. About 3.1 % smoke in India and only 2% in Austria.

There is a great similarity between the groups in practicing Yoga. Only 23.1% in India and 24% in Austria do Yoga regularly. A daily sport is being done among 18.5% of the women in India and 28% in Austria.

2.6. Influencing factors:

BMI groups and education

A statistically significant correlation between the BMI groups and the education level could not be found ($\chi^2=14.2$; $p=0.861$).

BMI and employment

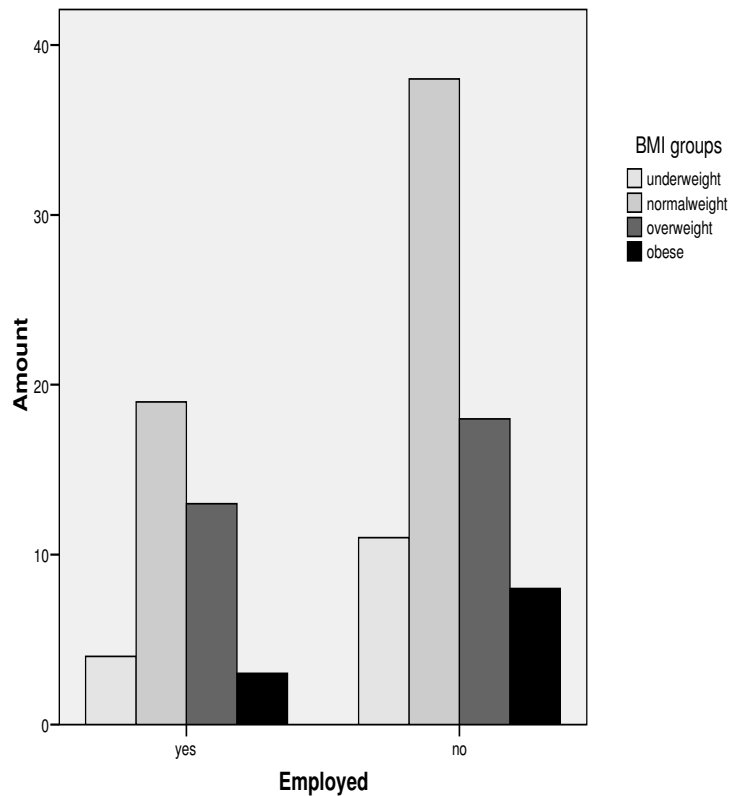


Figure 25: BMI groups according to the employment of the women

The group of overweight and obese is larger within the women, who are not employed. 58.1% of the women have overweight and 72.7% of them are obese in this group. The t-test (p-value 0.383) was not significant for the dependency of BMI with employment. Also the Mann-Whitney-U test (p-value 0.625) showed that there is no obvious dependence of BMI group on the employment.

BMI groups and vegetarian or non-vegetarian

The result indicates that there is no coherence between the eating habits and BMI. Mann-Whitney-U test (p-value 0.763) shows no significant outcome. But still the group of obese women with 66.7% is vast within the non-vegetarian group.

BMI groups and side dish

There is a significant correlation between the BMI groups and eating habits related to side dish. ($\chi^2=12.94$; $p=0.043$). The subjects eating roti with butter have a higher BMI than the women who eat their side dish without smearing butter on it and who eat many other things as a side dish in order to give a variety in their daily meal.

Side dish	BMI groups				total
	underweight	normal weight	over weight	obese	
roti with butter % of BMI groups	73.3%	52.6%	56.7%	50.0%	56.10%
roti without butter % of BMI groups	13.3%	0.00%	3.30%	0.00%	2.60%
all of them or others % of BMI groups	13.3%	47.40%	40.00%	50.0%	41.2%
total % of BMI groups	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8: BMI groups vs. side dish

BMI groups and Diabetes

A statistically significant correlation between the BMI groups and diabetes could be found ($\chi^2=15.8$; $p=0.015$).

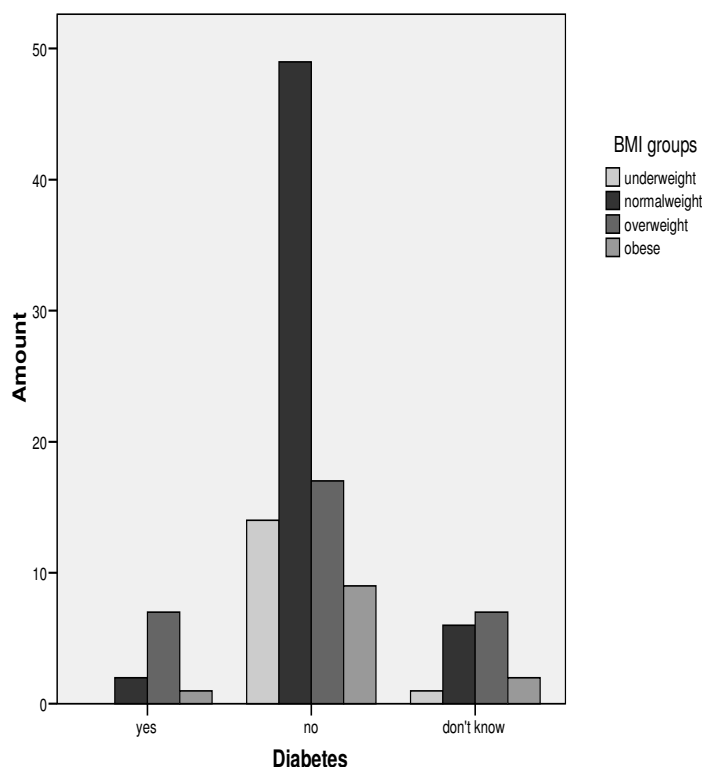


Figure 26: BMI groups according to the Diabetes concern

BMI groups and daily sports/Yoga

There is no coherence between the BMI groups and daily sports ($\chi^2=1.76$; $p=0.623$).

Although the group of overweight and obese is larger within the subjects who never practise Yoga, the result indicates no correlation between the BMI groups and Yoga ($\chi^2=2.58$; $p=0.461$).

Daily sports and age groups

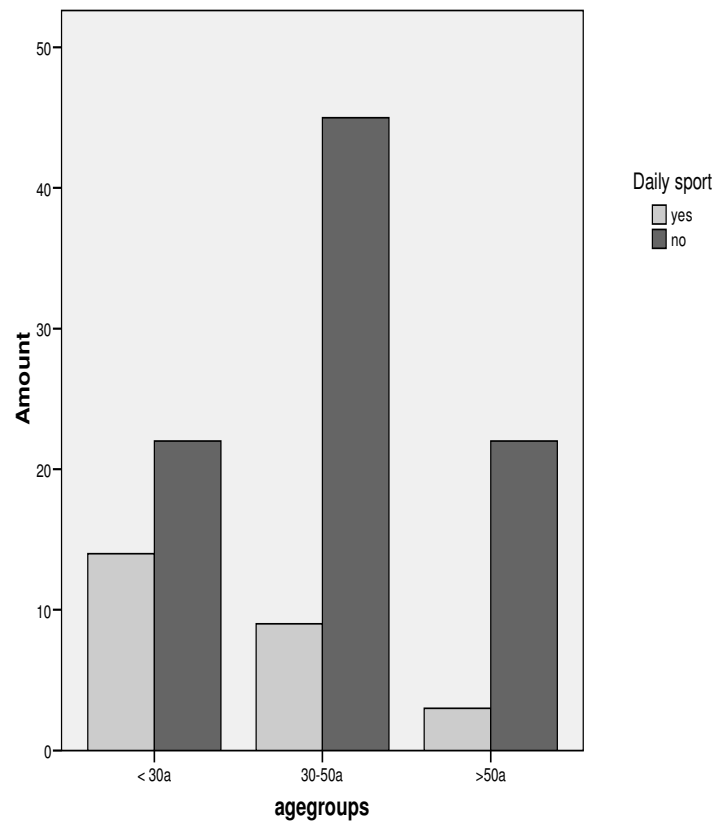


Figure 27: Daily sports vs. Age (divided into groups)

18.1% of women in India and 28% in Austria admitted that they do daily sports.

Practising sports on a daily basis decreases with age. 38.9% of the women younger than 30 years do sports daily. 16.7% of the subjects between 30 and 50 years and only 12% of the women over 50 years do sports daily. The result indicates that there is coherence between the age groups and daily sports ($\chi^2=8.51$; $p=0.017$). 23.1% of the women in India and 24% in Austria do yoga according to the results. But, for doing Yoga no such correlation to age groups could be found. The result is not significant.

BMI groups and age groups

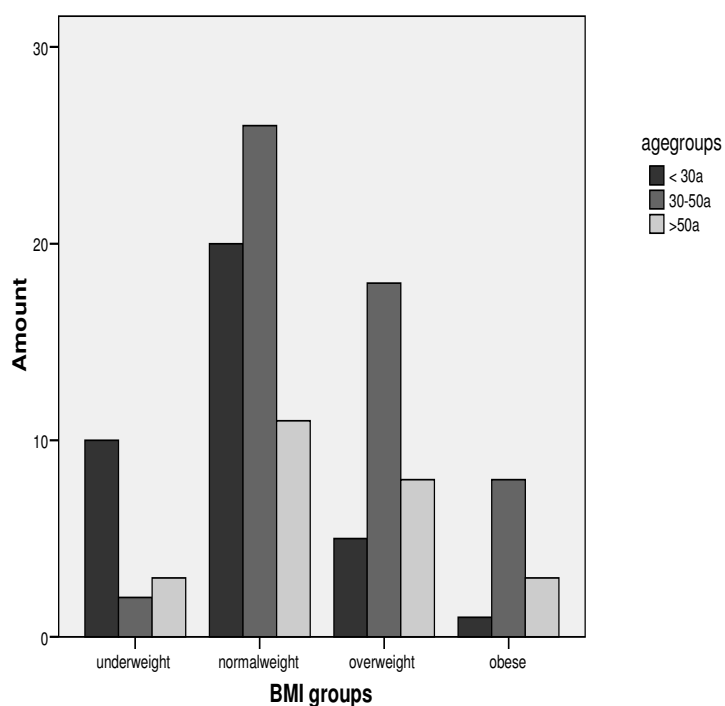


Figure 28: BMI groups vs. age groups

BMI increases with the subjects getting older. There is a coherence between the BMI groups and age groups ($\chi^2=16.47$; $p=0.011$). The largest group of overweight and obese women are between the age of 30 and 50 years.

Education and Financial dependency

A statistically significant correlation between education and financial dependency could be found ($\chi^2=14.59$; $p=0.042$). Considering the Kendall-Tau-b, it could be said that financial dependency decreases the higher education level. Women, who are less educated, mostly depend on their families.

Education and birthplace

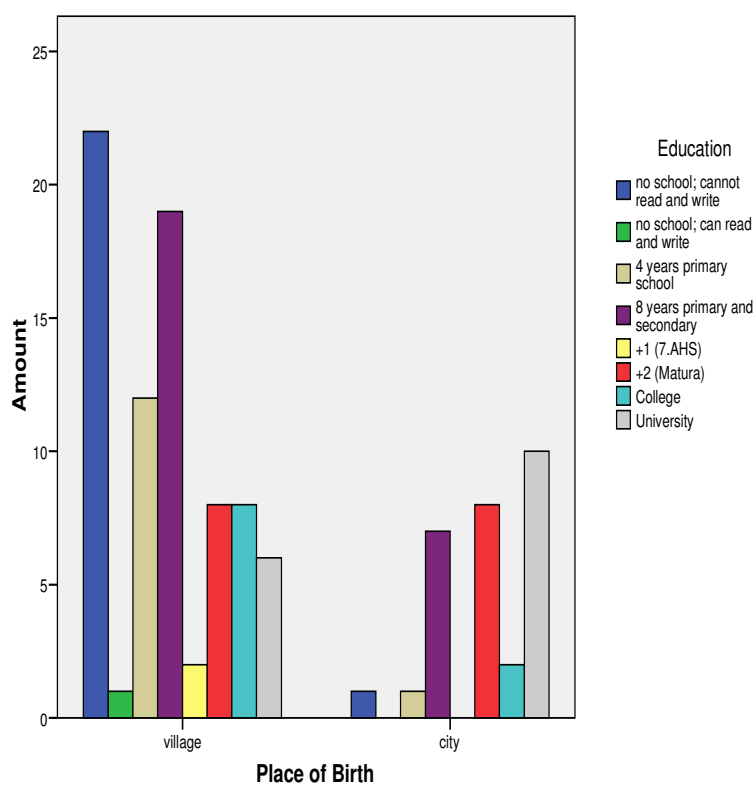


Figure 29: Education vs. Birthplace

The correlation between education and birthplace shows a high significant result ($\chi^2=24.27$; $p=0.001$). Subjects born in the city have a higher education than the ones born in a village.

2.7. Interviews:

Interview with Dr. Jaintika Randev (B.A.M.S Bachelor of Medicine and Surgery): She worked in a Surgical and Maternity Hospital in Kapurthala (Punjab).

Author: You may have noticed in the last few years, that certain diseases are more common among the women in India. Can you tell me more about this situation?

Dr. Jaintika Randev: Obesity has increased. Osteoporosis, diabetes, high blood pressure and cardiovascular diseases are very common and have increased in the last few years.

Author: In India, is there a system for a general check up, where you can go to a doctor and have the possibility for an annual routine check up?

Dr. Jaintika Randev: Actually in cities people are more aware. There are special camps to check bone density and diabetes. You have the possibility to get free information. People living in villages are not aware of such camps due to their low education level. They don't know much about the importance of their diseases/illness and don't use these opportunities.

Author: Are these camps for free? Are they governmental or organized through some private people or Institutions?

Dr. Jaintika Randev: These camps are organized by hospitals, both through government and privately. But, naturally you also have the possibility to pay a certain amount of money for the registration fee at any hospital and do the general check up.

Author: Do you know your patients well? Do they come to you regularly? Can you tell me about your experiences?

Dr. Jaintika Randev: Yes, many patients who were satisfied with their treatments and felt to have a good treatment came regularly to us. They even recommended us to their friends, relatives and other patients.

Author: How advanced/acute are the diseases of women when they come to you for their treatment?

Dr. Jaintika Randev: In my opinion, ladies are not aware of their diseases at the starting stage. If they fall ill, they first try to get some medicines from the chemist to relief their pain. They mostly come to a hospital for a proper check up, when their diseases are advanced. They even avoid doing some important tests. Mostly women from villages go to a doctor when their diseases are very advanced. In cities women are more aware of their health situation and go directly to a doctor if they feel ill. They even try to take care of themselves from the beginning if they had to deal with any kind of illness or operations before.

Author: Do your patients ask about detailed information about their diseases or do they just come to you to be cured fast with medication?

Dr. Jaintika Randev: About 80% of women just want to know about the medicines to cure their illness and they even avoid some tests, like checking their haemoglobin level. They don't like to do a general check up.

Author: Do your patients ask you about prevention methods? How do you deal with these types of questions? What do you think are the most common contraceptives women like to use in India?

Dr. Jaintika Randev: Mostly educated ladies in cities know more about protection methods than ladies living in villages. Generally, most of the women don't use any contraceptives after their marriage until the first baby is not born. They visit a lady doctor for the first time when they get pregnant. After the first pregnancy we guide them and give them information about protection methods. We also advise them to take the contraceptive for at least 3 years. Pills are very common among Indian women and if their partners are cooperative, they like to use condoms as well.

Author: Do you perform abortions? Can you give me some information about governmental laws dealing with abortion and long term abortion?

Dr. Jaintika Randev: Legally you are allowed to abort a child within 8 weeks of pregnancy with a valid reason. Without a valid reason and without a mother's will an abortion is not possible. Poverty or over age can be such a reason for an abortion.

Author: Do you have experience with long term abortion in your carrier? Did you have patients who aborted their child without your allowance? Can you explain please?

Dr. Jaintika Randev: I can tell you about one case. She has been my patient and had an abortion in the sixth month of pregnancy. She aborted her child without my agreement with the help of another doctor. I think, she took some medicines from the chemistry and could easily fulfill the act. After that, she came to us late night with strong bleedings. She didn't tell us why she did it. We shifted her to a civil hospital.

Author: Now, I just want to know your personal opinion about all these problems Indian women have to live with, as you seem to have a lot of knowledge considering your job. What do you think should be done to improve the women's health situation in India?

Dr. Jaintika Randev: In my mind the only help I see is that we should inform people about common diseases through good campaigns. We need proper awareness for women living in villages and in cities. Campaigns should be done in easy languages through the media like

newspapers, television, wallpapers, etc. Many people could avoid their illnesses through changing their life style.

The next Interview is with Dr. Sharma (B.A.M.S Bachelor of Medicine and Surgery), who has his own Medical Clinic in Jalandhar near Sarai Khas. His clinic is easily available for villagers living in the surroundings. He is a general Doctor and has his own chemistry. He refuses to record his voice for the interview because he feels very insecure. He has explained about the problem of high blood pressure, diabetes and anaemia among most of his lady-patients. In the last few years the problem of diabetes and obesity is increasing in women living in cities. He also explains that mostly women living in a village have to work very hard on fields to pluck vegetables under the sun and heat during the summer, which causes addition to their illnesses, headache and high blood pressure.

Interview with Dr. Zinatossadat Vatanparast: She is a medical practitioner and a gynaecologist in Vienna. Her special fields are nutrition/diet counselling, sterility and hormone therapy.

Author: You may have noticed in the last few years, that certain diseases are more common among the women, especially the migrants. Can you tell me more about this situation?

Dr. Vatanparast: Infectious diseases, sexual transmitted diseases (STDs), obesity among young women, cardiovascular diseases and depressions are the most common diseases that I have noticed among migrant women.

Author: As I know, in Austria there is a system for a general check up, where you can go to a doctor and have the possibility for an annual routine check up. How do you go about this topic with your patients?

Dr. Vatanparast: Actually some migrant women do the annual routine check up when the doctor tells them or puts them under pressure. Sometimes they don't know anything about it but I look after my patients and give them enough information about their health system. In Austria, there is a health insurance company, like "Wiener Gebietskrankenkasse", responsible for the costs of any kind of check up. We still have one of the best health systems in the world.

Author: Do you know your patients well? Do they come to you regularly? Can you tell me about your experiences?

Dr. Vatanparast: Yes, I know my patients very well, even by their names. They are satisfied with their treatment and they come to me on a regularly base. They even recommend me to their friends, relatives and other patients. Especially many of my patients give me the feeling that they need more attentiveness and affection which can be a reason for regular visits.

Author: How advanced are the diseases of women when they come to you for their treatment?

Dr. Vatanparast: Actually only 10% of my patients come with an acute problem, like accidents or bleedings, to me. I have my experience with some migrant women, who are not aware of their diseases and don't even know about their medicines. Here I try my best to help them how to deal with their health problems.

Author: Do your patients ask you about prevention methods? How do you deal with these types of questions? What do you think are the most common contraceptives women like to use in Austria?

Dr. Vatanparast: Anti Baby Pills are very common among my patients. Most of my patients who come for the gynaecology check up ask for my advice and information for prevention methods.

Author: Do you perform abortions? Can you give me some information about governmental laws dealing with abortion and long term abortion?

Dr. Vatanparast: I don't perform abortions by myself. Austria has a very well organised system in hospitals and many institutions. You can legally abort a child within 12 weeks of pregnancy. If my patients ask me about abortion, I recommend them to one of the hospitals or institutions. I also help my patients by giving name and address of some shelters for women or relief organisation when they have the need to.

Summarizing the Interviews, it can be said that there are some diseases that have increased in the last few years within women. Obesity and cardiovascular diseases have been mentioned by the doctors as well as in India and in Austria. There are some differences between the laws for abortion in both countries. In India there is now harsh procedure against abortions, therefore the short period of 8 weeks with a valid reason to abort a child.

3. Discussion

The health of Indian women has to do with their status in the society. Indian women have high mortality rates, especially during childhood and adolescence, and more so in their reproductive years, although India is one of the few countries in the world where women and men have almost the same life expectancy at birth. (Velkoff V. A. /Adlakha A., 1998)

The health situation, the use of contraceptives, the education of their children, proper hygienic practises, access to employment, status in the society, almost everything is influenced by the literacy level of women. (Buckshee K., 1997)

In India tradition requires that women should eat last after preparing the meal for their husbands and their children, even when pregnant and while breastfeeding. Undernourished women give birth to undernourished children. Early marriages and giving birth to children at a very low age lead to major challenges for the women's health. (Coonrod C. S., 1998; Buckshee K., 1997)

The overall maternal mortality for India is 572.3 per 100 000 births, ranging from 14.9% in Bihar to 1.3% in Kerala. Anaemia is an indirect factor in 64.4% of the maternal deaths. (Buckshee K., 1997)

There are many aspects to be considered for the topic of fertility. Education, religion, caste and place of residence can influence the fertility rates. For example Uttar Pradesh, the most densely populated state in India, has a total fertility rate of over 5 children per woman. But Kerala has a total fertility rate fewer than 2 children because it has relatively high levels of educated and autonomous women. (Velkoff V. A. /Adlakha A., 1998)

One of the challenging health topics will be the problem of HIV/AIDS in India and will affect women's health. About 2 and 5 million Indians are currently infected with HIV. There are certain population groups, who are at risk like sex workers, intravenous drug users, and sexually transmitted disease patients. (Velkoff V. A. /Adlakha A., 1998)

The prevalence of obesity among Indian women is also increasing. From 10.6% in 1998-1999 to 12.6% in 2005-2006. Studies have shown prevalence between the age of 40-49 years among highly qualified and rich Sikh women. Highest percentage of obese women was found in Punjab, due to increasing sedentary lifestyle and junk food habits. (Garg C., 2010)

Today, one of the main causes of death in most of the industrialized countries is due to cardiovascular diseases. Studies in Austria concerning cardiovascular issues have been done by the Ludwig Boltzmann Institute for cardiac gender studies at the University Hospital of Innsbruck and they confirm the international trend and show that women have a higher mortality in heart attacks and heart surgery than men. (Bundesministerium für Gesundheit)

Cancer is the next challenge for the health issues in Austria. Annually, about 35,000 new cases are being registered. Breast and abdominal cancer are very common among the women followed by cancer of the genital organs and cancer of the respiratory system.

In 2004, there were 4832 cases (72.9 cases per 100,000 women) of women, who suffered from breast cancer. The age-standardized rate of new cases of breast cancer is increasing during the last 10 years of about 3.1 percent. (Bundesministerium für Gesundheit)

In Austria, life expectancy for women in 2006 was 82.68 years and for men 77.13 years. (Statistics Austria, 2006)

The concepts of sexual and reproductive health go well beyond the medical model of disease. It focuses on aspects of health promotion, such as enabling a satisfying sex life, respect for and protection of sexual rights and freedom of choice. Austrian women have an average of 1.39 children; fertility age is now 29.7 years. By comparison, in 1963 the total fertility rate was 2.82, twice as high as it is today. (Statistics Austria, 2006)

Since 1974, for every Austrian woman starting from the age of 19 years, there is the possibility of a free screening, which is known as a general health check up. In 2005 the check up procedure has been “renewed”. It was divided in a basic program (general check up as usual) and a gynaecological additional service. Also for people over 50 years check up relating the colorectal cancer and early detection of hearing and sight loss was included. In addition, the examination for early detection of cervical carcinoma (cervical cancer) as well as for the early detection of breast cancer through mammography screening method has been required every two years between the ages of 50 and 69 years. Women can also be provided with early detection test for genetic breast cancer if needed.

Although women’s life expectancy is higher than men, there health status is worst. They stay in general longer in hospitals and have higher medical drug consumption.

(Bundesministerium für Gesundheit)

(<http://www.bmg.gv.at/cms/site/standard.html?channel=CH0774&doc=CMS1201507195414> 27.11. 2010)

The cultural- environmental changes have effects onto eating habits, life style and play a big role in the health situation of Indian migrants in Austria.

The access to a regulated health care is difficult for most of immigrants and asylum seekers. Immigrants face a lot of pressure being minority members of a country, which leads to discrimination. The basis of professional discrimination and iniquitous division of working family members can be heavy factors of bad health issues. (Bundesministerium für Gesundheit)

In this survey, the matter of price was important for most of the migrants when it comes to

buying their daily food. Most of them are not vegetarian, although due to their religious belief, they are not allowed to eat meat. It shows that cultural influences of their host country have effects onto eating habits. But results indicate that there is no correlation between the eating habits and Body Mass Index between the migrants in Austria. However, the group of obese women with 66.7% is vast within the non-vegetarian group.

Additionally there is a significant correlation between the Body Mass Index groups and eating habits relating to side dishes. The women eating roti with butter in India have a higher Body Mass Index than the migrants who eat many other things as a side dish in order to give a variety in their daily meal.

Diet is also influenced by the social status. People from a low socio-economic group have less protein, monounsaturated fat, vitamins and minerals, such as thiamine, riboflavin, niacin, vitamin C, calcium, magnesium, and iron in their diet. Breads, oils, and sugars are the main contributors for the energy intake. (Shahar D., 2004)

Further, the cultural- environmental changes have certain effects onto migrants concerning period of breastfeeding, amount of children and age of the mother at first birth. The women in India have a higher period of lactation of about two years, which declines to approximately one year in Austria, due to a high range of baby milk and food. In Punjab not everyone has access to or can afford baby food. So mother's milk remains the only diet for a longer period of time.

The average amount of children in Austria within the migrants decreases and the age for giving birth to the first child increases. Most migrant families in Austria have about 2 children.

WHO reports that the average age at marriage for women in India is 19 years with some regional variations. There are some states with an average of only 16 years of age. But evidences have emerged that young married couples prefer spending more time together before getting their first child, although the traditional norms are in favour of having a child soon after marriage.

Body Mass Index is higher within the migrants in Austria.

Body Mass Index increases with the subjects getting older in this study. There is a high correlation between the BMI groups and age groups. The largest group of overweight and obese women are between the age of 30 and 50 years. The percentage of women with overweight in Austria is, as expected, higher than in India.

The average of BMI for women in Austria is higher than for the women in India. The group of underweight women is larger in India.

Studies show, that obesity rates among immigrants in the United States increase after living in this country for some years. For example, Japanese living in Hawaii or California have higher BMI comparing to their relatives in Japan. (Diet and Health, 1989; Susan F., 2005)

There are evidences that obesity is a risk factor for the development of cardiovascular diseases, diabetes mellitus, gallbladder disease and endometrial and postmenopausal breast cancer. Studies also show that obesity is highest among women with low socio-economic status. (Diet and Health, 1989)

There are also evidences that migration into urban areas is linked with increases in obesity, because people usually adopt modes of life that put them at similar risk to the urban population. (Shah E., 2010)

Obesity is increasing in the European countries since 1980s. Data is available from Germany, Finland, Sweden, The Netherlands and England. 30–80% of adults in these countries are affected from obesity and overweight. About 20% of children and adolescents are overweight, and a third of these are obese. Factors that are responsible for weight gains in Europe can be discussed. High calorie food intakes in combination with low physical activities lead to increasing prevalence of obesity. (Seidell J.C., 1995; WHO, 2007)

Obesity is associated with high health care costs and economic productivity losses in Europe. (WHO, 2007)

Women in India are able to do more sports or yoga compared to their relatives in Austria

According to the results in this study, the amount of women, who admitted that they do daily sports are more in Austria (28%) than in India (18.1%). The amount of women doing yoga is very similar within both countries.

Commonly, practising sports on a daily basis decreases with age. Mostly women younger than 30 years do sports daily. There is a correlation between the age groups and daily sports. But, for doing Yoga no such correlation to age groups could be found.

This sub hypothesis is rejected, Women in India do less sports and yoga compared to their families and friends in Austria, but it doesn't mean that they are physically inactive. They work very hard on fields and have to walk long distances for their daily need. The migrants in Austria are more affected with the sedentary life style.

Physical inactivity is associated with some chronic diseases and obesity. (Henderson K. A. 2003)

Women who are dependent on their families are mostly illiterate and unemployed.

In this study a statistically significant correlation between education and financial dependency was found. It could be proofed that women who are dependent on their families are mostly illiterate and unemployed. Financial dependency decreases with a higher education level. It is also very important to realize that place of residence, inadequate infrastructure and living status have a high influence on education. Women born in villages are not able to receive suitable education like the women in cities. The correlation between education and birthplace in this study shows a significant result. Subjects born in the city have a higher education than the ones born in a village.

The differences in literacy rates between the rural areas and urban areas are huge. In 1991, the urban female literacy rate was about 64%, which was more than twice that of the rural rate of about 31 %. One of the handicaps in the education system in India is the lack of adequate school facilities. Most of the states in India simply do not have enough classrooms to shelter all of the school-age children. Another barrier could be the lack of female teachers.

In highly gender-segregated societies such as in India, girls need female teachers to attend school and have higher academic achievement. (Velkoff V. A. /Adlakha A., 1998)

The educational level of women influences their reproductive behaviour in many ways such as the use of contraceptives, health and upbringing of their children, proper hygienic practises, and access to jobs. The literacy level has effects onto the status of women in the society.

(Buckshee K., 1997)

A short while ago, a survey in India found that infant mortality was conversely proportional to the mother's educational level. (Velkoff V. A. /Adlakha A., 1998)

Studies show that contraceptive use depends also on place of residence, education, and religion. In comparison to uneducated women, more than half of married women with at least a high school education are more likely to use contraceptives. Muslims have the highest total fertility rate and the lowest contraceptive use in India. Today more than 200 million women are illiterate in India. Furthermore, uneducated women have high levels of fertility and mortality, poor nutritional status, low earning potential, and little autonomy within their families. (Velkoff V. A. /Adlakha A., 1998)

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The questionnaires

Gesundheitssituation der indischen Frauen in Österreich

Bitte kreuzen Sie die zutreffenden Antworten an.

1) Wie alt sind Sie?

2) Welcher Religion gehören Sie an?

- ☐ Hinduismus
- ☐ Sikhismus
- ☐ Islam
- ☐ Christentum
- ☐ Andere:.....

3) Wie viele Kilos wiegen Sie? (in kg)

4) Wie groß sind Sie? (in cm)

5) Wo sind Sie geboren?

Ist diese Ortschaft:

- ☐ ein Dorf
- ☐ eine Stadt

6) Was ist ihr Familienstand?

- ☐ Ledig
- ☐ verheiratet
- ☐ verwitwet

Wenn verheiratet: Seit wann (wie viel Jahre):

War die Ehe arrangiert?

- ☐ ja
- ☐ nein

7) Wenn Ledig/verwitwet:

Möchten Sie (wieder) bald heiraten?

- ☐ ja
- ☐ nein

Wenn nein: warum?.....

8) Haben Sie Kinder?

- ☐ ja
- ☐ nein

Wenn ja, wie viele?

In welchem Alter haben Sie Ihr erstes Kind bekommen?

Wenn nein: möchten Sie einmal Kinder haben?

- ☐ ja , wie viele?.....
- ☐ nein

9) Haben Sie Fehlgeburten gehabt?

- ☐ ja
- ☐ nein

10) Haben Sie ihre Kinder gestillt?

- ☐ ja
- ☐ nein

Wenn ja: Wie lange?

Wenn nicht: Warum?

11) Wie viele Kinder leben heute?

12) Wie alt sind die Kinder Heute?

13) Haben Sie Enkelkinder?

- ☐ ja
- ☐ nein

Schul Ausbildung

14) Haben Sie die Schule besucht?

- ☐ ja
- ☐ nein

15) Ich bin:

- ☐ Nie in die Schule gewesen, kann nicht lesen und schreiben
- ☐ Nie in die Schule gewesen, kann aber lesen und schreiben
- ☐ Nur die 4 Jahre Grundschule besucht
- ☐ Nur 8 Jahre
- ☐ Höhere Ausbildung: Welche?

16) Arbeiten Sie?

- ☐ ja
- ☐ nein

Wenn ja: Was?

Wenn nicht:

- ☐ Studentin
- ☐ Schülerin
- ☐ Hausfrau
- ☐ Arbeitslos
- ☐ Pension
- ☐ Andere(Karenz, Krank, ..)

17) Sind Sie finanziell von ihrer Familie abhängig?

- ☐ ja
- ☐ nein

18) Wer trägt zur Familieneinkommen bei?

19) Welchen Beruf übt Ihr Ehemann aus?

20) Welche Ausbildung hat ihr Ehemann?

- ☐ Nie in die Schule gewesen, kann nicht lesen und schreiben
- ☐ Nie in die Schule gewesen, kann lesen und schreiben
- ☐ Nur die 4 Jahre Grundschule besucht
- ☐ Nur 8 Jahre
- ☐ Höhere Ausbildung: Welche?

21) Haben ihre Kinder die Schule besucht?

- ☐ ja
- ☐ nein

Wenn nein: Welche Ausbildung haben Ihre Kinder?

Lebenssituation in Österreich

22) Seit wie viel Jahren leben Sie in Österreich?

23) Wieso sind Sie nach Österreich ausgewandert?

- ☐ aus familiären Gründen (Ehemann, bzw. Kinder waren zuerst in Österreich)
- ☐ andere (schlechte Wirtschaftslage in Indien, politisch verfolgt in Indien, usw.)

24) Wie gut können Sie Deutsch?

lesen

- ☐ sehr gut
- ☐ gut
- ☐ schlecht
- ☐ sehr schlecht
- ☐ gar nicht

Sprechen

- ☐ sehr gut
- ☐ gut
- ☐ schlecht
- ☐ sehr schlecht
- ☐ gar nicht

25) Gehen Sie zum Arzt mit Begleitung anderer?

- ☐ ja, warum
- ☐ nein

26) Arbeiten Sie?

- ☐ ja
- ☐ nein

Wenn ja:

- ☐ Geringfügig (..... std./Woche)
- ☐ Teilzeit (.....std./Woche)
- ☐ Vollzeit

Ist ihre Arbeit eine:

- ☐ sitzende Tätigkeit
- ☐ stehende Tätigkeit

Wünschen Sie sich ihre Tätigkeit zu ändern?

- ☐ ja
- ☐ nein

27) Wie groß ist Ihre Wohnung/Haus?²m

28) Wie viele Leute leben mit Ihnen in gemeinsamen Haushalt?

Fragen zur Essgewohnheiten

29) Wie stark denken Sie an Ihre Gesundheit beim Essen?

Ich ernähre mich:

- ☐ Sehr gesund
- ☐ Normal, denk nicht immer daran
- ☐ Ziemlich ungesund
- ☐ Sehr ungesund
- ☐ Weiß nicht

30) Kochen Sie selber?

- ☐ ja
- ☐ nein

Wenn ja: Wie oft kochen Sie am Tag?

31) Sind Sie Vegetarier?

- ☐ ja
- ☐ nein

Wenn nein: Seit wann essen sie Fleisch?

Wie oft Essen Sie Fleisch in der Woche?

32) Wie oft essen Sie Gemüse in der Woche?

33) Trinken Sie indischen Tee?

- ☐ ja
- ☐ nein

Wenn ja:

- ☐ Mit Zucker
- ☐ Ohne Zucker

Wie viele Tassen am Tag?

34) Trinken Sie Cafe?

- ☐ ja
- ☐ nein

Wenn ja:

- ☐ Mit Zucker
- ☐ Ohne Zucker

Wie viele Tassen am Tag?

35) Wie oft kaufen Sie in der Woche Lebensmittel ein?

36) Worauf achten Sie beim Kauf der Lebensmittel?

- ☐ Qualität
- ☐ Preis
- ☐ nicht so genau

37) Wo kaufen Sie Ihre Lebensmittel ein?

- ☐ Supermarkt
- ☐ Gemüse/Fleisch-Händler

38) Wie viele Mahlzeiten nehmen Sie zu sich am Tag?

- ☐ 2-mal
- ☐ 3-mal
- ☐ mehr als 3-mal

39) Als Beilage essen Sie immer:

- ☐ nur Reis
- ☐ nur Roti
- ☐ nur Kartoffel
- ☐ alle, abwechselnd

Wenn Roti: Wie viele Rotis pro Mahlzeit?

Roti:

- ☐ immer mit Butter
- ☐ selten mit Butter
- ☐ ohne Butter

40) Trinken Sie Alkohol?

- ☐ ja
- ☐ nein

Wenn ja, seit wann?

Wie oft?

41) Rauchen Sie?

- ☐ ja
- ☐ nein

Wenn ja , seit wann?

Wie viele Zigaretten am Tag?

Fragen zur Gesundheitszustand

42) Wie würden Sie zurzeit Ihren Gesundheitszustand selbst beurteilen?

- ☐ sehr gut
- ☐ gut
- ☐ schlecht
- ☐ sehr schlecht
- ☐ weiß nicht

43) Haben Sie einen hohen Blutdruck?

- ☐ ja
- ☐ nein
- ☐ weiß nicht

Wenn ja: Wie oft messen Sie ihren Blutdruck in der Woche?

Nehmen Sie dagegen Medikamente?

- ☐ ja
- ☐ nein

Blutdruck messen!

44) Haben Sie irgendwelche Beschwerden, kronische Erkrankungen, usw.

- ☐ ja, welche
- ☐ nein

45) Haben Sie schon Operationen gehabt?

- ☐ ja
- ☐ nein

Wenn ja, wie oft?

46) Gehen Sie regelmäßig (einmal im Jahr) zur Gesundenuntersuchung?

- ☐ ja
- ☐ nein

Wenn nein: Warum nicht?

Kennen Sie die Gesundenuntersuchung?

- ☐ ja
- ☐ nein

47) Wenn Sie krank werden, gehen Sie gleich zum Arzt?

- ☐ ja
- ☐ nein

48) Gehen Sie regelmäßig zur Gynäkologischen Untersuchungen?

- ☐ ja
- ☐ nein

Wenn nein: Warum?

49) Verhüten Sie?

- ☐ ja
- ☐ nein

Wenn ja: wie?

50) Hatten Sie eine Abtreibung?

- ☐ ja
- ☐ nein

Wenn ja: wo haben Sie die den Angriff durchgeführt?

- ☐ Im Spital
- ☐ im privat Klinik
- ☐ andere (Zuhause,...)

51) Nehmen Sie zurzeit regelmäßig Medikamente ein?

- ☐ ja
- ☐ nein

Wenn ja: Welche:

52) Gehen Sie sich regelmäßig Impfen?

- ☐ ja
- ☐ nein

Wenn ja: welche?

53) Treiben Sie Sport?

- ☐ ja
- ☐ nein

Wenn ja: Wie oft in der Woche?

54) Machen Sie Yoga?

- ☐ ja
- ☐ nein

Wenn ja: Wie oft?

55) Sind irgendwelche Allergien bekannt?

- ☐ ja
- ☐ nein
- ☐ weiß nicht

Wenn ja: machen Sie etwas dagegen?

- ☐ ja
- ☐ nein

56) Leiden Sie unter Diabetes?

- ☐ ja
- ☐ nein
- ☐ weiß nicht

Wenn ja, seit wann?

57) Haben Sie Knochenbrüche gehabt?

- ☐ ja
- ☐ nein
- ☐ weiß nicht

Wenn ja, wie oft?

58) Haben Sie hohe Cholesterin Werte?

- ☐ ja
- ☐ nein
- ☐ weiß nicht

Women's health in India

1) How old are you?

2) Which religion do you belong to?

- ☐ Hinduism
- ☐ Sikh
- ☐ Islam
- ☐ Christianity
- ☐ Others:.....

3) What is your weight? (in kg)

4) How tall are you? (in cm)

5) Where are you born?

This place is:

- ☐ a village
- ☐ a city

6) What is your marital status?

- ☐ single
- ☐ married
- ☐ widowed
- ☐ divorced

If married: How long (in years):

Was your marriage arranged?

- ☐ yes
- ☐ no

7) If single/widowed/divorced:

Would you like to marry (again)?

- ☐ yes
- ☐ no

If not: short reason?.....

8) Do you have children?

- ☐ yes
- ☐ no

If yes, how many children?

At what age did you get your first child?

If not: Would you like to have kids?

☐ yes, how many?.....

☐ no

9) Did you have miscarriages?

☐ yes

☐ no

10) Did you feed your baby with breast?

☐ yes

☐ no

If yes: How long?

If not: Why?

11) How many of your children are living today?

12) How old are they?

13) Do you have grandchildren?

☐ yes

☐ no

Education

14) Did you go to school?

☐ yes

☐ no

15) I:

☐ have never been to school and cannot read and write.

☐ have never been to school but can read and write.

☐ attended only the first 4 years (Primary school)

☐ only primary and secondary (8 years)

☐ higher education, please explain?

16) Are you employed?

☐ yes

☐ no

If yes, please describe your duties.

If not:

- ☐ student
- ☐ pupil
- ☐ house wife
- ☐ retired
- ☐ else: (illness, jobless, maternity leave, ..)

17) Are you financially dependent on your family?

- ☐ yes
- ☐ no

18) Who is responsible for the family income?

19) What is your husband's occupation?

20) Your Husband's education:

- ☐ He has never been to school and cannot read and write.
- ☐ He has never been to school but can read and write.
- ☐ He attended only the first 4 years (Primary school)
- ☐ only primary and secondary (8 years)
- ☐ higher education, please explain?

21) Has your children attended the school or still attending?

- ☐ yes
- ☐ no

If not: What is their occupation?

22) How big is your house/flat?²m

23) How many people are living with you (in the same household)?

Eating Habits

24) How important is for you to have healthy meal?

- ☐ I always try to eat healthy food.
- ☐ Usually, I don't think too much about it.
- ☐ often unhealthy
- ☐ very unhealthy
- ☐ don't know

25) Do you cook by yourself?

- ☐ yes

- ☐ no

If yes: How often a day?

26) Are you vegetarian?

- ☐ yes
- ☐ no

If not: When did you start eating meat?

How often do you eat meat in a week?

27) How often do you eat/cook vegetables in a week?

28) Do you drink chai?

- ☐ yes
- ☐ no

If yes:

- ☐ with sugar
- ☐ without sugar

How many cups a day?

29) Do you drink coffee?

- ☐ yes
- ☐ no

If yes:

- ☐ with sugar
- ☐ without sugar

How many cups a day?

30) How often do you buy food (vegetables, fruits, meat,..etc) a week?

31) What is important for you?

- ☐ Quality
- ☐ Price
- ☐ don't know, I don't care

32) How many meals do you eat in a day?

- ☐ twice
- ☐ 3-times
- ☐ more than 3 times

33) As a side dish with your sabji, who always eat:

- ☐ rice
- ☐ roti
- ☐ potatoes
- ☐ all of them, take turn

If roti: How many roties per meal?

Roti:

- ☐ always with butter
- ☐ seldom with butter
- ☐ without butter

34) Do you drink alcohol?

- ☐ yes
- ☐ no

If yes, how old were you, when you started to drink alcohol?

How often?

35) Do you smoke?

- ☐ yes
- ☐ no

If yes: If yes, how old were you, when you started to smoke?

How many cigarettes a day?

Health Situation

36) How would you evaluate your current health status?

- ☐ very good
- ☐ good
- ☐ bad
- ☐ very bad
- ☐ I don't know

37) Do you have a high blood pressure?

- ☐ yes
- ☐ no
- ☐ I don't know

If yes: How often do you measure your blood pressure in a week?

Do you take some medicines against high blood pressure?

☐ yes

☐ no

38) Do you have any health complaints, chronic disease, etc.?

☐ yes

☐ no

If yes, please explain:

39) Did you have any operations?

☐ yes

☐ no

If yes, how often?

40) Do you go for a complete health check up once a year to a doctor?

☐ yes

☐ no

If not: Please explain?

42) If you fall ill, do you visit a doctor?

☐ yes

☐ no

43) Do you go to a lady doctor for an ordinary check up?

☐ yes

☐ no

If not: Please explain?

44) Do you use contraceptive (protection against pregnancy)?

☐ yes

☐ no

If yes, which kind of?

45) Did you have an abortion?

☐ yes

☐ no

If yes, where did you have the abortion?

- ☐ at a hospital
- ☐ in a private clinic
- ☐ somewhere else (at home,...)

46) Do you take any other medicines regularly?

- ☐ yes
- ☐ no

If yes: Which ones?

47) Do you go regularly for vaccination?

- ☐ yes
- ☐ no

If yes: what kind of?

48) Do you go for daily sport?

- ☐ yes
- ☐ no

If yes, how many times in a week?

49) Do you practice yoga?

- ☐ yes
- ☐ no

If yes, how many times in a week?

50) Are there any known allergies?

- ☐ yes
- ☐ no
- ☐ I don't know

If yes: Do you take some actions against it?

- ☐ yes
- ☐ no

51) Do you suffer from diabetes?

- ☐ yes
- ☐ no
- ☐ I don't know

If yes, when (at what age) did it start?

52) Did you break your bones?

- ☐ yes
- ☐ no
- ☐ I don't know

If yes, how many times?

53) Do you have high cholesterol level?

- ☐ yes
- ☐ no
- ☐ I don't know

Curriculum vitae

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SCHUL- UND BERUFSBILDUNG

- 2007-2011 Studium an der Universität Wien: Anthropologie
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