HEALTH, LIFE-STYLE AND QUALITY OF LIFE AMONG FOREIGN STUDENTS OF GRODNO STATE MEDICAL UNIVERSITY IN BELARUS AND KAUNAS UNIVERSITY OF MEDICINE IN LITHUANIA

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SUMMARY

HEALTH, LIFE-STYLE AND QUALITY OF LIFE AMONG FOREIGN STUDENTS OF GRODNO STATE MEDICAL UNIVERSITY IN BELarus AND KAUNAS UNIVERSITY OF MEDICINE IN LITHuANIA.

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Aim of the study. To investigate and evaluate the health, health behavior, quality of life, use of health care services of international students of the Grodno State Medical University (GSMU) in Belarus and to compare these data with similar study data conducted among international students from Kaunas University of Medicine (KMU) in Lithuania.

Objectives. 1. To evaluate health and health behavior profile of international students of GSMU in Belarus. 2. To investigate the needs and use of health care services by the international students of GSMU. 3. To analyze the quality of life of foreign students and to find its interrelations with health behavior. 4. To compare self-rated health, lifestyle, QoL, use of health services of international students from GSMU and KMU.

Methods. Data for the study were collected through a cross-sectional survey of students from 1st and 6th year of studies aged 17–26 years old studying at the GSMU in Belarus. This survey was carried out between October 2009 and January 2010. Questionnaire forms were distributed through the assistance of local research assistance among the students. In total, 297 questionnaires were distributed and 250 respondents have returned properly filled in forms (response rate was 84.1%). The questionnaire had 56 questions about student’s health, lifestyle, quality of life and health care with WHO QoL questionnaire (WHOQOL-BREF, 1996) being part of it. In comparative analysis we used data of similar study (the same methodology was applied), which was conducted in 2008/2009 in KMU by master’s student Vlada Breskutė. The statistical analysis was performed using the SPSS 11.0 statistical data processing package. $\chi^2$ test was used to evaluate the statistical differences. Statistical difference $p < 0.05$ was considered significant.

Results. Studies showed that female students have a better lifestyle habit than the male in relation to smoking and alcohol intake but this better lifestyle habit than the male students appears not to have influenced their self-rated health due prevalence in physical activities and regular eating habit is less than the male students. In GSMU, among the foreign students, 93.0% of the male and 88.0% of the female foreign students have rated their health positively (either good or very good),
respectively KMU students self-rated health positively 92.8% in males and 94.2% in females. During the survey, good percentage of foreign students in Belarus were on rational diet with 76.4% of them eating at least 3 times a day though only 12.6% eat 4 or more times daily. However, only 44.4% of total student consumed daily fresh fruit, 39.1% consumed salad, fresh fruits and cooked vegetables, dairy products 52.2%, meat/ sausage products 63.6% but only 8.1% consumed sea/sea food on daily bases. However in 10.9% of the students in GSMU eats less than 3 times a day as against 43.8% of the foreign students from KMU. Addictive behaviors were moderately prevalent among the total foreign student in GSMU: 9.2% smoked regularly (25.2% from KMU), 34.0% (20.3% from KMU) smoked several times a week. While 2.0% (30.2% from KMU) of the male are regular alcohol consumers none of the female foreign student gave affirmative response to consumption of alcohol on regular bases as against 21.7% of the female students from KMU (p>0.05). This result shows that while we have less regular smokers in GSMU than KMU, we have more occasional smokers in GSMU than KMU. Healthier lifestyle has been associated with higher QoL and so found that foreign students who were physically active had a higher QoL in the field of psychology, as compared with low physical activity. Students with regular meals intake had higher QoL in physical health than occasional students with irregular meals. Non-smoking students exhibited better physical health QoL than those who smokes as well as between students who take alcohol and those who do not. The average QoL score among students was ranged from 13.86 (environmental domain) to 15.32 (social relation domain) and the overall average quality of life score was 14.09. The QoL of students depends on health behavior factors such as physical activity, hence students who are physically inactive and eat not regularly have lower QoL score than those who were physically active and eat regularly. Foreign students in GSMU (90.5%) and KMU (71.6%) gave QoL assessment as good and very good. Between genders statistically significant differences were found. Quality of life score in all domains depends on the level of self-perceived QoL: the lower self-assessment of students QoL, the lower the score in all domains. The highest QoL indicators were found in social relations and psychology in both Universities. In KMU, the highest QoL indicators set of social relations (14.5 points) and psychology (13.7 points) in the fields. In GSMU, the highest QoL indicators set of social relations (15.3 points) and psychology (14.9 points) are found, indicating that foreign students in GSMU arm or active. In similar sequences, QoL is lowest in students of lower courses, while highest among the sixth year students both in both Universities. During the last 12 months before the survey 27.3% kept various appointments with the dentist at least from GSMU against 41.1% from KMU. About 91.7% of the foreign students have health insurance against 98.3% of those from GSMU. In GSMU, majority of the
students were not satisfied with the health service (42.3%) unlike in KMU where majority were satisfied. Good relationships between doctor and patient were reported by 74.6% vs. 50.6% of respondents respectively from GSMU and KMU. According to the students in KMU, the lack of information (44.4%) and availability of health services (23.4%) are problems faced by them. While in GSMU, health Services availability (42.3%) and quality (31.8%) and health care accessibility (38.4%) was mentioned.

**Conclusions.** During the course of the survey, a healthier lifestyle has associated with higher QoL. General health of foreign students based on self-assessment is positive as majority assessed theirs health and QoL as good or very good among in GSMU (93.0% of the male and 88.0% of the female) and in KMU with majority of foreign students (92.8% of the male and 94.2% of the female) gave the same assessments. Arriving to study abroad also has a significant role in improvement of their health even as majority lives not a very healthy lifestyle (healthier lifestyle has been associated with higher QOL). Addictive behaviors were moderately prevalent among the foreign student in GSMU: 9.2% smoked regularly (25.2% from KMU), 34.0% (20.3% from KMU) smoked several times a week. While 2.0% (30.2% from KMU) of the males were regular alcohol consumers, none of the female foreign student gave affirmative response to consumption of alcohol on regular bases as against 21.7% of the female students from KMU (p>0.05). This result shows that while we have less regular smokers in GSMU than KMU, we have more occasional smokers in GSMU than KMU. In Belarus, 42.3% of the students were not satisfied with the healthcare services and it is one of the problems facing foreign students there. Other health problems includes: health care accessibility (38.4%) and health care service quality (31.8%). Health problems reported by foreign students in Lithuania were: insufficient information (44.4 %) and non availability of health services (23.4%).Majority of foreign students hold a valid health insurance in Lithuania (91.7%) and in Belarus (98.3%).

**Key words:** foreign students, self-rated health, lifestyle, smoking, alcohol, diet, physical activity, quality of life, health care services.
LIST OF ABBREVIATIONS

QoL – Quality of life
WHO – World Health Organization
UNICEF – United Nations Children Educational Fund
OECD – Organization for Economic Co-operation and Development
HIT – Health system in transition
GP – General practitioner
USAID – United States Agency for International Development
SHIF – State Health Insurance Fund
SODRA – State Social Insurance Agency (in Lithuania)
GSMU – Grodno State Medical University
KMU – Kaunas University of Medicine
TSMU – Tajik State Medical University
BMI – Body mass index
CI – confidence interval
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KEY TERMS AND DEFINITIONS

High school students: students enrolled under the study of sequential programs, including doctoral candidates and postgraduate art.

Quality of life (QoL): is a multi-level and amorphous concept, which reflects both macro societal and socio-demographic influences and also micro concerns, such as individual’s experiences, circumstances, health, social well-being, values, perceptions, and psychology. It is thereby a collection of interacting objective and subjective dimensions (Lawton 1991).

Personal health care: state licensed individuals and legal persons, with the aim to give timely diagnose to different individual medical conditions and prevention and to assist with recovering and reinforcement of health.

Public health: the science and art of protecting and improving the health of communities through education, promotion of healthy lifestyles and research for disease and injury prevention. Public health helps to improve health and well-being of people in local communities and around the globe. It helps to prevent health problems before they occur.

Additional (voluntary) health insurance: an insurance contract contains personal health care services are reimbursed under this contract after the occurrence of additional (voluntary) health insurance an insured event.

Health: defined as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO 1948).

Healthcare: defined as “the prevention, treatment, and management of illness and the preservation of mental and physical well-being through the services offered by the medical and allied health professions” (Farlex medical dictionary).

Health Promotion: the process of enabling people to increase control over, and to improve, their health. It moves beyond a focus on individual behavior towards a wide range of social and environmental interventions. It is a core function of public health and contributes to the work of tackling communicable and non-communicable diseases and other threats to health (Bangkok Charter 2005).

Lifestyle: it is a common way of life, which is based on the mutual relationship between living conditions in the broad sense and individual behavior, which is influenced by socio-cultural factors and human personal properties. Habits and customs of the population exposed, as appropriate, encourage the concomitance of socialization throughout life. Diet lifestyles, physical
activities, tobacco and liquor use, drugs, sexual and other life habits. All of these affect health (Ottawa Charter 1986).

**Health Lifestyle:** according to European health-21 target 11 healthier living by the year 2015, health lifestyle has three distinct definitions:

1. A way of living that lowers the risk of being seriously ill or dying early. Not all illness and disease is preventable. However, a large proportion of deaths, particularly those from coronary heart disease and lung cancer, can be avoided. Scientific studies have identified certain types of behaviour that contribute to serious illness and early death. This booklet aims at helping you to change your behaviour and improve your health so that you and your family live healthier, longer lives.

2. A way of living that helps you enjoy more aspects of your life. Health is not just about avoiding a disease or illness. It is about physical, mental and social well-being too. This booklet aims at helping you decide to make healthier choices in your lifestyle, which will give you more opportunity to enjoy more aspect of your life for longer living.

3. A way of living that helps your whole family. When you adopt a healthy lifestyle you provide a more positive role model for other people in your family, particularly children. You will also create a better environment for them to grow up in. By helping them to follow a healthier lifestyle you will be contributing to their wellbeing and enjoyment of life now and in the future (WHO 1998).
INTRODUCTION

Rising demand on higher education worldwide has resulted in increased student mobility from one country to the other. According to Organization for Economic Co-operation and Development (OECD), roughly 2.5 million students study outside of their home country. This increases to about triple the figure in 1980. Some estimates suggest that the number of the international students will rise up to 7 million by 2020 (OECD Higher Education Conference Ontario 2010). According to the who "health for all in the 21st century" program, quality of life (QoL) among populations can be improved if the monitoring of health potential and QoL; active participation of individuals in community activities and formulation of health policy in particular are encouraged; access to health prerequisites, especially education, improved; healthy lifestyles are accepted as a social norm; greater emphasis is imposed on the QoL at primary, secondary and tertiary levels of health care (WHO 1998).

Higher academic studies of young people started as soon as completed high school, with its own way already formed habits, lifestyle, health and approach to care. The first year of studies in the higher institution is however, a very important period of change as many are just leaving their parents for the first time into a University environment where they are to study, communicate and be part of activities of vital importance to their well-being and health. During this period, they face new challenges, which are capable of changing their attitudes, behaviors and lifestyle for either good or bad. Also, the Bangkok Charter for Health Promotion in a Globalized World set out four key (income and status disparities in and between countries, Climate change, Urbanization and Globalization) commitments to address the factors influencing public health and to attempt to meet the United Nation’s call for health for all (WHO 2005).

Improving the health of young people is one of the World Health Organization (WHO) policy 'Health 21' targets. In 1996, England started a movement to promote health among University students (Cromley et al. 1990; Cashin et al. 2002). This movement was based on Ottawa Charter philosophy and principles of health promotion, equality, support, solidarity and empowerment of the university community to take care of health of their students. It is therefore a necessity to embark on concept for action that promotes health among the University Students. The University is a centre of learning and development, with roles in education, training and research, creativity and innovation, provides a setting in which students develop independence, learn life as a resource for and a partner in local, national and global communities and lastly, a
university is a business – increasingly concerned with its image, performance and balance sheets within a competitive market (Tsouros et al. 2008).

All these roles provide opportunities for universities to affect the health and wellbeing of its members and outside communities and to contribute to the knowledge and empowerment. The success of the Health Promoting Universities movement depends on its ability to integrate a commitment to health within the policies and practice of universities. It is necessary; however, to be realistic about what health gains can be realized, given the constraints within which universities now operate (Tsouros et al. 2008). These actions should be aimed at providing adequate welfare for the students.

Human welfare is closely related to their health, thus the significant differences between socio-economic groups, and the income difference between the groups of which accumulates in a variety of risk factors for health and reduces the possibility of a better quality of life (QoL) (Prapiestis 2003). Like in Lithuania health care for foreigners in Belarus is not free. All foreign students have a special student health insurance cover (a form of collectivism by means of which they collectively pool their risk of incurring medical expenses). In Kaunas Medical University, foreign students are all options for treatment in the Kaunas university clinics or private institutions which have entered into contracts with health insurance agencies. In Belarus, the university has its own clinics and students are attended to by their own doctors.
THE AIMS AND OBJECTIVES

Aim:
To investigate and evaluate the health, health behavior, use of health care services of international students of the Grodno State Medical University in Belarus and to compare these data with similar study data conducted among the international students from Kaunas University of Medicine in Lithuania.

Objectives
1. To evaluates health and health behavior profile of international students of GSMU in Belarus.
2. To analyze the needs and use of health care services by the international students of GSMU.
3. To analyze the quality of life of foreign students and to find its interrelations with health behaviour.
4. To compare self-rated health, lifestyle, QoL, use of health services of international students from GSMU and KMU.
1. LITERATURE REVIEW

1.1. Students health, lifestyles and relationship to quality of life

Based on WHO estimates of experts, we can say that the health of 20% of the world population is being determined by genetic factors, 20% by habitation, while 10% by medical devices and the greatest influence on human health 50% is by individual lifestyle. Obviously, there is the need to actively take care of the quality of living environment, live healthy lifestyles, promote health and adapt to various prevention methods. Lifestyle habits and customs of the population exposed, as appropriate, encourage the concomitance of socialization throughout life: diet lifestyle, physical activity, tobacco and liquor, drugs, sexual and other life habits. All of these affect health (Ottawa Charter 1986). Age is one of the factors that influence lifestyle. A young man has a tremendous impact on adopted lifestyle in preparing himself for the future.

Learning in a higher institution is not an easy endeavor for young ones going by changes in their body physiological growth, change in environment, the increased mental workloads, and often by "freedom" from their parents and family. Becoming independent in this period of life encourages responsibility and partial if not control over individual life, enabling the emergence of a healthy lifestyle (World Bank Statistical Handbook 1993). However, researches shows that many students, lives unhealthily and adopt risky behavior by not having enough exercises, eat unhealthy, smoke, use alcohol and other drugs (Dinger et al. 1997; Wechsler et al. 1993&1997; Gladiolus et al. 2001). Researchers analyzed the health of students, especially those in the first year of studies, and noted the more rapid morbidity, negative life changes in the rate of growth compared with other population groups (Proškuvienė et al. 2006).

In order for students to live healthy, healthy lifestyle habits need to be developed during childhood. The school has the greatest impact on children's lifestyle compared with other social institutions, and is an ideal place for this to happen (Cotugna et al. 2005). Medical University students (future doctors) - in the future will be responsible not only for their patients health but also for their own beliefs, habits, behavior and health and if they will not abide normal lifestyle, it will be risky to the health of themselves and patients (Breskute 2009). Researches on student lifestyle can help to adjust and improve their health.

It is therefore, advisable to live a life with lower risk of being seriously ill or dying early. Not all illness and disease is preventable; however a large proportion of deaths, particularly those
from coronary heart disease and lung cancer, can be avoided. Scientific studies have identified certain types of behavior that contribute to serious illness and early death. This studies aims:

1. To help you to change your behavior and improve your health so that you and your family live healthier and longer life.

2. To help you enjoy more aspects of your life. Health is not just about avoiding a disease or illness. It is about physical, mental and social well-being as well.

3. To help your whole family as when you adopt a healthy lifestyle you provide a more positive role model for other people in your family, particularly children. You will also create a better environment for them to grow up in. By helping them to follow a healthier lifestyle you will be contributing to their wellbeing and enjoyment of life now and in the future.

1.1.1. Health

Good health is vital to human welfare, not only for healthy living but as well in sustaining both economic and social development, therefore health aside from being the level of functional and/or metabolic efficiency of an organism, can be said to be the general human condition from all ramifications in combination of physical, mental, and social well-being (referred to as the Health Triangle). The WHO Ottawa Charter of November 26, 1986 on Health Promotion identifies health as a resource for everyday life, and not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. According to same charter, the fundamental conditions and resources for health are: peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice, and equity.

The understanding that health is not synonymous with absence of disease or infirmity, led the World Health Organization (WHO) to define health as a state of complete physical, mental and social well-being. This definition has been broadened to one that recognizes and incorporates the complex interaction of factors which operate at the individual and population levels, including the social, economic and cultural environments (Oladimeji 2008). In compliance with this WHO definition of health, “as a full comprehensive physical, emotional and social well-being and not merely the absence of disease or disability” (WHO 1948), we can therefore, say that physical health is optimal functioning of the human body (physically fitness), and individual emotional stability (mental well-being) as individuals with behavioral difficulties cannot be emotionally stable and thus cannot be said to be healthy based on this definition.
Academic environments, mental well-being, financial status, health behaviors, diet habits, health attitudes, health care services and accessibility all have important influences on individual health of the students. Also among the students, studies show that health status and physical fitness have a significant impact on their mental alertness and academic success. Nevertheless, negative effects as a result of students health behavior cannot be under-estimated. Health behaviors such as smoking, alcohol, and drug-abuse also have adverse effect on health and academic performances of students who indulge in them. Students who uses drugs stands the risk of having reduced attention spans, lower investment in homework, lower grades, more negative attitudes towards school, increased absenteeism, and higher drop-out rates. Students who had little or no substance involvement performed better than their peers who had even low levels of alcohol or drug use. Health is therefore, a resource or capacity for everyday life that makes people pursue their goals, acquire skills and education, and grow within the spectrum of a range of social, economic and physical environmental factors that contribute to health (Health Canada 1998).

1.1.2. Lifestyles and health promotions

Health promotion plays an important role on individual towards producing or maintaining his/her health with the evidences of the importance of healthy lifestyles as overwhelming as the social determinants approach offering the knowledge into understanding the role of individuals as agents contributing to their own health and that of their immediate environment. According to the WHO, new research conducted in Iran shows that lifestyle changes in diet and levels of physical activity improve the health of entire communities. Results of the research have appeared in the January issue of the Bulletin of the World Health Organization. In the research project – called “A Healthy Heart” – mass media was used to educate people about healthy nutrition, food labels, the introduction of half portions in fast food restaurants and healthy snacks in schools and encourage people to undertake physical activity; the government announced automobile-free days and built bicycle lanes in cities.

In addition, smoking was banned in the workplace. Diet, physical activity and smoking behavior were assessed annually for four years in the intervention areas and for three years in the control area. Changes were most notable in the diet of the research participants. In one area, 14 % of participants had a healthy diet at the beginning of the study. This increased to 30 % after four years. Time spent on leisurely physical activity increased from 81 minutes to 181 minutes per week. Smoking declined but not significantly. According to Dr. Tim Armstrong from the WHO
Department of Chronic Diseases and Health Promotion, non-communicable diseases such as cancer, cardiovascular disease and diabetes account for 35 million deaths each year. This is 60% of all deaths. Moreover, these diseases have common risk factors: tobacco use, inappropriate diet and physical inactivity.

By avoiding these risk factors in the first place, by preventing the risk factors, we can prevent the majority of deaths due to those diseases. On lifestyle-related chronic diseases, believe that prevention is the best answer to the problem. We can prevent these diseases by small changes in people's behavior. For example, 30 minutes of moderate physical activity each day, that is the equivalent of a brisk walk, can reduce your risk of a heart attack by up to 50%. Increasing your fruit and vegetable consumption can reduce your risk of colon cancer by up to 50%. So these changes are real, they are achievable. What we as WHO, and of course governments are encouraged to, do is to create the policies and the environment for people to be able to make these small choices. The health benefits are there, they are real, they are measured and they are cost effective.

1.1.3. Alcohol consumption and smoking

Immoderate use of alcohol can cause problems in the family, at school, work and with friends. There is a gradual increase in the number of foreigners who arrive for studies in Belarus every year. It has been suggested that immigrants sometimes are faced with different cultural believes, and turmoil and they experience change in culture. Some might use alcohol, especially in a society where alcohol use is not prohibited (Bloomfield et al. 2005). High level of harmful alcohol use in the society calls for the necessity of carrying out preventive measures aimed at early diagnosis of alcohol related problems, with subsequent consultation and therapeutic intervention (Welcome et al. 2008).

It has been suggested that alcohol problems might greatly defer among students of different ethnicities in the general Belarusian students population and might show unexpected high prevalence in respect to the period of stay in this country (especially for students who came from countries where alcohol use against cultural and religious norms). The suggestion that alcohol problems might show increase in prevalence, especially among foreign students is however, subject to criticism (Davenport et al. 1994).

Smoking is more prevalent among men, but in recent times, there has been a rise in smoking among young women. In Belarus, many measures are taken to discourage smoking, like banning the advertisement of tobacco on television and radio from 07:00 to 22:00, prohibiting its
advertisement on the first and last pages of newspapers or magazines or at or near sports centres or public health facilities. Among students in Belarus and Lithuania, smoking likewise has been banned in the Universities areas and of course study rooms. Since 2007 February under the Republic of Lithuania Law on Tobacco Control, ban was placed on the use of tobacco and similar products in public areas: education, health care institutions, Internet cafes, where there is indoor sporting events, public transport, restaurants, cafes, bars and other catering establishments clubs, discos, except for specially installed pipe or cigar clubs (Ministry health, Lithuania Tobacco Control 1995).

1.1.4. Quality of life

The WHO “Health for all in the 21st Century” programme proposed that the QoL of the world population can be improved by the monitoring of health potential and the promotion of adequate QoL. It encourages active participation of individuals in community health actions and formulation of required health policies, improvised health education, individual healthy lifestyles habit; greater emphasis on QoL at primary, secondary and tertiary levels of health care (Health 21 1998).

Table 1. Taxonomy of quality of life definitions

<table>
<thead>
<tr>
<th>Type</th>
<th>Name of type</th>
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<tbody>
<tr>
<td>I</td>
<td>Global definitions</td>
</tr>
<tr>
<td>II</td>
<td>Component definitions:</td>
</tr>
<tr>
<td></td>
<td>(type IIa: non-research-specific)</td>
</tr>
<tr>
<td></td>
<td>(type IIb: research specific)</td>
</tr>
<tr>
<td>III</td>
<td>Focused definitions:</td>
</tr>
<tr>
<td></td>
<td>(type IIIa: explicit)</td>
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<tr>
<td></td>
<td>(type IIIb: implicit)</td>
</tr>
<tr>
<td>IV</td>
<td>Combination definitions</td>
</tr>
<tr>
<td>B</td>
<td>Lay definitions</td>
</tr>
</tbody>
</table>

QoL is a multi-level and amorphous concept, which reflects both macro societal and socio-demographic influences and also micro concerns, such as individuals experiences, circumstances,
health, social well-being, values, perceptions, and psychology. It is thereby a collection of interacting objective and subjective dimensions (Lawton 1991).

Global definitions (type I) appear to be the most common type of definitions of the concept of QoL. They usually incorporate ideas of satisfaction/dissatisfaction and happiness/unhappiness. For example, Abrams (1993) defined QoL as the degree of satisfaction or dissatisfaction felt by people in various aspects of their lives, and Andrews (Campbell et al. 1976) related it to the extent to which pleasure and satisfaction characterize human existence. Similarly, Dalkey and Rourke (1973) described it as an individual sense of well-being, his satisfaction or dissatisfaction with life, or his happiness or unhappiness (Farquhar 1995). However, some argued that happiness and satisfaction are conceptually different, stating that satisfaction implies a judgmental or cognitive experience, while happiness suggest an experience of feeling or affect.

Therefore, QoL has also been defined more subjectively in terms of individual’s own evaluation of their life experience (Andrews; Campbell et al. 1976). Similarly, Hanestad (1990) considers that QoL concerns the individual person’s experience of his her own life and life situation, with QoL reflecting the individual’s well-being. Component definitions (type II) are those which break QoL down into a series of component parts or dimensions, or identify certain characteristics deemed essential to any evaluation of QoL. All these dimensions could contribute to type I definitions. Component definitions can be further subdivided into those component definitions that are not (type IIa) and those that are (type IIb) specific to the research topic. Underline dimensions, two of which are objective and two of which reflect the personal judgment of the individual.

The objective dimensions are general health, functional status, and socioeconomic status. The dimensions reflecting the personal judgment of the individual or subjective evaluations are life satisfaction/related measures, and self-esteem/related measures. Paterson (Patterson 1975) described the key QoL dimensions as health, function, comfort, emotional response and economic. One example of a research-specific component definition can be found in Clark and Bowling (Clark et al. 1989) observational study of QoL in nursing homes and long stay wards for the elderly. They state that QoL is not limited to functional ability, level of activity, mental state and longevity, but encompasses the concept of privacy, freedom, respect for the individual, freedom of choice, emotional wellbeing and maintenance of dignity’.

Focused definitions can be explicit (type IIIa) or implicit (type IIIb). Explicit focused definitions are found in papers which use terms such as ‘health related quality of life’ or micro-economic definitions of QoL itself. For example, Gillingham and Reece (1979) describe a microeconomic definition of QoL. They assume that the QoL for the individual is the level of
satisfactions he achieves as result of his consumption of market goods, leisure, public goods, and other physical and social characteristics of the environment in which he is located. A recent example of implicit focused definitions was in a paper on the assessment of QoL in clinical trials by Cox et al. (Cox et al. 1992). They did not define QoL, but they operationalized it in terms of health and functional status measures; in such context it would be more suitable to use the term ‘health related quality of life’ rather than ‘quality of life’ itself (Novik et al. 2004).

1.2. Health care system, policies and health problems in Belarus and Lithuania

1.2.1. Health care system in Belarus

Access to healthcare in Belarus is universal and healthcare is free at the point of use. Patients are assigned to medical centers based on their place of residence. The state is the biggest employer of the medical staff; each citizen is entitled to a medical check-up (usually once a year). The Ministry of Health is in charge of managing the health sector through health departments belonging to the Regional and Minsk Municipal Executive Committees. The 1993 healthcare law maintains that public spending on healthcare should not be less than 10 percent of the national income. All citizens in Belarus have the right to free health care in state-funded institutions (The Health Systems in Transition on Belarus 2008). Foreign students are covered under the health insurance scheme. The main aims of the Ministry of Health are as follows:

- Implementation of a state policy in the field of public health;
- Provision of medical care in the republic, provision of the state-guaranteed free medical care at the state health care institutions;
- Preventive activities, formation of healthy lifestyle, public health education;
- Provision of favorable sanitary-and-epidemiological conditions for the population;
- Continuous improvement of the quality of medical care as well as the increase of its efficacy (Ministry of Health RB 2009).

In addition to state-run institutions, medical care is also provided by departmental agencies and privately-owned (non-state) health care companies. Sanitary and epidemiologic examination of the population in Belarus is performed by a network of state-owned health care institutions, the main one being the National Hygiene, Epidemiology and Health Protection Center. At the local
level, sanitary and epidemiologic services are provided by oblast, town and district hygiene and epidemiology centers.

1.2.2. Health policies and finances in Belarus

According to the Health Systems in Transition (HiT) profile reports on Belarus in 2008, promoting people’s health care, enhancing the quality of medical services and improving the health care system are top priorities of Belarus’s state policy. The Belarusian health system aims to provide the entire population with universal access to care, which is free at the point of use. While there has been equity in receiving health services, distribution of health staff and facilities has been un-even between rural and urban areas. Efforts to reorient financial resources from the hospital sector to primary care and to introduce technical efficiency have been slow. Since provision of healthcare services is primarily ensured by the state, it uses general taxation to raise necessary funds. Majority of them come from revenues of state-owned enterprises rather than payroll taxes. Also, while Ministry of Health is the key player and main regulator, it is the local authorities which ensure funding for healthcare.

Since independence from the soviet union, health expenditure patterns remained similar to those under the prior Semashko system (implemented in every socialist country where health facilities were owned by the State and health professionals were paid by the State with free of charge but patients were asked to pay a lump sum for some services such as pharmaceuticals). While levels of total health expenditure and public sector expenditure remained relatively stable. Social health insurance has not been introduced in Belarus, and the system is mainly funded by the State through general taxation and some out-of-pocket payments. In March 2007 Belarus adopted a Law on organ and tissue transplantation. The Law provides for free-of-charge international exchange of organs and tissues if appropriate donors and recipients are found and in April 2008 Minsk ninth city hospital, doctors performed the country’s first two liver transplantation surgeries utilizing cutting-edge technologies.

Unlike most other countries in Europe, employees are not required to contribute to the health budget. All citizens and registered residents of Belarus are entitled to a wide-ranging package of free health care benefits in state-funded institutions. Medicines prescribed for outpatients, some dental services including false teeth, cosmetic surgery, spectacles, visits to health resorts and some preventive examinations will incur costs. The government decides what each group of society receives in terms of health services, hence, Citizens who belong to vulnerable groups of society e.g. pregnant women, war veterans, diabetics and tuberculosis patients do not have to pay any charges (Health care in Belarus 2010).
1.2.3 Health problems in Belarus

According USAID report of 2010, Circulatory disease and cancer are the leading causes of morbidity in Belarus with many Belarusians still linking health problems to the Chernobyl disaster of 1986. Reproductive health is another concern in Belarus which has one of the highest rates of abortion in the region. Tuberculosis and HIV rates continue to be of concern and TB a major focus in USAID assistance (USAID Belarus 2010). According to reports, the scenario of healthcare in Belarus mirrors the legacy of Soviet healthcare system. This has led to a unique problem of cheap and easily available healthcare-but specialized higher level of healthcare is almost non-existent. The large numbers of medical colleges have resulted in a large number of medical professionals plying their recognized expertise in the country. The large numbers of medical professionals have also resulted in the lower pay of doctors and other allied medical practitioners. The lower pay has resulted in lesser adherence to standard medical codes.

There are many other problems in Belarus healthcare. The formal system of healthcare in Belarus suffers from an inherent inequality of service in the urban and rural areas. Quality healthcare in Belarus is found to be concentrated around urban areas, where purchasing powers are higher. Rural areas see lesser private healthcare investments. The number of chemist shops noticeably decreases as one goes from urban to the rural areas of the country. The use of traditional or 'home made' remedies also add to the dismal nature of the formal insurable healthcare system in Belarus.

1.2.4 Health care system in Lithuania

Reports from the WHO health care system in transition on Lithuania said that significant changes in the health care system have been prompted by two major factors:

1. The appearance of a third party payer in the form of a statutory health insurance system.
2. Enforcement of legislation redefining property rights and the status of health care institutions.

In Lithuania public health care institutions are financed by the Statutory Health Insurance Fund (SHIF). Property rights and administrative functions fall under the jurisdiction of the central government (Ministry of Health), its ten county branches (the county administration), or the 56 municipalities. The Ministry of Health is responsible for general supervision of the entire health care system. It is strongly involved in drafting legal acts and issuing the consequent regulation for the sector and also controls few health care facilities (Health Care system in transition on Lithuania 2000). The Ministry of Health has an overall responsibility for the public health
system’s performance until the decline in scope of directly administered health care institutions, maintenance and development of tertiary health care became the focus of the administrative activities of the Ministry of Health, it now shares responsibility for running two major Lithuanian teaching hospitals with the State Vilnius University and the Kaunas Medical University. It also through the State Public Health Centre it manages the public health network including ten county public health centres with their local branches (in total 50 institutions). The State Public Health Centre has subordinate bodies to deal with prevention of communicable diseases, health education and other public health functions.

1.2.5. Health Policies and finances in Lithuania

The Ministry of Health develops a public health care infrastructure by establishing state programmes aiming at the achievement of key health targets and by making decisions together with Ministry of Economy and Ministry of Finance on major investment projects. Regulation and control of work safety conditions are the responsibility of the Ministry of Social Security and Labour while the Ministry of Health is in charge of the performance of occupational health care providers. At the regional level each of the ten counties has a county governor who is appointed by the Lithuanian Government and is responsible for implementation of state policy in a number of spheres including health care. The health care function is carried out by the post of County Physician. Some health care providers (county hospitals, specialized health care facilities) are governed by the county administration.

Decision-making in this network of providers requires participation of the Ministry of Health. The counties are in charge of enforcement of the state health programmes in their respective regions. The municipalities are responsible for providing primary health care to their local populations. They have been granted property rights for outpatient facilities and nursing homes. Municipalities are engaged in running small and medium sized hospitals within their localities, in accordance with legislation which has delegated this function to them. A decentralization process defining the health care facilities’ subordination to the county or municipality was launched three years ago. This has not yet been completed, as there are still discussions on who (counties or municipalities) should be responsible for medium-sized hospitals, and how administrative responsibilities should be allocated between the different levels.

The position of Municipality Physician has been established with supervisory and decision-making authority in the field of primary health care. Moreover, municipalities have a wide range of responsibilities in the implementation of local health programmes and improvement of public
health activities. Local health care infrastructure, until 1996, was organized and financed in a pyramid fashion. Municipal hospitals were at the top of the administrative and financing pyramid, below which were specialized local medical institutions and village hospitals, followed by ambulatories and finally health posts at the bottom. The picture of the outpatient institutions’ network has since changed significantly as a result of the process of separation of facilities (most commonly, polyclinics and ambulance services) from hospitals. Currently, various outpatient models are in use in municipalities.

The majority of primary health care services are provided by primary health care centres since 1997, which specialize in primary health care provision, in contrast to polyclinics which provide both primary and secondary outpatient services. A statutory health insurance scheme was first implemented in Lithuania in 1991 but became limited in scope between 1991 and 1995, covering pharmaceuticals and spa care which were partly reimbursed through a general social insurance scheme. This scheme was administered by the SODRA and supervised by a tripartite council consisting of representatives of the Government, the trade unions and employers’ organizations. In 1992, the State Sickness Fund, a kind of purchasing agency under Ministry of Health supervision was established by the government, and was financed by the Ministry of Health.

Between 1992 and 1996, the State Sickness Fund’s role was to finance the recurrent costs of health care institutions on the basis of contracts with prospective payments. In 1997, the functions and responsibilities of the SODRA were transferred to the State Sickness Fund, alternatively known as the SHIF, in accordance with the 1996 Law on Statutory Health Insurance. This law established a separate social insurance scheme covering health care expenditures, to be administered by the State Sickness Fund and its ten regional branches, the territorial sickness funds (one such fund for each county). A scheme of cash benefits for sick leave and maternity (as well as pensions) is now administered by SODRA.

Until 1997 the statutory health care system in Lithuania was mainly tax-funded, with the greater part of financial resources coming from local budgets and the remainder from the national budget. Generally, local budgets were (and still are) formed from taxes collected within their respective territory. Some taxes (e.g. property and land taxes) passed directly to the local budget. Others were transferred to the central government from where they were redistributed on the basis of a number of criteria. These included the total population and the population density. The historic rate of expenditure per capita was also an important criterion. This takes into account the actual social infrastructure network within particular groups of municipalities.
A Law on State Social Insurance was adopted in May 1991. This is an obligatory, single-insurer scheme. Under it, a number of health related payments were made to defray expenses of preventive and curative medical treatment. These are reimbursement of the costs of pharmaceuticals prescribed during The outpatient treatment and re-imbursement of the costs of sanatorium vouchers scheme also paid compensation to blood donors and reimbursed transportation (for medical purposes) expenses to the disabled. The scheme was SODRA, under the authority of the Ministry of Social Security and Labour. Its financial resources were separate from the state budget. A wide network of territorial branches collected social insurance contributions and paid out benefits.

1.2.6. The change to health insurance system in Lithuania

In the cause of development of the Health Insurance Law, several approaches to health insurance were looked into. The prevailed idea was that of a statutory insurance scheme regulated by the State Sickness Fund and ten territorial sickness funds (one for each county), financed through a fund that was separate from the state budget. The Law on Health Insurance was adopted in May 1996. Enforcement of the law has occurred first in January 1997, and subsequently since July 1997. According to the health insurance legislation, all of the country’s residents are to have health insurance coverage. The State Sickness Fund is similar to SODRA in organization with a national office and regional branches, but with different functions. SODRA is responsible for the provision of pension benefits, as well as maternity and sick leave benefits. In addition, it is responsible for the collection of all social insurance contributions which finances the three branches of social insurance:

1. Pensions, maternity and sick leave benefits;
2. Statutory health insurance administered by the State Sickness Fund and the territorial sickness funds and unemployment benefits administered by the Labour exchange.

Employers transfer a certain percentage of personal income tax and contribute a certain percentage of the payroll tax, self-employed persons contribute a proportion of their personal income tax, and farmers cover themselves and their adult family members by paying a percentage of their declared income. Though the main responsibility in payment for health care has been transferred to the State Sickness Fund, the reforms in Lithuania have retained some basic principles of financing based on general taxation.
1.2.7 Health care problems in Lithuania

Apart from major health problems needing attention in Lithuania like, trauma, accidents, communicable diseases and mental health (Lithuania ministry of health), ethical problems has been described as a factor that needing attention not only in Lithuania but globally. In undertaking any health care reform, it is important to clarify the ethical problems they may engender (Callahan 2002; Roberts et al. 2002; Fung H et al. 1999; Špalek et al. 2000). According to study carried out on ethical problems in Lithuanian health care (Jakušovaitė et al. 2005), analyses health care ethics into two levels:

1. The micro level (the ethics of doctor-patient relationships);
2. The macro level (the ethics of health policy-making, which can be realized by applying the principles of equal access, reasonable quality, and affordable care and shared responsibilities).

Till this day, healthcare ethics at the micro level appears dominant though need has arises for us to shift attention from the micro level to the patterns of managing and delivering care, managing the health care resources, and conducting business practices. By refocusing on healthcare ethics at the macro levels, we not only increase accessibility but as well as equalities, and quality. Management improvement is a way of easing out ethical problems in health care. This would ensure satisfaction for the patients needs for the same expenditure. However, the actual administration of health care institutions does not meet the patients’ needs. The results of the qualitative study on healthcare ethical problem in Lithuania led to identify reasons for dissatisfaction of patients and division of ethical problems in the Lithuanian health system into:

1. The system level: dissatisfaction with the health care reform, bureaucracy, difficulty in getting the specialist, and high cost of services.
2. The institutional level: deficiencies in provision and quality of service, long queues, waiting, lack of medical equipment, and inadequate quality of the health care service.
3. The individual level: deficiencies in Physicians attitudes and skills and work, lack of attention, information, responsibility, negligence and rudeness.

Another problem pointed out by both physicians and patients is the quota of reimbursed medicines and services. Until 1990, the entire pharmaceutical sector was state-owned. In 1991, Lithuania decided to harmonize its standards with those of Western Europe, which favored the opening of the Lithuanian market to more expensive drugs produced in the European Union. At the same time, it has prohibited cheaper imports from the former USSR and other countries, as these did not meet European GMP standards. Because of the strong lobbyism of rich manufacturers of brand-name medicines, it is difficult for generic medicines to take a stronger position within the market (Jakušovaitė et al. 2005). According to the data of the State Sickness
Fund, the expenditures of Lithuanian population for medicines in 2003 were ~65%, while the expenditure of the State Sickness Fund for reimbursed medicines was 35%. Other ethical problems include: illegal (informal) payments, inequalities in health and shortage of professional as a result competition between the private and public sectors.
2. MATERIAL AND METHODS

2.1. Survey procedures and sampling

Survey was conducted in 2009 among the students of Grodno State Medical University in Belarus. Data for the study were collected through a cross-sectional survey of students of 1st and 6th year of studies at the University. Cross-sectional study design was adopted for the studies. Participants were questioned after being given the full understanding of the purpose of research coupled with their consent to partake in the study. The ages of the students ranges between 17 and 35. In the order of year of studies, participated students in their 1st year of study represents 61(24.5%), 2nd year 40 (16.1%), 3rd year 41(16.5%), 4th year 29 (11.6%), 5th year 46 (18.5%) and 6th year 32 (12.9%).

During the survey in GSMU, Belarus, I personally with the assistance of local research assistants, have distributed copies of the questionnaire and collected the information. This survey was conducted between October 2009 and January 2010. Respondents from India, Sri Lanka (Ceylon), Pakistan, Turkmenistan, Lebanon, Syria, Ghana, Ethiopia, South Africa and Nigeria were covered by questionnaire survey. Questionnaire forms were distributed by the academic group leaders among the students. In total, 297 questionnaires were distributed and 250 respondents have returned properly filled in forms (response rate 84.1%).

2.2. Questionnaire and variables

The survey questionnaire was based on similar international experiences and research studies included in these matters. The questionnaire was made in English. The questionnaire (see Annex 1) covered 56 questions about student’s health, lifestyle, quality of life and health care (included both closed and open-ended questions). WHO QoL questionnaire (WHOQOL-BREF, 1996) was a part of it. The following six main groups of questions were included into the instrument:

- Socio-demographic data;
- Lifestyle (physical activity, its frequency, duration of the diet, harmful habits – frequency of alcohol consumption, smoking regularity);
- Health complaints and psychosomatic and physical illnesses;
- Attitudes to health;
- Questions about the quality of life;
- Questions about health care.
Data were gathered based: student age, gender, country of origin, year of studies, accommodation, financial status and several questions on individual life styles. Health care questions have been translated into English from its Lithuanian version. All discrepancies were consistent. The questionnaires completed on some issues reflect students' socio-demographic data. Profiles section "Quality of life was drawn, using the WHO QOL questionnaire (WHOQOL-BREF, 1996). This reduced the WHO QOL questionnaire (WHOQOL-100) format, which consists of 26 questions. Shortened QOL questionnaire covers four areas of QOL: physical health, psychological, social relationships and environment, and depends on health-related QOL questionnaire group.

2.3. Statistical analysis

Estimates of the parameters such as the mean of QoL score in each domain, correlation between domains were available in the computer program package, SPSS version 11.5. Also, we were interested in factors that had an effect on QoL scores and conducted an analysis of variance with the paired comparisons. An SPSS syntax file provided by WHO automatically checks recodes data and computes QoL domain scores. This transformation method converts QoL scores to range between 4 and 20. The mean score of items within each domain was used to calculate the domain score. The four domain scores denoted an individual’s perception of QoL in each particular domain. Domain scores were scaled in a positive direction, i.e. higher scores denote higher QoL. Standard deviation (SD) as a measure of dispersion around the mean was calculated. Reliability analyze was used to study the properties of the WHOQOL-BREF measurement scale and the items that make up them.

Good reliability was found among the 26 questions of WHOQOL – BREF (Cronbach's alpha was 0.83). The Bivariate correlation procedure was computed by Pearson’s correlation coefficient (r). It is the measure of linear association. For quantitative, normally distributed variables, the correlation coefficient varies between -1 (a perfect negative relationship) and +1 (a perfect positive relationship). For the significant of difference between the compared values was calculated p value as a level of significant. There are the levels of significant: p<0.05; p<0.01; p<0.001. In our research we have used the first level of significance.
3. RESULTS

3.1. General characteristics of surveyed students in GSMU

The socio – demographic of respondents who took part in the questionnaire is presented in the table 2 according to their age, year of studies in the University and country of origin. In all, it was given to a total of 297 foreign students. During this period of survey, 250 data were analyzed consisting of 150 (60%) males and 100 (40%) females.

Table 2. Demographic characteristics of the foreign students according to age, gender, year of studies and countries of origin in GSMU

<table>
<thead>
<tr>
<th>Variables and other characteristics</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age mean (X ±SD)</strong></td>
<td>22.0 ± 2.47</td>
</tr>
<tr>
<td><strong>Gender:</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>150 (60)</td>
</tr>
<tr>
<td>Female</td>
<td>100 (40)</td>
</tr>
<tr>
<td><strong>Course:</strong></td>
<td></td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; course</td>
<td>61 (24.5)</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; course.</td>
<td>40 (16.1)</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt; course</td>
<td>41 (16.5)</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt; course</td>
<td>29 (11.6)</td>
</tr>
<tr>
<td>5&lt;sup&gt;th&lt;/sup&gt; course</td>
<td>46 (18.5)</td>
</tr>
<tr>
<td>6&lt;sup&gt;th&lt;/sup&gt; course</td>
<td>32 (12.9)</td>
</tr>
<tr>
<td><strong>Country of origin:</strong></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>78 (32.5)</td>
</tr>
<tr>
<td>Mauritius</td>
<td>39 (16.3)</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>35 (14.6)</td>
</tr>
<tr>
<td>Pakistan</td>
<td>19 (7.9)</td>
</tr>
<tr>
<td>Maldives</td>
<td>19 (7.9)</td>
</tr>
<tr>
<td>Ghana</td>
<td>10 (4.2)</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>8 (3.3)</td>
</tr>
<tr>
<td>Lebanon</td>
<td>5 (2.1)</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2 (0.8)</td>
</tr>
<tr>
<td>Syria</td>
<td>2 (0.8)</td>
</tr>
<tr>
<td>Africa countries</td>
<td>16 (6.8)</td>
</tr>
<tr>
<td>Others</td>
<td>7 (2.8)</td>
</tr>
</tbody>
</table>
3.2. Health complains among foreign students

A good number of the foreign students in Belarus claim not to need medical treatment for daily function. This is represented by 77.2% of the total students surveyed. Among the others, 17.9% said to need medical treatment a little, 3.3% moderately, and those needing medical treatment very much to function daily represent 0.8% and another 0.8% claimed to some extent need medical treatment to function. This shows that majority are in good state of health.

Majority of the students see the doctor at list once at the beginning of the semester for annual medical check-up for blood test, HIV test, urine test, and test for hepatitis, e.t.c. In the past 6 months, 52.2% did not see the doctor at all while 47.8% of total student have seen the doctor at least between one to nine times with reason like reasons: compulsory annual medical check-up for foreigners living in Belarus, headache, flu, stomatitis, tooth ache, sore-throat, fever, gastritis, radiculitis among many others. In a similar manner, majority of students were not hospitalized for any illness within same period with 96.3%, while 3.7 % were hospitalized between one to five times within the period of past one year for several illness like appendicitis, acute respiratory diseases, rhinitis, syphilis and flu among many others are represented in the table below.

3.3. Quality of life and health assessments among foreign students

Investigation among medical students in Grodno shows that they sleep irregularly, at different times of day, sometimes around midnight or even after midnight. They sleep at different times of the day. They also give very little time to eating; eat in haste with more food consumed in the afternoon. Even some takes dinner into the early hour of the following day. According to Steptoe A, 1991 & 1996, 21 European countries carried out a health and lifestyle survey (European Health and Behavior Study) which explored university students “lifestyles and attitudes to health did not analyzed students health status. Twenty – one European countries after the health and lifestyle survey after which was established among Southern European students” health was better, with the Eastern European students live less healthy lifestyle than westerners. The study showed that the Eastern European students often complain of depression than those in Western Europe, as well as bad habits and differences in physical activity (Petrauskas 2004).

Concentration among the students are as follows: 2.8% concentrate extremely, very much 66.9%, and moderately 26.2%, felt safe a little in their daily lives among the students are 4.2 %, very much 46.2% and moderately 47.8%. Physical environment is said to be extremely healthy by 0.4%, 38.8% very much and moderate amount are 47.6%. For daily activities have complete energy 16.4%, 70.8% mostly, 10.0% moderately while 2.8% claimed to have a little energy for
their daily activities. Completely accepted their body appearances are 63.3%, mostly 25.0% and 8.5% moderately.

Completely informed of various daily activities are 3.6%. This comprises of students with adequate knowledge of Russian language and mostly those from the higher years of studies: 3rd, 4th, 5th and 6th. Mostly informed are 34.8% and moderately 53.6%. 75.6% get around good/very good, 20.7% neither poor nor good and poor/very poor are 3.6%. Some 3.2% of the students said they do not have time at all for leisure activities. Completely got time for leisure activities also represent a very small percentage of 2.4%, mostly 9.6%. However 70.0% of the entire students claimed to have moderate time for leisure activities. Very satisfied/satisfied with themselves represents a very good percentage of the students with 91.9%, neither satisfied nor dissatisfied as 5.7% while 2.8% of them claimed to be very dissatisfied or dissatisfied. General description of foreign students in GSMU is described in figure 1 below.

**Figure 1. Description general health among foreign students in GSMU**

**3.4. Eating habits among foreign students**

Students must realize that a healthy lifestyle is based on physical activity and nutrition consistent and regular five times a day (Healthy lifestyle and nutritional pyramid 2009). Eating the right food and at the right time is a habit that should be encouraged for sustaining healthy life-
style. Eating breakfast helps students perform better during daily lessons, and allows them to learn better all year-round. Students who eat well before taking exams can remember what they’ve learned and think more quickly and effectively too. Eating breakfast also effects student’s long-term health in positive ways, which prepares them to learn well throughout the school year. In respect to food offered in the university 6.5% strongly agreed that there are enough healthy food are offered in the university, 16.9% disagree while 56.5% agrees food offered to be normal. Although irregular meals consumption was reported in 11.5% of the participants, with the vast majority of them (77.2%) eats three times daily, the eating habit among the Students cannot be said to be regular with 11.75% of them eating four or more times daily. This is because, 4-5 times daily eating habit is recommended for a healthy living. Responded to question on how many times they eat daily within the last three months, among the female students 11.3% eat eats two times per day, 81.4% 3 times per day while 7.3% eat four times or more per day. Among the male students, 10.8% eats two times per day,73.0% three times daily while 16.2% eat four or more times a day. Eating habits as regards to daily meal of foreign students are described by figure 2 below.

![Figure 2. Daily meal intake (%) among foreign students in GSMU](image-url)
3.5. Sleeping habits among foreign students

Good health means good sleep and high alertness. Surveys have shown (National Sleep Foundation 2006; Dworak et al. 2007) that internet users spend excessive time at the computer, and have found that the population as a whole is sleeping less hours due to exposure to television programs and computers on the internet (Suganuma al. 2007; Mesquita et al. 2007; Van Den 2004). These are some of the reasons responsible for a less than average of the surveyed students in Grodno having agreed to sleep satisfaction within the past four weeks before taking part in the survey. Some students are awake into the early hour of the next day as result of sitting with computers in majority of the cases. This is similar to their counterparts from Kaunas. Many claimed that not having enough time during the day is the reason they spend more time in the evening with their computers. Among the students, 47 % only admitted to be satisfied with their sleep within the specified period, 16.1% admitted to be very satisfied, 25.7% feel indifferent while 8.8% are not dissatisfied with their sleep. Having enough sleep at least one day of the week among surveyed students is 2 %, two days 3.7%, three days 8.6%, four days 31 %, five days 39.6% and six days 6.1% seven days of the week are 7.8%.

3.6. Moods and self-satisfactions among foreign students

Emotional health should be of concern to all due it role as a phenomenon contributing to life satisfaction. People who are emotionally healthy are in control of their own thoughts, feelings and behaviors. They feel good about themselves and have good relationships with others as well as the ability to keep problems in perspective. Factors associated with students rating their lives positively includes good or excellent health, positive self-esteem, absence of psychosomatic symptoms, positive relationship with parents, lecturers, fellow students, positive on decision making, maintaining a balance between work and play, rest and activity, well integration socially into a new environment etc. Stress and problems in a new environment, with family, work or school can be the cause of emotional disability or make an already existing one worse but only people who are emotionally healthy knows how to keep with either of this two situations. They often know when to see the doctor or get counseled.

Majority of the students in Belarus claimed that in the past four weeks prior to the time of the survey to rarely have negative feelings such as bad mood, despair, anxiety and desperate mood are high with 75.6%, 11.7% of them claimed never to have had such situations, quite often 8.9%, often 2.4% and 0.8% are those who said they are always under this situation. Also within
the same period, 74.2% of the entire students feel their life to be meaningful and have internal fulfillments very much, 1.6% feels same a little and 0.8% feels their lives not meaningful at all.

### 3.7. Quality of life among foreign students

Quality of life generally seems to have a positive result with 90.6% of the total students rated their quality of life to be either of very good or good, 7.7% rated theirs to be either poor or good and 1.6% claimed their quality of life is poor. Describing their quality of life by gender 0.7% of the male and 3.0% students rate theirs as poor. 8.1% of male and 7.1% of the female student rated their quality of life as neither poor nor good are s. Surveys shows that 91.2% of the male students claimed to have good quality of life and 89.9% of the female students. Using the QOL WHO-BREF in the evaluation of their quality of life, 53.8% rate their quality of life as very good, 36.8% as good, 1.6 % as poor and 7.7% rated their health as neither poor nor good.

![Figure 3. QoL (%) among foreign students by gender in GSMU](image-url)
3.7.1. Quality of life score of foreign students by domains and relationship by gender

The QoL scores in each domain are presented in Table 3. The average QoL score domain ranged from 13.86 (environmental domain), 15.32 (social relation domain) 14.88 (psychological domain) to 12.36 (physical health domain) and the overall average QoL score was 14.11. Significant differences in mean QoL score were observed in each domain (p<0.05). Among the foreign medical students, the average of QoL means score in the social domain, which includes personal relations, social support, sexual activity, were significantly higher in overall domains. It might be caused by better personal relationship and stronger social support. Students feel higher companionship, love and support they desire from relationships in their life, commitment approval and availability or practical assistance from family and friends, share responsibility and work together to solve personal and family problems (Ducinskiene et al. 2003).

Table 3. Mean score in four QoL domains among foreign students in GSMU

<table>
<thead>
<tr>
<th>Domain</th>
<th>Minimum</th>
<th>Mean</th>
<th>Maximum</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical health</td>
<td>7.43</td>
<td><strong>12.36</strong></td>
<td>16.57</td>
<td>1.45</td>
</tr>
<tr>
<td>Psychological</td>
<td>7.33</td>
<td><strong>14.88</strong></td>
<td>18.67</td>
<td>1.62</td>
</tr>
<tr>
<td>Social relation</td>
<td>4.00</td>
<td><strong>15.32</strong></td>
<td>20.00</td>
<td>1.92</td>
</tr>
<tr>
<td>Environment</td>
<td>4.50</td>
<td><strong>13.86</strong></td>
<td>17.50</td>
<td>1.88</td>
</tr>
</tbody>
</table>

The beginning of university training is a period of particularly stress. The students belong to a specific group of population whose health, working capacity and emotional status are influenced by such negative factors as high mental strain, lack of time, and low physical activity (Petrauskas 2004). In our study the lowest score assessed social health domain. This was affected by factors which constitute the domain: health and social care (accessibility and quality), socioeconomic status; social support and networks, fatigue, emotional distress, sleep and unfriendly weather. This can be used to give the reason why the lower average QoL in the social domain is lower than the overall average in our study. It is however, highest in the environmental domain. It is possible to determine this by factors capable of affecting social live such as income and social status, race, social support networks, insecurities, social environments, culture, gender and sexual orientation. Strong correlations were found between the physical domain and the psychological domain ($r = 0.37$) Physical as well as social domain ($r = 0.39$), as shown in table 4.
Table 4. Correlation coefficients (r) and QoL domains among foreign students of GSMU

<table>
<thead>
<tr>
<th>Domain</th>
<th>Physical health</th>
<th>Psychological</th>
<th>Social relationships</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical health</td>
<td>1</td>
<td>0.37**</td>
<td>0.25**</td>
<td>0.60**</td>
</tr>
<tr>
<td>Psychological</td>
<td>0.37**</td>
<td>1</td>
<td>0.39**</td>
<td>0.50**</td>
</tr>
<tr>
<td>Social relationships</td>
<td>0.25**</td>
<td>0.39**</td>
<td>1</td>
<td>0.47**</td>
</tr>
<tr>
<td>Environment</td>
<td>0.60**</td>
<td>0.50**</td>
<td>0.47**</td>
<td>1</td>
</tr>
</tbody>
</table>

** p<0.01 - correlation is significant

Quality of life score in all domains depends on the level of self-perceived quality of life: the lower self-assessment of students’ quality of life, the lower the score in all domains. In Lithuania, the highest QOL indicators points are found at social relations (14.5), psychology (13.7), and lowest in physical (11.7) domains. In Belarus: highest in social (15.3), psychology (14.9) and lowest in physical health (12.4). In Tajikistan: highest are in physical and social health with both at 14.3 points and lowest at environmental health domain at 13.2 (Fig. 4). The major determinants of health are socioeconomics determinants, lifestyle and physical environment. Life style related risk factors, acknowledged in the report, are unhealthy nutrition, physical inactivity, tobacco use and use of alcohol and illicit drugs (Steptoe et al. 2002). Denton et al showed that women’s health was more influenced by structural and psychological determinants, while men’s health was more affected by health behavior such as smoking, drinking and physical activity (Denton et al. 2004).
During the study, we defined a mean QoL scores for the surveyed population as the average QoL point of all individuals under various parameters of QoL domains (physical health, psychology, social relationship and environment) in the population. Among the foreign students in GSMU, the table below shows that female students statistically have a significantly lower QoL in physical health (12.07 points) than that of the male (12.55 points) and in the social relationship (14.71 points) to the 15.72 points of the male students ($p < 0.05$) in GSMU. Among the foreign students in KMU, there was no statistically significant difference between the males and female foreign students in their assessment of QoL by the physical and psychological health and social relations and environmental aspects were found. It was conclude that the same number of students between men and women assessed their QoL similar in different areas of QoL (Breskutė 2009).

**Figure 4. QoL domains among foreign students in GSMU, KMU and TSMU**

$p > 0.05$, when comparing GSMU with KMU students
Table 5. Mean QoL (95% CI) among foreign students by gender in GSMU

<table>
<thead>
<tr>
<th>Gender</th>
<th>Quality of life domain</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Physical health</td>
<td>Psychological</td>
<td>Social relationships</td>
<td>Environment</td>
</tr>
<tr>
<td>p</td>
<td>0.012</td>
<td>0.901</td>
<td>0.000</td>
<td>0.512</td>
</tr>
</tbody>
</table>

*p< 0.05, compared between gender

3.8. Quality of life and relationship with lifestyles among foreign students in GSMU and KMU

3.8.1 Quality of life among foreign students and relationship with meals

Eating habits as well as number of times they eat influence their QoL. According to table 6, those who ate three or more times per day in GSMU have a mean QoL social relations (15.49 points), psychological health (15.06 points) and environmental (14.00 points) were significantly higher than those who ate two to times per day at 13.97 points, 13.27 points and 12.57 points unders same domain respectively (p< 0.05). According to Breskutė V (2009), students in KMU who ate three or more times per day, have mean QoL social relations (15.12 points), environmental (13.68 points) and physical health (12.00 points) areas was significantly higher than those who ate two to times per day (equivalent to 13.74 points, 12.42 points and 11.16 points) (p <0.01, p <0.001). Based on this statistics, mean QoL is relatively highest in the social relations domain though slightly higher in GSMU than KMU.
Table 6. Mean QoL (95% CI) among foreign students by daily meals intake in GSMU

<table>
<thead>
<tr>
<th>Frequency of meals per day</th>
<th>Quality of life domain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Physical health</td>
</tr>
<tr>
<td>Up to two times</td>
<td>12.67</td>
</tr>
<tr>
<td>3 and more times</td>
<td>12.31</td>
</tr>
<tr>
<td>p</td>
<td>0.301</td>
</tr>
</tbody>
</table>

*p< 0.05, compared by the frequency of meals

3.8.2. Quality of life and smoking habits among foreign students

In GSMU, according to table 7 students relationship between QoL and smoking those who smokes daily with mean QoL in psychological domain (14.22 points) is lower than those who never smokes (14.90) as well as in social domain at 15.59 points among daily smokers and 14.90 points(never smokes). Students in KMU, shows that students who had never smoked, with the average QoL in physical health (12.01 points) was statistically significantly higher than those who smoked every day (11.26 points) and in some cases (11.08 points) (p <0.05) (Breskutė 2009).
Table 7. Mean QoL (95% CI) according to smoking habit among foreign students in GSMU

<table>
<thead>
<tr>
<th>Smoking</th>
<th>Quality of life domain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Physical health</td>
</tr>
<tr>
<td>p</td>
<td>0.943</td>
</tr>
</tbody>
</table>

*p<0.05, compared by the smoking habits („never“ as reference group)

3.8.3. Quality of life foreign students and relationship with own health assessments and year of studies

In GSMU, according to table 8, more students in the social relationship domain (15.71 points) assessed their health as either excellent or very good, psychological domain (15.53 points), environmental domain (14.71 points) and least at the physical health (12.99 points), (p<0.05) but all were significantly higher than those who assessed their health as average and poor. Likewise in KMU students who assessed their health is excellent and very good psychological QoL average (14.06 points) and environmental (13.70 points) areas was significantly higher than those who assessed their health as average, and poor (p <0.01, p <0.001) (Breskutė 2009).
Table 8. Mean QoL(95% CI) of own health assessment among foreign students in GSMU

<table>
<thead>
<tr>
<th>Health assessment</th>
<th>Quality of life domain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Physical health</td>
</tr>
<tr>
<td>Excellent or very good</td>
<td>12.99*</td>
</tr>
<tr>
<td>Good</td>
<td>11.69</td>
</tr>
<tr>
<td>Fair</td>
<td>10.64</td>
</tr>
<tr>
<td></td>
<td>(9.27 – 12.00)</td>
</tr>
<tr>
<td>p</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*p<0.05, compared by the health assessment

Figure 5. Health assessment of own health by gender among foreign students in GSMU
According to figure 5, foreign students' general assessment shows that 95.3% of the male students in GSMU positively assessed their health, 93.0% of female does same while 10.7% and 4.7% of male and female foreign students gave negative assessments of their health. This shows positive assessments of health by male students than the females.

In GSMU, there was statistically significant difference between 1st – 6th year students in assessing QoL physical health (11.68 points), psychological health (14.49 points) and environmental health (13.81 points) (p<0.05) (table 9) unlike in KMU where according to Breskutė 2009, was no statistically significant difference between 1 – 6 year students in assessing QoL physical health, however, a statistically significant difference between students' assessment of her psychological QoL, social relations and environmental aspects where QoL social relations of the average (16.89 points) was statistically significantly higher rate than the remaining sixth of all other courses, student groups (p <0.001). Environmental and psychological health QoL domains averages (11.86 and 12.35 points) was significantly lower than in the first-year courses for students of other remaining groups (p <0.001).

Table 9. Mean QoL (95% CI) among foreign students by year of studies in GSMU

<table>
<thead>
<tr>
<th>Year of Studies</th>
<th>Physical health</th>
<th>Psychological</th>
<th>Social relationships</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>11.68*</td>
<td>14.49*</td>
<td>15.05</td>
<td>13.81*</td>
</tr>
<tr>
<td>2nd</td>
<td>11.73</td>
<td>14.80</td>
<td>15.15</td>
<td>13.34</td>
</tr>
<tr>
<td>3rd</td>
<td>12.17</td>
<td>15.00</td>
<td>15.58</td>
<td>13.59</td>
</tr>
<tr>
<td>4th</td>
<td>13.12</td>
<td>15.25</td>
<td>15.75</td>
<td>14.59</td>
</tr>
<tr>
<td>5th</td>
<td>12.73</td>
<td>14.47</td>
<td>15.04</td>
<td>13.53</td>
</tr>
<tr>
<td>6th</td>
<td>13.36</td>
<td>15.83</td>
<td>15.67</td>
<td>14.78</td>
</tr>
<tr>
<td>p</td>
<td>0.000</td>
<td>0.000</td>
<td>0.095</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*p<0.05, compared 1-6 year of studies at the university
3.9. Life styles among foreign students in GSMU and KMU

3.9.1. Uses of food and products among foreign students

Study of dietary habits shows that eating and cooking habit among both students in KMU and GSMU are not always in line with nutritional requirements. The used/consumed foods surveyed are classified into Healthy food (meat/sausage product, fish/sea food, dairy/dairy products, cereal/cereal products, fresh fruits, salad/raw vegetables, cooked vegetables) and less healthy/unhealthy (lemonade/soft drinks, sweets, cake/cookies, snacks (chips, peanuts, etc.), fast food/canned food and any alcohol (beer, cider, vine) food products. The term "Healthy" foods are: foods that are low in fat and saturated fat and that containing limited amounts of cholesterol and sodium. If it is a single-item food, it must also provide at least 10 percent of one or more of vitamins A or C, iron, calcium, protein, or fiber (Healthy food label, definition of healthy food label, 2011). Any products that falls below the classified content of the above definition of "Healthy" foods can be classified under either less healthy food or unhealthy foods.

According to Breskute (2009), in Kaunas students eating and cooking habit does not meet the requirements for a healthy diet. Fish that is low in fat and rich in protein are hardly taken by the students. Fruits and vegetables are was one of the largest of the students’ nutritional deficiencies. More girls (46.5%) eat than boys (35.4%). Students also take less of cereal products as almost half of the students take these only 1-4 times a month. On the contrarily, in the United States studies show that 58 % met the recommendations for male and 44 % for female vegetable consumption habits, cereal, respectively, 86 % and 46 %. However with population of boys more than girls, students often eat meat and chicken. Students often than recommended and eat more confectionaries and fast food with the boys eating more fast food more than the girls. Very satisfied with their health are 37.9%, satisfied represented 53.8 % and 5.2 % as neither satisfied nor dissatisfied.

In GSMU, more female student take salad daily more than their male counterparts with 53.5% (male 30.2%), several times daily 41.4% (male 60.4%), between once and four times a month 8.1% (male 5.1%) and those that never took salads in the past one month among female students is represented by 1.3% (male 0.0%) prior to the survey. Fish are low in fat, rich in protein and can replace meat is rarely taken by students in KMU: the majority takes fish 1 – 4 times a month and as its daily intake is low among both genders among students in GSMU. It is taken several times in a week by 78.4% of male and 77.8% of females. Daily intake of dairy products is 54.4% in the male and 52 % of the female students, lemonades/soft drink is taken daily by 46.6% of male students and 34.7% of female students. The intake of cereal products in
male students is high with 81.1% and 74.5% of the male unlike among the foreign students in KMU where students will under-used cereal products with almost half of the students takes these foods only 1 – 4 times a month.

Taking these products several times per week among female students are 17.3%, males 6.1%, once to four times a month in females are 7.1%, males 8.1% and 4.7% admitted to never to have taken this products in females in past one month is 1 % and in the males 4.7%. Vegetables are moderately consumed among the students in Grodno with 58.9% daily consumption among the participants; however, daily consumption of fruit is below the average with 40.8% daily consumption of the total participants.

Percentages of students who never eat vegetables and fruits were respectively within questioned period (0.65% and 0.35%) are very less, the percentage that consumed this essential products is not too encouraging considering the facts that the majority of students was aware of the types of food they should eat in order to have a balanced nutrition. One of the biggest students nutritional deficiencies is the intake of fresh fruit and vegetable consumption. While more female students eat these products and daily basis with (46.5%) than the male students (35.4%) in KMU (Breskutė 2009), it is the opposite in GSMU where cooked vegetable is taken more in the male students, 42.6% and 39.0% among the female students. However, fresh fruits is taken daily by 57.7 % of male students and 60 % of female students. Meat and sausage products are more taken daily by male students with 79.1% with 71.7% of the female taking same products daily.

The term "snack" refers to all foods and drinks taken outside the context of the three main meals (De Graaf 2006). Eating snacks was a common habit among students and its daily consumption among the participants was reported in 78.45% of them with the exception of dates which are taken at one to four times monthly by the students. The intake of daily sweets also is higher in the female students at 53 % (34.5%), several times a day lower in females with 35 % (male 46.6%), as well as percentage of females who take sweets one to four times a month 12.0% (male14.2%) and never to have taken sweet in past one month in the female students represents 0.0% (male 4.7%). More female students take more cakes and cookies in 57.6% of them, and male students with 48.3%. Male students with 81.6% take snacks (chips, peanuts, etc.) daily while 75.3% of females take these products daily. Fast food/canned food are taken very less taken daily by the students (male 5.4% and female 0.0%) but 63.6% of female students takes this product between one and four times monthly while 58.4% of the male takes within same period. Use of food/drink products by student among foreign students in GSMU is represented in table 10.
Table 10. Uses of food and drink products among foreign students in GSMU

<table>
<thead>
<tr>
<th>Food/drinks</th>
<th>Uses (%)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Daily</td>
<td>Several times a week</td>
<td>1 – 4 times a month</td>
<td>Never</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Healthy food</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meat/sausage products</td>
<td></td>
<td>79.1</td>
<td>71.7</td>
<td>14.2</td>
<td>21.2</td>
<td>3.4</td>
<td>6.1</td>
</tr>
<tr>
<td>Fish/sea food</td>
<td></td>
<td>8.1</td>
<td>10.1</td>
<td>78.4</td>
<td>77.8</td>
<td>9.5</td>
<td>10.1</td>
</tr>
<tr>
<td>Dairy/dairy products</td>
<td></td>
<td>54.4</td>
<td>52.0</td>
<td>39.5</td>
<td>43.9</td>
<td>4.8</td>
<td>4.1</td>
</tr>
<tr>
<td>Cereal/cereal products</td>
<td></td>
<td>81.1*</td>
<td>74.5</td>
<td>6.1</td>
<td>17.3</td>
<td>8.1</td>
<td>7.1</td>
</tr>
<tr>
<td>Fresh fruits</td>
<td></td>
<td>57.7</td>
<td>60.0</td>
<td>37.6</td>
<td>32.0</td>
<td>4.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Salad/raw vegetables</td>
<td></td>
<td>30.2*</td>
<td>53.5</td>
<td>60.4</td>
<td>41.4</td>
<td>8.1</td>
<td>5.1</td>
</tr>
<tr>
<td>Cooked vegetables</td>
<td></td>
<td>42.6</td>
<td>39.0</td>
<td>48.0</td>
<td>51.0</td>
<td>7.4</td>
<td>10.0</td>
</tr>
<tr>
<td>Less healthy/unhealthy food</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lemonade/soft drinks</td>
<td></td>
<td>46.6</td>
<td>34.7</td>
<td>39.9</td>
<td>44.9</td>
<td>11.5</td>
<td>19.4</td>
</tr>
<tr>
<td>Sweets</td>
<td></td>
<td>34.5*</td>
<td>53.0</td>
<td>46.6</td>
<td>35.0</td>
<td>14.2</td>
<td>12.0</td>
</tr>
<tr>
<td>Cake/cookies</td>
<td></td>
<td>48.3</td>
<td>57.6</td>
<td>36.7</td>
<td>30.3</td>
<td>12.2</td>
<td>10.1</td>
</tr>
<tr>
<td>Snacks (chips, peanuts, etc.)</td>
<td></td>
<td>81.6</td>
<td>75.3</td>
<td>8.8</td>
<td>7.2</td>
<td>7.5</td>
<td>16.5</td>
</tr>
<tr>
<td>Fast food/canned food</td>
<td></td>
<td>5.4</td>
<td>0.0</td>
<td>32.2</td>
<td>31.3</td>
<td>58.4</td>
<td>63.6</td>
</tr>
<tr>
<td>Any alcohol (beer, cider, vine)</td>
<td></td>
<td>2.1</td>
<td>1.0</td>
<td>39.0</td>
<td>1.0</td>
<td>31.5</td>
<td>13.3</td>
</tr>
</tbody>
</table>

*p<0.05, in comparison males and females

3.9.2 Living conditions, financial situations and funding of studies sources among the foreign students

Majority (86.4%) of the student lives in the student dormitory in GSMU, against 31.3% in KMU. This considered my many as affordable and convenient especially among the new students.
putting into consideration it is a less than 10 minute working distance from the University. 65.9% of the students in KMU live in rented apartments. This is a far cry from the 12.0% of the students from GSMU living in rented apartments. They comprises mainly of students in the upper level of studies. This is represented in the figure 6.

![Figure 6. Places of residence among foreign students during their studies in GSMU](image)

Among the students in GSMU, 41.5% of them claimed to have sufficient amount to support themselves during their studies, 53.6% claim to have mostly sufficient fund, mostly insufficient 3.6% and 1.2% claim to have always insufficient fund. Most of the student derived financial resources from their families from home country. Majority with 81.6% study in GSMU with parents support against 90.9% among the foreign students in KMU. In Belarus, more students study on loan at 40 % (11.5% in Lithuania), 4.8% study on scholarships in Belarus (1.9% in Lithuania). Some students (4.8% in Belarus and 3.5% in Lithuania) also assist themselves with jobs during breaks though this is not sufficient for annual study but its supplements their spending and supports they get from parents while 2.0% undertake jobs during the semester in Belarus and 4.3% in Lithuania. Figure 7 shows funding sources of foreign students in GSMU.
This is one of the biggest health behaviour problems in XXI century in many countries. Findings shows that it has a positive impact on individual health by reducing stress, anxiety, depressive symptoms, improved appearance, increase work ability, self-expression and self-esteem, the ability to create and experience the joy of leisure time and improve sleep. As physical exercise increases nerve connections and blood flow to the brain, it has a positive effect on mental alertness and thus, studies. Indirectly, physical activities has been proven to increase academic performance as it improves emotional health, self-esteem and alertness among the students, all of which are related to improved school performance. It is therefore, of great immense to good QOL.

In GSMU, as in Belarus in the general, sport lesson is a part of the University curriculum with students both native and foreign taking part in this exercises at least two times every week. A total 63.7% of the entire students however, do not take part in vigorous exercise for at least 20 minute, 18.0% once a week, 4.1% three days of the week, while 1.2% of the students takes part six days of the week. Participated in moderate exercise for at least 30 minutes once a week.
among the students are 37.8%, 4.1% three days per week and 1.2% takes part in moderate exercise for at least 30 minutes six days in a week. Majority of the students that takes exercises to strengthen or tone your muscles, such as push-ups, sit-ups are male students. Under these categories, 26.6% takes exercises at least one day of the week, 7.4% three days of the week while 0.8% takes these exercises six days out of the 7 days in week only. On the other hand, it can be argued that there is a lack of physical activity Lithuanian students. Students spend a lot of time sitting with the computer, spending less time not exercise. Every second female and male never does any sports. Women are physically more moderate than men (Breskutė 2009).

Body mass index (BMI) is a measure of body fat based on height and weight that applies to adult men and women.

**BMI Categories:**

- **Underweight** = <18.5
- **Normal weight** = 18.5–24.9
- **Overweight** = 25–29.9
- **Obesity** = BMI of 30 or greater (U.S department of health and human services, national heart lung and blood institute).

Among the entire survey population of students in GSMU, 76.6% of the male foreign students fall within the normal weight range, 6.1% are underweight, 15.5% overweight and 1.4% fall under those classified under obesity. In KMU, among the male students, 62.7% fall under the normal weight category, 0.7% underweight, 32.1% are overweight while 5.1% fall under the obesity category. These results shows that less students are underweight in KMU at 0.7% as against 6.1% at GSMU but the number of overweight male students in KMU is almost twice (32.1%) those from GSMU (15.5%). From the GSMU, a whopping 67.7% of the female students are underweight while only 28.2% are of normal weight, 3.1% overweight and 1.0% fall under the obesity category. In KMU, among the female students, the case is reverse as a very good percentage of them (75.4%) are of normal weight, 10.8% of them are underweight, 13.8% are overweight and none of them falls under the category of obesity. Figure 8 show weight category of foreign students by gender in GSMU. Figure 9 BMI values between foreign students of GSMU and KMU.
Figure 8. Weight category (%) among foreign students by gender in GSMU

Figure 9. BMI values among foreign students in GSMU and KMU
3.10. Smoking and alcohol consumptions among foreign students in GSMU and KMU

Quite some good numbers of students population in GSMU and KMU Kaunas drinks alcohol smokes and vice-versa. This is a lifestyle habit. Some countries noted that the youth smoking prevalence and consumption of alcohol has a tendency to decrease, but in Lithuania study made by adolescents and adult lifestyle change shows that they are more likely to consume alcoholic drinks has led to an increase in smoking among adolescents and women (Goštautas et al. 2006).

![Graph showing smoking habits among foreign students over the last three months by gender in GSMU](image)

*p<0.05, in comparison males and females

**Figure 10. Smoking habits among foreign students over the last three months by gender in GSMU**

Smoking is more prevalent among men, but during the last rise in smoking among young women. It was established that women’s health is more influenced by structural and psychological determinants, while that of men is more affected by health behavior such as smoking, drinking and physical activities (Denton et al. 2004 ). Over the last 3 months prior to the survey in GSMU, among the female, 3.0% of the foreign adopt the habit of smoking daily, 8.0% occasionally, and 89.0% claimed never to have smoked. Among the male students, 13.3% are daily smokers, occasionally 51.3% and 35.4% never smoked (Figure 10). According to the
survey in KMU, one-third of regular smokers in are male and one-fifth is females, while another 25.0% of boys and girls smoke occasionally (Figure 11). Study also showed that every day smoker was 40.4% (43.2% male and 34.8% female, p > 0.05). In KMU more than half (59.6%) foreign student claimed to be non-smokers (65.2% female and 56.8% of male).

![Figure 11. Differences in smoking habits among foreign students by gender GSMU and KMU](image)

*p < 0.05

In Kaunas, students alcohol drinking habits depend on the study area. Male students from Social sciences and humanities drink less beer than those from other faculties. Alcohol consumption rate among male students was independent of the study area. There are differences in girls studying in different fields in wine and beer consumption rates. Girls from technology faculty more often than the other students drink beer. Reasons for this consumption habits however, are not clear (Petrauskas 2004). During the survey, some male students said that they start to take alcohol when they arrived to study abroad. They were not used to do this before arriving to study. This could be an attribute of peer group pressure. In the existing literature on substance use, “peer group pressure” is frequently thought to be an important factor influencing cigarette smoking, alcohol and other drug use. Either measured by means of perceived norms or
through an independent measure of use/approval by the peer group, the association is robust and consistent (Kandel 1980).

*\(p<0.05\), in comparison of males and females

**Figure 12. Alcohol consumption (%) by gender among foreign students during last 3 months in GSMU**

Daily alcohol consumption in KMU was 2.2% as of the time of survey while 2.0% of male students from GSMU form same habit (Figure 13). However, more male students from GSMU take alcohol at least once a week at 62.6% as against 30.2% from KMU. This indicates a more incidence of weekly alcohol consumers among the male students in GSMU. Also, 8.7% of male students in GSMU took alcohol less than once a week; this is higher in KMU at 33.8%. In GSMU, 26.7% of the male students never took alcohol while this is represented by 33.8% of male students in KMU. Among female students, there was no daily record of alcohol consumption, 8.0% of them from GSMU took once weekly, 6.0% less than once a week while 86.0% never took alcohol. In KMU, 21.7% of female students took once weekly alcohol, 30.5% less than once weekly while 47.8% never taken alcohol. There was no recorded daily alcohol consumption among the female students from both Universities. This could be attributed to the stigma the culture attached to alcohol intake in Asian countries (India, Sri lanka, e.t.c) among women. Majority of female foreign students are from these countries.
Figure 13. Significant differences in alcohol consumption (%) among the male and female foreign students in GMU and KMU

3.11. Health assessments and health problems of foreign students

Foreign students general assessment shows that 95.3% of the male students in GSMU positively assessed their health, 93.0% of female does same while 10.7% and 4.7% of male and female assessed their health negatively respectively. It is a similar situation in KMU, 92.8% of the male students assessed their health positively, 94.2% of the female and negatively assessed their health are 7.2% and 5.2% of both male and female respectively (Figure 14).
Very important is the issue of health accessibility - longer hours, the patient has to wait for long time to consultation; this is associated with dissatisfaction. In GSMU, 38.4% of foreign students are satisfied with health care accessibility, 51% neither satisfied nor dissatisfied and another 10.7% are not satisfied with its accessibility. Other problems faced by students in GSMU include health care availability (42.3%) and lack of information (30.0%). In KMU, 36.7% were reported never to have health care services in Lithuania. It can be assumed that they did not have health problems. Another 23.4% are said to be satisfied with availability of health care, 30.3% are not satisfied with health care quality, 2.0% not satisfied with health care accessibility, and 44.4% lack informations on health care.

3.11.1 Dental health care needs among foreign students

Oral health affects more than just the teeth. There are actually many negative effects of bad dental health that can affect your entire body. Dental care effects health and can lead to various health problems if you are not careful to take care of your teeth, gums and mouth. Medically, dealing with gum disease or even cavities can end up contributing to a variety of health problems.
that are quite serious, including diabetes, premature babies, respiratory problems, and even heart
disease. It is however of important use to know about problems associated with bad dental health
and their prevention. It is necessary to take care of our teeth on daily basis and important to take
routine checkups with the dentists to appropriate care the teeth needs. Any dental problem should
be detected early so they can be treated early as well.

After taking a look at how dental care effects health, it is easy to see how important it is to
maintain great oral health. This includes taking care of your teeth on a daily basis, but there is
more to it than that as well. There are many effects of bad dental health that can affect your
overall health, so getting regular dental checkups and taking care of your teeth on a daily basis is
essential. During the last 12 months before the surveyed in GSMU, the percentages of students
that never had appointment with the dentist was 72.7% while 27.3% kept various appointments
with the dentist at least once. Foreign students in KMU had 40.8% of them visiting the dentist at
least once in a year, 45.1% 2-3 times within the year and 12% represents those who visited 1-4
times in a year. This statistics shows that foreign students visited the dentist more in KMU and in
GSMU. This is a good practice.

3.11.2. Health insurance schemes for foreign students

When living, studying or working in Belarus, people may not have the same level of access
to the healthcare system as to the local population. As a foreign national, you will be required to
purchase local medical insurance at the port-of-entry, regardless of any other insurance you might
have. Costs for this insurance will vary according to the length of stay. Health Insurance in
Lithuania is mandatory for the travelers visiting Lithuania from abroad. Health Insurance in
Lithuania dates back to the beginning of 20th century and in October 28, 1928 the first patient
fund was established in Kaunas. In the beginning accumulating the patient fund was difficult but
it began to improve from 1935 onwards. The funds were used to establish the health care
institution in the country and propagated healthy lifestyles of the individuals (Health insurance in
LT 2010).

Among the foreign students that took part in the survey in GSMU, 98.3% of them gave a
“yes” response to the payment of health insurance during all year of studies (Figure 15). In KMU
as well, survey showed that majority (91.7 %) foreign students were covered by insurance with, a
significant 8.3% were reported not insured (Figure 16). The students opinions on cost of health
insurance among the students reflects on their satisfaction of it as well. This is as the result of
many not using the insurance scheme as result good general state of health and so never had the
chance to see its effectiveness. This also leads to a huge 69.1% of them been neither satisfied nor dissatisfied with the scheme. Very satisfied/satisfied represents 19.0% of them and 11.0% of them were dissatisfied /very dissatisfied with the insurance scheme. In KMU, 19.7% of the reported to be completely satisfied with the health care service and half of the students (50.5%) are of average opinion, 19.2% are dissatisfied and another 10.6% very dissatisfied with the health services received. Foreign students’ opinion on the cost of health insurance in Belarus show in figure 17.

Figure 15. Use of health insurance (%) during studies in GSMU by foreign students

*\textit{p}<0.05 in compared GMU students with KMU students

Figure 16. Use of health insurance in GMU and KMU by foreign students
Figure 17. Opinion of foreign students on the cost of health insurance in Belarus
3.11.3 Comparison of lifestyle, quality of life and use of health care services in GSMU and KMU

Tables 11.1 and 11.2 show the health and lifestyle assessment of foreign students in GSMU and KMU.

**Table 11.1 Health and lifestyle assessments by foreign students in GSMU and KMU**

<table>
<thead>
<tr>
<th></th>
<th>GSMU (%)</th>
<th>KMU (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive health assessment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>95.3</td>
<td>92.8</td>
</tr>
<tr>
<td>Females</td>
<td>93.0</td>
<td>94.2</td>
</tr>
<tr>
<td><strong>Addictive behaviours: daily smoking</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>13.3*</td>
<td>43.2</td>
</tr>
<tr>
<td>Females</td>
<td>3.0*</td>
<td>34.8</td>
</tr>
<tr>
<td><strong>Occasionally</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>51.3*</td>
<td>25.0</td>
</tr>
<tr>
<td>Females</td>
<td>8.0</td>
<td>25.0</td>
</tr>
<tr>
<td><strong>Never</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>35.4*</td>
<td>56.8</td>
</tr>
<tr>
<td>Females</td>
<td>89.0*</td>
<td>65.2</td>
</tr>
<tr>
<td><strong>Addictive behaviours: alcohol</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily (only male)</td>
<td>2.0</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>At least once a week</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>62.6*</td>
<td>30.2</td>
</tr>
<tr>
<td>Females</td>
<td>8.0</td>
<td>21.7</td>
</tr>
<tr>
<td><strong>Less than once a week</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>8.7</td>
<td>33.8</td>
</tr>
<tr>
<td>Females</td>
<td>6.0</td>
<td>30.5</td>
</tr>
<tr>
<td><strong>Never</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>26.7</td>
<td>33.8</td>
</tr>
<tr>
<td>Females</td>
<td>86.0*</td>
<td>47.8</td>
</tr>
<tr>
<td><strong>Highest QoL rating</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social relations</td>
<td>15.3 points</td>
<td>14.5 points</td>
</tr>
<tr>
<td>Psychology</td>
<td>14.9 points*</td>
<td>13.7 points</td>
</tr>
</tbody>
</table>

* - p<0.05 between GSMU and KMU students
Table 11.2 Health and lifestyle assessments by foreign students in GSMU and KMU

<table>
<thead>
<tr>
<th>Health services</th>
<th>GSMU (%)</th>
<th>KMU (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td>42.3*</td>
<td>23.4</td>
</tr>
<tr>
<td>Accessibility</td>
<td>38.4</td>
<td>-</td>
</tr>
<tr>
<td>Quality</td>
<td>31.8</td>
<td>-</td>
</tr>
<tr>
<td>Lack of information</td>
<td>30.0</td>
<td>44.4</td>
</tr>
<tr>
<td>Use of dental care services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appointments</td>
<td>27.3*</td>
<td>97.9</td>
</tr>
<tr>
<td>Regular use of medications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regularly</td>
<td>10.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Health insurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health insured</td>
<td>98.3</td>
<td>91.7</td>
</tr>
<tr>
<td>Satisfied by health insurance</td>
<td>19.0</td>
<td>19.7</td>
</tr>
<tr>
<td>Dissatisfied by health insurance</td>
<td>11.0</td>
<td>29.8</td>
</tr>
<tr>
<td>Neither</td>
<td>69.1</td>
<td>50.0</td>
</tr>
<tr>
<td>Opinion on cost of health insurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too expensive</td>
<td>5.0</td>
<td>8.2</td>
</tr>
<tr>
<td>Expensive</td>
<td>34.2</td>
<td>38.0</td>
</tr>
<tr>
<td>Opinion on prohibition alcohol consumption in the Universities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>81.9</td>
<td>65.2</td>
</tr>
<tr>
<td>Opinion on prohibition on smoking in the Universities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>78.2</td>
<td>48.6</td>
</tr>
<tr>
<td>Opinion on change in health before and during arriving to study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Better</td>
<td>23.6</td>
<td>37.1</td>
</tr>
<tr>
<td>Same</td>
<td>67.9</td>
<td>16.3</td>
</tr>
<tr>
<td>Worst</td>
<td>8.5</td>
<td>16.3</td>
</tr>
<tr>
<td>Opinion health care service accessability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied</td>
<td>38.4</td>
<td>31.8</td>
</tr>
<tr>
<td>Opinion health Quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied</td>
<td>32.4*</td>
<td>62.5</td>
</tr>
<tr>
<td>Opinion on patient-doctor relationship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied</td>
<td>50.6*</td>
<td>74.0</td>
</tr>
</tbody>
</table>

* - p<0.05 between GSMU and KMU students
It is evident from the tables, that some health behaviour differences could be observed between foreign students at GSUU and KMU. Male students of GSMU were less involved in smoking but more involved in alcohol drinking. Female students of KMU also smoked more often and used alcohol more frequently. GSMU respondents rated higher availability of health services; however KMU foreign students reported higher satisfaction on quality of health services and doctor-patient relations.
4. DISCUSSION

Belarus is a country with high number of foreign students despite the many barriers and believes that the Russian language is not easy to learn and understand. This can be attributed to the low rate of tuition fees when compared to other university from Western Europe and a not too complicated immigration protocol. It is located between the European Union and Russia; Belarus has maintained the old Soviet health – care system almost intact, which makes it quite different from other transitional countries (Gapova 2002). Even though free health care has been “preserved” in Belarus, the state has undergone some economic and social transformation since 1991, which has led to significant socio-economic disparities compared to the pre-transitional period (World Bank 2009). As the country has been much less open to the international community than its neighbours; data on health, particularly on reproductive health, available for international researchers are scarce and come mainly from official statistics. Therefore, whether growing social inequalities in Belarus have an adverse impact on reproductive health is unknown. Before the breakup of the Soviet Union, Belarus had one of the highest standards of living in the Soviet bloc as shown by life expectancy at birth, infant and maternal mortality rates (World Bank 1993). Despite these good indicators in Belarus, the availability and utilization of health services in the two republics were quite similar. For example, in 1989, physician-population ratio (number of physicians per 100,000 population) for Kazakhstan and Belarus were 396.2 and 357.6, respectively with Alma-Ata (then capital city of Kazakhstan) and Minsk (capital city of Belarus) having evenly higher numbers of physicians per 100,000 population, 899.3 and 690.2, respectively (Cromley et al 1990). After the demise of the USSR, most post-Soviet countries have espoused liberal ideals and embarked on deep societal transformations.

Radical changes unfold before our very eyes, giving a researcher the opportunity to study their impact in a unique natural experiment. Over the course of economic transition, rising inequalities in access to health care have become one of the major concerns in the former Soviet bloc countries (Cashin et al. 2002; Falkingham J; Balabanova et al. 2004; Habicht et al; Kunst 2005). The prevailing social condition in Belarus will assist in understanding more clearly, the differences in QoL, health, health care and health lifestyle with already conducted investigations in Lithuania and perhaps other countries.

The purpose of this study was to assess QoL, use of health care services of international students of the Grodno State Medical University in Belarus and to compare these data with
similar study data of international students from Kaunas university of medicine. Studies over the years have experienced a remarkable increase over recent years. QoL measurement is no doubt a vital tool which enables researchers and health policy makers to see trends in population well-being outside disease levels. It helps evaluate the remote of health and social policies and to determine the rightful allocation of resources to meet the health demand of various population groups in varieties of situations. It is established that the WHOQOL instruments allow the monitoring of policy changes and can access QoL under different situations and population groups (Ducinskiene et al. 2003).
CONCLUSIONS

1. **Health and health behaviour in GSMU and KMU students.** Self-reported health of foreign students was good or very good both among respondents in GSMU (93% of males and 88.0% of females) and in KMU (respectively 92.8% and 94.2%). Addictive behaviours were moderately prevalent among the foreign student in GSMU: 9.2% smoked regularly, 34.0% smoked several times a week. Addictive behaviors were more prevalent among the foreign students in KMU: 25.2% smoked regularly, 20.3% smoked several times a week, while 30.2% of males and 21.7% of the females on regular basis. None of the female foreign students have reported the consumption of alcohol on the regular bases as against 21.7% of the female students in KMU. However, 70.0% of the entire students in GSMU claimed to have moderate time for leisure activities. Also, respectively 38.8% and 47.6% felt their physical environment is very much and moderately healthy.

2. **Health complains and use of health care services.** Majority of the foreign students in Belarus (77.2%) claimed not to need medical treatment for daily function. This shows that majority are in good state of health. Among the others, 17.9% said to need medical treatment a little, 3.3% moderately. Majority of the students see the doctor at least once at the beginning of the semester for annual medical check-up. In the past 6 months, 52.2% did not see the doctor at all while 47.8% of total student have seen the doctor at least between one to nine times with reason like reasons: compulsory annual medical check-up for foreigners living in Belarus, headache, flu, stomatitis, tooth ache, sore-throat, fever, gastritis, radiculitis among many others. In a similar manner, majority of students were not hospitalized for any illness within same period with 96.3%, while 3.7% were hospitalized between one to five times within the period of past one year for several illness like appendicitis, acute respiratory diseases, rhinitis, syphilis and flu among many others. In Belarus, the use of healthcare services however met with the following problems: 42.3% were not satisfied with the service they received, 38.4% show dissatisfaction over health care accessibility and 31.8% not satisfied with health care quality. In Lithuania on the other hand, 44.4% of foreign students reported dissatisfaction towards information dissemination on health services provided and 23.4% were not satisfied with health care availability. Majority of foreign students were insured (self-paid) - 98.3% in Belarus and 91.7% in Lithuania.
3. **QoL and its relation with health behaviour.** Majority of foreign students from both medical universities have rated their QoL as good and very good (respectively, 90.5% in GSMU and 71.6% in Lithuania. It was established quite a good balance in the social and mental state of health of foreign student both from both Universities in Belarus and Lithuania. Male students in Belarus had better QoL than the female while this was the opposite in KMU, where female students have higher scored than the males. It was established that QoL was lower in students of primary courses, while highest among the sixth year students both in Belarus and Lithuania. Foreign students who were physically active had a higher QoL in the psychology domain, as compared with those with low physical activity. Those with regular meals intake had higher QoL in physical health domain than occasional students with irregular meals as non-smoking students exhibited better physical QoL those who smokes and same among students who takes alcohol regularly and those who were not regular consumer of alcohol. This shows the positive interrelation between QoL and health promoting behaviors among foreign students. The highest QoL indicators were found in social relations and psychology in both Lithuania and Belarus. This can be deduced from the highest QOL indicators set of social relations (14.5 points) and psychology (13.7 points) in the fields in Lithuania and in Belarus where the highest QOL indicators set of social relations (15.3 points) and psychology (14.9 points) are found.
PRACTICAL RECOMMENDATIONS

1. It is recommended regular monitory and evaluation of health among foreign students in Belarus and Lithuania with various epidemiological surveys on their health, lifestyle and QoL. Medical check-up by general practitioner should be made compulsory at the beginning of every academic year in KMU to include blood test, urine analysis, biochemical analyses and many others like it is been done in GSMU. This will allow the thorough checking and assurance on the health of both new and new intakes. It would allow early detection of health problems, its prevention and spreading especially among the students living in the dormitory. This would be of immense benefits to the students educational, University and the host community.

2. Health promotion programmes should be created in the Universities which should improve not only quality of life of foreign students but as well as local students. This is necessary to create a conducive atmosphere of learning and improve confidence among the students. Students should be carried along, encourage to take part various decision-making and cooperation with other universities for moral and material benefits to promote measures in reducing student stress during the knowledge assessments.

3. In scheduling students time-table, the Universities should give consideration to recreational, sport activities for the students and give enough breaks to allow students to rest both mentally and physically. In Lithuania, it will be of immense benefit to organize recreational and sport for both home and foreign students as it is among the Belarusian students in form of “physical culture”(physical and health education). It will be a rewarding experience for the student not only to pass through the system, but the system passing through them as well.

4. Foreign students should be provided adequate health care service, improve its availability and its quality and ensure that they get necessary medical information. They should have access to psychologist to relate with whenever in stress. There should be a career and guardian counseling department that provide career guidance as well as moral and social guidance.

5. The results of the work and the findings should be made available to national or local authorities, foreign nationals or organizations representing communities of foreign nationals involved in the study of living conditions and health care improvement projects or seeking better conditions for foreigners in Belarus and Lithuania to help evaluates the preventive health measures designed to promote good health via the deliverance of adequate health care services, quality and availability.
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