ORIGINAL RESEARCH

Heart, Vessels and Transplantation 2023; 7: 43-47
DOI: 10.24969/hvt.2023.368

# Students' attitude towards health in terms of sociological analysis

Lubov M. Yao[1], Linar S. Sabitov[2], Raisa M.Atambaeva[3], Klara H. Karamova[4], Juliana G. Emanova[4], Mikhail K. Yao[1]

[1]Department of Sociology, [2]Department of Constructive design, Institute of Design and Spatial Arts, Kazan Federal University, Kazan, Russia

[3]Department of Hygienic Disciplines, Faculty of Sanitary, Kyrgyz State Medical Academy named after I.K. Akhunbaev, Bishkek, Kyrgyzstan

[4]1Department of Pedagogy, Institute of Design and Spatial Arts, Kazan Federal University, Kazan, Russia

## Abstract

**Objective:** The article is devoted to the analysis of sociological information about the attitude of students to their health.

**Methods:** A sociological survey among students of Kazan educational institutions of Higher Education was conducted in September-November 2020.

**Results:** The study showed low knowledge of students about the main medical indicators of health, the absence of a healthy lifestyle in the system of value orientations, and lack of confidence in the healthcare system.

**Conclusion:** The study results on low knowledge of health indicators suggests that it is necessary to conduct competent educational work on the dissemination of medical knowledge among young people, to examine students more carefully in the course of medical examination, to improve the availability and quality of health services provided to students.

**Key words:** students; health; healthy lifestyle; sociological survey; healthcare system

(Heart Vessels Transplant 2023; 7: 43-47 doi: 10.24969/hvt.2023.368)

### Introduction

The problem of maintaining the health of the younger generation is one of the most important for societies and states. The main contrast between human, society and nature at the present stage is the discrepancy between the intellectual, industrial, technological and creative potential of human and the way and form of his/her attitude to nature and him(her)self. At the beginning of the 21st century, new challenges have emerged: the natural foundations of human existence, globalization, values, ideals, lifestyles of millions of people on all continents are being affected. Information networks only reinforce this process by increasing number of Internet sites that promote violence, pornography, terrorism, national and religious discord. The traditional values – family, children, healthy lifestyle, respect for elders, sympathy for the poor and the weak – are being dropped out of the equation down (1). The opposite is the promotion of a struggle for the legalization of soft drugs, free relationships between people without any obligations, and a life "for yourself". It must be said that, for many years, the normative documents of the education system enshrined the concept of "educational service"; the concept of "education" was removed from teachers' tasks, so teachers were advised not to go beyond the discipline taught, not to discuss with students topics related to political, moral, religious and medical values.

In this changing environment, the health status and its perception in students have been altered (1-8). Recent studies demonstrated that health literacy among college students depends on demographic characteristics, being higher in female, nonsmokers and students enrolled in health studies (5). Health literacy among college students differs by countries of residence as well. Overall, 55% of students have limited health literacy in Ghana (6).

**Address for Correspondence:** Lubov M.Yao, Department of Sociology, Institute of Design and Spatial Arts, Kazan Federal University, 420008, Kazan, Russia **E-mail:** yao_lubov@mail.ru + 79172852079 **ORCID ID:** 0000-0002-0647-1298
**Received:** 09.11.2022 **Revised:** 03.01.2023 **Accepted:** 05.01.2023

Systematic review of 21 studies in demonstrated that low health literacy depends on age, gender, numbers of semesters, course curriculum of studies, parental education, and socio-economic background (7). It is estimated that 90% of students applying to Russian universities have some medical problems (8). Healthcare system changes and COVID-19 pandemics affect health and attitude to health as well. There is a limited knowledge on health attitude and social values of college students.

The aim of this study underlying was to identify the structure of basic social values and students' attitudes to their health as the main social value.

## Methods

This cross-sectional survey study was performed among of the students of humanities specialties of Kazan universities: Kazan (Volga Region) Federal University and Kazan National Research Technological University. These are the largest Kazan institutes, where students of all fields and specialties study. For the survey we selected students of 1, 2 and 3 courses of humanitarian specialties, and in each course the nests were selected - groups, within which a continuous survey was conducted. The sample included 319 students aged between 18 and 21 years. A total of 392 students were to participate in the sample survey. The sample sized was calculated according to Paniotto's formula with a confidence interval of acceptable error of 5%, but since the survey was conducted online through the students' personal accounts, some questionnaires were not filled in, or filled in by 25%, due to which they did not participate in the processing. The type of sampling is non-random, one-stage, purposive and clustered. Purposive sampling is used when the main characteristics of the sampling coincide: in our sample the social characteristic (student), professional (humanities), age (18-21 years; differences of 3 years are not statistically significant; as a rule, in sociological research with a large sampling time step is 5-10 years) coincided. Before the survey, students were informed and their consent was obtained that their data would be used in summary form and only for scientific purposes, thereby removing the ethical issues of medical confidentiality.

A quantitative sociological survey was conducted online among all students participated in the study. The survey included assessment of social values and evaluation of sources of the diseases, including records of diseases, time of diagnosis, seeking physician or hospital care and knowledge of blood pressure, blood sugar and cholesterol levels, their normal values.

## Statistical analysis

Sociological analysis of the array of primary data obtained in the course of the survey was conducted with the help of SPSS Statistics software (IBM, New York, USA). Univariate analysis of the distribution of sociological information as a percentage of the number of respondents was used; bivariate and multivariate distributions and coefficients of contingency of different attributes were not used due to the small sample. In addition, grouping and classification of data were used - a ranked series of responses according to the degree of increase and decrease in the significance of the attribute.

## Results

Analysis of social values in our study demonstrated that students assigned a secondary place to the "health" value after the "equal rights" value (Table 1).

It is interesting to analyze the ranking of social values by students: the "equal rights" value came first – 24.62% of respondents gave it the highest rank of 10.

The second place in the system of social values is occupied by "health" – 19.20% ranked it as tenth. But this value, as well as "family", which turned out to be in the third place with 14.58% of choices of rank 10, is rather declarative. Students understand that health determines the quality of their life, but at the same time to the question of the survey "How often do you consult a physician for illness?" 70.64% responded "rarely", and 20.50% said "never".

In our study only 9.72% of the students surveyed assessed their state of health as "excellent"; 54.44% defined it "good"; 30% - "satisfactory"; 4.44% - "unsatisfactory" (1.39% could not answer). Only 24.77% determined their state of health according to the doctors' diagnosis; the rest – according to poor health, pain syndrome (62.39%); poor appearance (6.42%). Less than 2% of the students surveyed (1.83% of the respondents) identified their diseases during a clinical examination or health checkup. In other words, students feel unwell, experience pain, look bad, but rarely turn to doctors, which indicate either the inability of young people to take care of their health, or the inaccessibility of medical care for students. Of course, neglect for their health is also present, which students honestly wrote about in answering the question of the questionnaire "If you assess your health as poor, what do you think has caused it?" (Table 2).

**Table 1. Social values in students' evaluations, as a percentage of respondents (Ranking in Terms of the Significance from 1 to 10)**

| **Values** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| High earnings, % | 9.17 | 3.15 | 7.16 | 11.46 | 12.03 | 10.89 | 10.03 | 12.89 | 8.88 | 14.33 |
| Career, % | 4.75 | 8.61 | 7.12 | 10.98 | 16.02 | 12.46 | 8.61 | 9.20 | 14.84 | 7.42 |

| Table 1. Continued | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Friendship,% | 2.08 | 4.75 | 12.76 | 12.76 | 14.24 | 12.17 | 12.17 | 12.76 | 9.50 | 6.82 |
| Family,% | 14.58 | 21.57 | 8.16 | 2.62 | 6.12 | 7.00 | 8.45 | 7.00 | 9.91 | 14.58 |
| Health, % | 28.37 | 11.75 | 5.44 | 4.58 | 5.44 | 8.60 | 3.72 | 6.88 | 6.02 | 19.20 |
| Safety, % | 5.11 | 5.11 | 9.91 | 11.11 | 12.31 | 9.91 | 15.32 | 10.51 | 8.11 | 12.61 |
| Stability, % | 5.34 | 6.53 | 12.46 | 12.76 | 9.20 | 10.98 | 13.65 | 11.57 | 10.09 | 7.42 |
| Fairness, % | 4.83 | 12.39 | 12.08 | 7.25 | 6.65 | 11.78 | 12.69 | 12.69 | 15.11 | 10.57 |
| Love, % | 8.96 | 11.04 | 13.13 | 12.54 | 11.39 | 8.96 | 8.36 | 8.06 | 7.16 | 10.45 |
| Equal rights, % | 18.54 | 6.69 | 5.47 | 6.69 | 5.78 | 6.99 | 7.29 | 8.51 | 9.42 | 24.62 |

| Table 2. Students' assessment of the sources of diseases, as a percentage of respondents (Ranking of answers in the descending order of significance) | |
|---|---|
| The neglect of their own health, % | 27.87 |
| Adverse ecological situation in the place of resistance, % | 24.59 |
| Inadequate health care, % | 13.66 |
| Bad heredity, congenital diseases, % | 13.11 |
| Harmful habits (alcohol, tobacco), % | 9.84 |
| Lack of medical knowledge about the functioning of the body, % | 8.74 |
| Something else, % | 2.19 |

As can be seen from the responses (Table 2), students ranked "the neglect of their own health" that does not correspond to the high ranking of the "health" value. This is confirmed by the answers to the question "What medical institutions do you currently visit?": the student clinic is attended by 5.3% of those surveyed; district (free) clinics are visited by 41.92%; fee-based (private) clinics – by 17.17%; 2.78% have indicated that they go to a national clinic; and a third of those surveyed (32.83%) have indicated that they do not attend any medical institution (even more than respondents that do not turn to doctors at all – they are 20.50%). At the same time, 35.10% of the students surveyed answered affirmatively to the question of the questionnaire "Do you have chronic diseases?" Chronic diseases in students were identified at school – 55.47%; 16.79% of chronic health conditions were identified in their preschool age; 9.49% - during their studies at the university.

Answering the question of the questionnaire "Do you know the level of normal blood pressure for your age?", 61.73% answered affirmatively, and 60.28% of the students surveyed identified their blood pressure level. Overall, 58.74% of the students surveyed said their blood pressure level was normal, 25.24% said they had high blood pressure, and 16.02% said they had low blood pressure. The 20.66% of respondents knew their normal blood sugar level, and 13.02% of respondents named their blood sugar level. Moreover, 77.78% of the students replied that their blood sugar level was normal, and 20% identified their blood sugar level as elevated. Even fewer, 10.5%, of respondents know their normal blood cholesterol levels, and 6.03% of students named their cholesterol levels, with 72.22% naming normal and 22.22% noting that their cholesterol levels were elevated. Overall, 8.74% of the students surveyed cited low assessment of body functioning medical knowledge as the source of their poor health.

## Discussion

The "Health Care" national project was adopted in Russia in 2006. The social sphere was the first to suffer the setbacks of the transition to market relations when the old paternalistic system of full state provision of health care was destroyed and the new market system had not yet taken shape. The Constitution of the Russian Federation in Article 41 enshrined the right of each person to health protection and medical care. However, from 1992 through 2007 inclusive, the demographic situation in the country was characterized as depopulation: the number of deaths exceeded the number of births. For example, in 2005, a year before the start of the national projects, 980220 people were born in Russia (96.8% of the 2004 level) and 1551700 people died (101.2% compared to 2004), i.e., the difference was 571500 people. Infant mortality amounted to 10800 people, almost 10 people for every 1000 live births, almost like in the underdeveloped countries of Africa and Latin America.

The coronavirus pandemic in 2021 showed the insufficiency of efforts to implement the "Health Care" national project, and primarily the shortage of infectious disease specialists and the absence of adequate hospital bed capacity in primary healthcare, and most importantly the inability of people, especially young people, to take care of their health, ignorance of the basic medical parameters – levels of cholesterol, blood sugar, normal blood pressure, reluctance to consult doctors if

any adverse symptoms, refusal of being vaccinated in principle.

Practically all sociological researches record high importance of health among the social values.

In our study, the first place among social values with the highest rank is attributed to equal rights. This choice was made because young people's desire for social equality, which is in line with the popular expression, "he who is not a revolutionary at age 17 has no heart, and he who is not a conservative by age 40 has no head." The fact that the protest against stratification of Russian society is forming among young people is evidenced by their participation in uncoordinated rallies and various actions.

The ``health`` was in the second place among social values ranked by students ranked as ten and `family`` in the 3rd place. However, these values are rather declarative, because 70% of students rarely seek physician consultation in case of illness. Researchers who study the state of health of students in higher education institutions note that "every year the number of students with health problems increases (up to 65% of students have chronic somatic diseases). Over the past 5 years the number of students classified as special medical group for health reasons has increased from 10 to 25%" (9).

The highest ranking of "the neglect of their own health" in assessment of source of the disease confirms declarative nature of high "health" value. In reality, young people do not give up their harmful habits, do not have the necessary knowledge about how their body functions, do not visit doctors because of poor medical care (10).

In our study, about 33% do not seek care in medical facilities, despite 1/3rd of them declared presence of chronic diseases.

Official government reports on significant improvements in the quality of medical services during the implementation of the priority national project "Health Care" are at odds with the data based on the population's subjective opinion. A survey by IS RAS sociologists, in particular, has revealed an extremely critical attitude toward this project: only 5% of respondents believe that the reform in medicine and healthcare is correct and can improve their situation, as well as their families'; at the same time, 60% of respondents believe that it is wrong and harmful in its effects; 13% of respondents believe that the situation in healthcare has improved over the past two years, 43% believe that it has worsened, and the same number of respondents are confident that the situation has remained the same. Respondents doubt that increasing the doctors' salaries will result in a marked improvement in quality of service: it was a "yes" from 27% of respondents, and a "no" from 72% (8). The past years have proved right those who doubted the health reforms that began in 2006, as 15 years later emergency measures were needed during the pandemic to deploy new inpatient hospitals, erect health posts in rural areas, and increase the salaries of health workers. "Experts estimate that up to 90% of applicants to various Russian universities already have some kind of morphological and functional abnormalities and chronic diseases, and 40% of them need physical therapy. There is also a deteriorating mental health situation and social adaptation of Russian students" (11). Valeeva et al (12), speaking at an inter-university conference back in 2001, said in her report that "in universities in Kazan of 60-70% of students have deviations in health status, about 30% require constant medical attention".

In a sociological study conducted by a team of authors in 2021 among students from Kursk and Kaluga regions and Moscow concerning an attitude to healthy living, similar data were obtained: 65.6% of the students surveyed assessed their health as satisfactory; 27.4% considered themselves practically healthy; 18.8% of the respondents monitored their physical condition; only 14% were completely satisfied with the quality of services in medical institutions (13). In other words, it is possible to state a rather widespread low quality of health among student youth in our country, which has not improved over the past 16 years, despite the enormous funds spent on the "Health Care" national project, the introduced examinations of the entire population, from schoolchildren to pensioners. Students are well conscious of the origins of their chronic diseases, are critical of neglecting their health, are clearly aware of the lack of medical knowledge about the functioning of their bodies (14).

For example, in our study, 60% of students had knowledge of their blood pressure and only 20% - blood sugar levels, 20% identified elevated blood sugar level, which is a very worrying sign for young people, and most likely a consequence of eating behavior dominated by carbohydrates, fast food. Fewer students knew their cholesterol levels. This data confirms the low assessment of medical knowledge of body functioning norms, which 8.74% of the students surveyed cited as the source of their poor health.

**Conclusion**

The study leads to the conclusion that the students' subjective assessments of their health coincide with the objective data on the decline in quality of health in each new generation of our country's citizens. At the same time, only in 2021, 284 billion rubles were spent on the implementation of the "Health Care" national project (15).

Nevertheless, the study has suggested that it is necessary to conduct competent educational work on the dissemination of medical knowledge among young people, to examine students more carefully in the course of medical examination, to improve the availability and quality of health services provided to students.

**Ethics:** Informed consent was obtained from participants of the study

**Peer-review:** External and internal

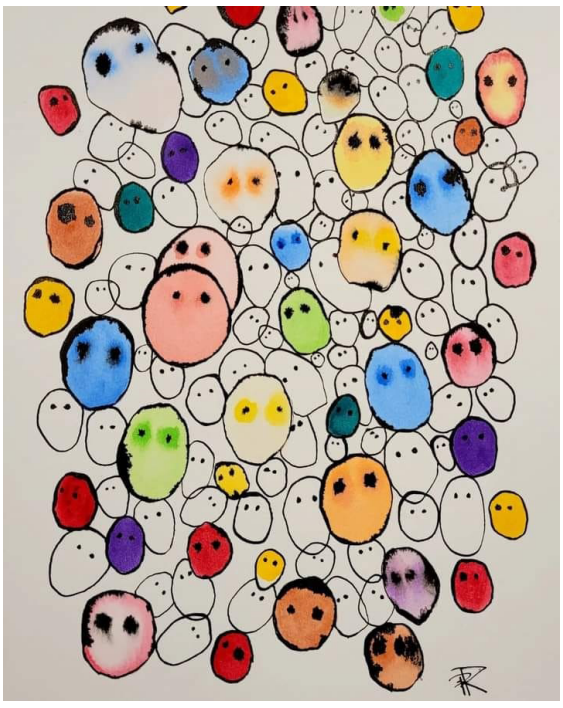
**Conflict of interest:** None to declare

**Authorship:** L.M.Y., L.S.S., R.M.A., K.H.K., J.G. E., M.K.Y. equally contributed to the study and manuscript preparation.

**Acknowledgement and funding:** None to declare

**References**

1. Pokrovskaya TYu, Titova EB, Blohin SA. Learning youth, motivation for a healthy lifestyle: current trends. Problems of Modern Teacher Education 2018; 58: 216-9.
2. Kwak Y, Kim H, Ahn JW. Impact of internet usage time on mental health in adolescents: Using the 14th Korea Youth Risk Behaviour Web-based Survey 2018. Plos One 2022; 17: e0264948.
3. Frangos CC, Sotiropoulos I. Problematic internet use among Greek University students: an ordinal logistic regression with risk factors of negative psychological beliefs, pornographic sites and online games. Cyberpsychol Behav Soc Netw 2011; 14: 1451-8.
4. Herman KM, Hopman WM, Sabiston CM. Physical activity, screen-time and self- rated health and mental health in Canadian adolescents. Prev Med 2015; 73; 11206.
5. Rabbah JA, Al-Hammouri MM, Drew BL, Aldalaykeh M. Health literacy: exploring disparities among college students. BMC Public Health 2019; 19: 1401.
6. Evans AY, Anthony E, Gabriel G. Comprehensive health literacy among undergraduates. A Ghanian University-base cross-sectional study. Health Lit Res Pract 2019; 3: e227-37.
7. Kuhn L, Bachert, P, Hilderbrand C, Kunkel J, Reitermayer J, Wasche H, et al. Health literacy among university students: a systematic review of cross-sectional studies. Front Public Health 2022; 9: 680999.
8. Gorshkov MK, editor. Freedom. Inequality. Brotherhood. Sociological Portrait of Contemporary Russia. Moscow: "Russian newspaper": 2007; 445p.
9. Starkova VA, Leonova AV, Shestera AA, Kiku PF, Kayerova EV, Chumash VV. Features of the physical development of modern students. Probl Soc Hygiene Health Hist Med 2022; 30: 574-9.
10. Ezirbaeva PS, Nurgalieva Zh, Chukanova GN. Factors influencing the formation of a healthy lifestyle of student youth. Med J West Kazakhstan 2018; 1: 15-22.
11. Dvoyenosov VG, Yusupov RA. Student health as a factor in increasing competitiveness of specialists. Bull Kazan Tech Univ 2006; 6: 194-202.
12. Valeyeva AG. Problems of health of university students in Kazan. In: Formation of Health Culture of Students: Problems and Prospects. Materials of the Interuniversity Theory and Practice Conference. Kazan, KSU; 2001: p.29-31.
13. Chuikov OE, Kameneva TN, Tkachenko PV, Zulfugarzadeh TE, Nuzhnyh MA, Tsybaneva AD. Healthy lifestyle in the value orientations of the student youth. Probl Soc Hygiene Health Hist Med 2022; 30; 621-4.
14. Savko EI, Hozhempo SV. Student youth and its attitude to physical culture and a healthy lifestyle. Human Health Theor Method Phys Cult Sports 2018; 4: 62-76.
15. Report on the Implementation of the "Health Care" National Project in 2021. – URL: https://static-0.minzdrav.gov.ru/system/attachments/attaches/000/060/073/original(Access date: October 30, 2022)



**Various expressions of mood. By Pablo Roura, Buenos Aires, Argentina**