

Report on the Results of the Survey Among Students of Kyrgyz State Medical Academy "Environmental Culture of Students of I.K. Akhunbaev Kyrgyz State Medical Academy".

Introduction:

In light of the United Nations Sustainable Development Goals (SDGs), environmental literacy stands as a pivotal factor in combating climate change and preserving biodiversity. The environmental consciousness and active involvement of youth in improving the environmental situation are essential elements in achieving these goals. The global and national situations call for active measures to preserve the environment and promote sustainable development. Youth, being highly educated and actively engaged in societal affairs, play a crucial role in addressing this issue. Therefore, it is imperative to strengthen environmental education and active participation of youth in improving the environmental situation. In today's world, facing threats of climate change, depletion of natural resources, and escalating environmental issues, the issues of shaping environmental culture among youth become more pertinent and gain significant importance. Youth, being the future of society, play a key role in creating a sustainable and environmentally responsible society. In this context, the I.K. Akhunbaev Kyrgyz State Medical Academy, as one of the leading medical educational institutions in Kyrgyzstan, holds particular significance in shaping the environmental culture of future healthcare professionals.

The relevance of studying environmental culture among youth in KSMA in the context of the UN SDGs is explained by the necessity of balanced development, consideration of environmental factors, and ensuring the viability of ecosystems. The UN SDGs include goals aimed at reducing poverty, ensuring health and education, as well as protecting ecosystems. In this context, it is important to understand how the formation of environmental culture among medical university students correlates with these global objectives. The global and national situations indicate a growing need for professionals knowledgeable about environmental issues and willing to contribute to creating a sustainable future. The medical field, in particular, is directly related to human health, and integrating environmental aspects into the educational process can significantly enhance the competency of future medical specialists.

Research Methodology:

Instrument:

To conduct the survey, a questionnaire was developed containing aspects related to attitudes towards the environment, environmental behavior, and ecological responsibility. The questionnaire was administered in November 2023. The questionnaires were distributed to students of I.K. Akhunbaev Kyrgyz State Medical Academy throughout the survey period. Responses to the questionnaire were anonymous and confidential. All collected data were used only within the framework of this research and were not shared with third parties. A total of 2282 students of I.K. Akhunbaev Kyrgyz State Medical Academy participated in the survey. The questionnaire included questions related to students' environmental awareness, their

waste management behavior, their participation in environmental projects and activities, their assessment of the importance of environmental education, and their plans for the future regarding sustainable development and environmental consciousness.

Data Analysis:

Statistical methods were employed for data analysis. The results were presented in percentages and transformed into corresponding categories. SPSS Version 24.0 software was utilized for statistical analysis, allowing for the calculation of proportions and percentages. This methodology ensured the systematic collection of data, maintaining anonymity and confidentiality, and employing robust statistical analysis to derive meaningful insights from the survey responses.

Survey Results:

Distribution of Students by Faculty and Course:

The majority of students belong to the "Dentistry" faculty, comprising 44.3% of the sample. This is followed by students from the "General Medicine" (26.7%) and Pediatrics (16.3%) faculties.

Faculties such as "Medical Prophylaxis," "Pharmacy," "Higher Nursing," and "Medical Engineering" have substantially lower representation in the sample due to differences in enrollment numbers.

The highest number of participating students belongs to the 2nd year (26.6%), followed by the 1st year (23.3%) and 3rd year (23%). The 4th, 5th, and 6th years have significantly lower representation, with the 6th year being the least represented, indicating decreased activity among students, particularly by the 6th year.

Attitudes and Actions Towards Environmental Conservation:

32% of respondents are willing to switch to more eco-friendly products and goods, while 20% are willing to reduce their electricity consumption.

10% are willing to adopt energy-saving technologies, and 9% are willing to engage in rational water consumption.

30% are ready to take a comprehensive approach to reduce their environmental impact. Only 8.7% of students frequently participate in environmental projects, while 35.1% do not participate at all. Additionally, 25.9% sometimes participate, and 30.3% rarely participate, indicating potential readiness to engage in environmental projects.

Waste Management Practices:

Analysis revealed that 32.1% of students utilize traditional waste disposal systems, where waste collection and temporary storage occur in containers near their homes, representing a more eco-friendly and responsible approach.

However, 36.8% of students dispose of waste at waste collection sites located far from their homes, which may be due to the lack of infrastructure or insufficient information about proper waste disposal.

Only 6% of students indicated that they have the ability to compost organic waste themselves.

Importance of Environmental Education and Future Plans:

The majority (63%) of students consider environmental education to be very important for shaping environmental consciousness.

13.6% of students plan to engage in environmental activities, while 19.8% plan to advocate for environmental ideas among others.

41.8% plan to educate others about the importance of ecology and solutions to environmental problems.

Survey Findings:

Perception of Environmental Culture in the Region:

47.4% of students perceive the level of environmental culture in their region as low, while 43.1% consider it average. This may indicate insufficient awareness among the population about environmental issues and the necessity for measures to address them.

Proposed Measures to Improve the Environmental Situation in Bishkek:

During the survey, students were asked about measures they could propose to improve the environmental situation in Bishkek. Key measures identified from the survey include:

Installation of more garbage bins (improving waste disposal accessibility in different city districts and enhancing waste management).

Waste recycling (utilizing waste for manufacturing new products to reduce waste volumes and minimize their environmental impact).

Public education (educating children from an early age and conducting information campaigns for adults).

Waste sorting (reducing waste volumes sent to landfills and increasing opportunities for recycling).

Reduction of plastic consumption.

Transition to energy-saving technologies (utilizing energy-efficient devices, transitioning to renewable energy sources, and using electric vehicles).

Responsible environmental behavior (maintaining cleanliness and order in public places, as well as respecting nature and plants).

Reduction of the number of vehicles (reducing air pollution levels caused by vehicle emissions).

Implementation of a fine system for littering (encouraging compliance with rules and reducing environmental pollution levels).

Strengthening the legal framework (developing and implementing laws and regulatory acts aimed at protecting the environment and improving the environmental situation in the city).

Identified Environmental Issues:

Survey results indicate that students consider air pollution (80.3%) and water pollution (3.8%) as the primary environmental problems.

Suggested Measures to Address Environmental Issues:

- According to students, solving these problems requires comprehensive measures, including:
- Installation of modern monitoring and control systems for air and water quality.

- Implementation of strict norms and standards for environmental safety, as well as mandatory environmental regulation.
- Development and implementation of programs for the protection and restoration of ecosystems, including greening initiatives.
- Conducting informational campaigns and educational programs to increase public awareness of the importance of environmental protection and proper resource management.
- Development and implementation of political measures to reduce environmental impact and improve the quality of life for the population.

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Key Measures to Enhance Environmental Awareness Among Youth:

- From students' responses on how to increase environmental awareness among the population, the following key measures for enhancing environmental culture among youth can be identified:
- Organization of contests and projects: Developing and implementing environmentally friendly technologies or ideas. Contests and projects can stimulate youth creativity and innovation, as well as draw attention to environmental issues.
- Conducting cleanup campaigns, such as community clean-up events: This can raise awareness about pollution issues and encourage youth to actively participate in waste management.
- Campaigns on social media: Spreading information about environmental issues and calling for action. Social media campaigns can be an effective way to engage youth and disseminate information about the importance of ecology.
- Implementation of educational programs and lectures: Educating youth on the basics of ecology, the history, and consequences of environmental pollution.
- Creating programs to reduce plastic consumption: Teaching youth alternative ways to use plastic and involving them in plastic recycling programs.
- Organizing events aimed at developing environmental culture: Flash mobs, contests, and games aimed at developing environmental culture among youth.
- Engage Youth in Environmental Projects: Encourage youth participation in environmental projects such as gardening, greening initiatives, and other ecological initiatives.

51.1% of the surveyed students believe that society is interested in fostering environmental culture. However, 14.2% of students do not perceive society as interested in nurturing environmental culture, and 34.7% find it difficult to provide a response.

Recommendations:

1. Conduct Cleanup Campaigns: Organize events to stimulate youth participation in cleaning up littered areas, promoting a sense of responsibility for the environment.

2. **Social Media Campaigns:** Utilize social media platforms to disseminate information about environmental issues and advocate for action, engaging the younger generation where they are most active.
3. **Engage Youth in Environmental Competitions and Projects:** Encourage youth involvement in environmental projects such as gardening, greening initiatives, and other eco-friendly activities to foster creativity and innovation while addressing environmental challenges.
4. **Organize Events Promoting Environmental Culture:** Arrange flash mobs, contests, and games aimed at developing environmental consciousness among young people, making environmental awareness enjoyable and interactive.
5. **Implement Programs to Reduce Plastic Consumption:** Educate youth on alternative uses of plastic and involve them in plastic recycling programs to promote sustainable consumption habits.
6. **Host Events to Enhance Environmental Awareness:** Conduct lectures, seminars, and other educational programs focused on increasing environmental awareness among young people, providing them with knowledge and understanding of ecological issues.

Conclusions:

The survey conducted among students of the Kyrgyz State Medical Academy named after I.K. Akhunbaev revealed that some students recognize the importance of environmental education and actively implement environmental measures in their daily lives. However, the majority of students do not participate in environmental projects and activities, with only a small portion actively engaging in waste management from household and food sources. The findings of the study conducted among students of the Kyrgyz State Medical Academy named after I.K. Akhunbaev directly relate to the university's development strategy.

Firstly, the survey results confirm the importance of environmental education and active student involvement in improving the environmental situation. This aligns with one of the key objectives of the Kyrgyz State Medical Academy named after I.K. Akhunbaev - to train qualified professionals capable of making a positive contribution to societal development.

Secondly, the research findings underscore the necessity of enhancing educational and advocacy initiatives aimed at increasing environmental awareness and active student participation in improving the environmental situation. This also corresponds to the university's development strategy, which encompasses fostering a responsible attitude towards the natural and socio-cultural environment and actively utilizing modern educational technologies and methods.

Thus, the conclusions of the study can serve as a basis for the development and implementation of new educational programs and projects aimed at enhancing environmental culture among students and increasing their environmental consciousness.

SWOT analysis:

Strengths:

1. **Recognition of the Importance of Environmental Education:** Some students already recognize the importance of environmental education, providing a basis for implementing relevant programs.
2. **Active Application of Environmental Measures in Daily Life:** Some students actively apply environmental measures, serving as examples for others and demonstrating the effectiveness of such approaches.
3. **Alignment with University's Key Goal:** The research findings align with one of the university's key goals, namely, the formation of qualified professionals capable of making a positive contribution to societal development.

Weaknesses:

1. **Low Participation in Environmental Projects and Activities:** A large portion of students do not participate in environmental initiatives, potentially reducing the effectiveness of university efforts in environmental conservation.
2. **Inadequate Waste Utilization:** Only a small portion of students actively engage in waste management practices, which could have negative environmental consequences.

Opportunities:

1. **Enhancement of Educational Initiatives:** The research results highlight the need for strengthening educational and awareness-raising initiatives, providing an opportunity to develop new programs and projects in environmental education.
2. **Development of Environmental Awareness Among Students:** Opportunities exist for the development of programs and activities aimed at increasing environmental awareness among students and fostering responsible attitudes toward the environment.

Threats:

1. **Lack of Student Interest in Ecology:** Insufficient student interest in ecology could pose a barrier to the successful implementation of environmental programs and projects.
2. **Limited Resources:** Inadequate funding or resources may limit the university's ability to develop and implement environmental initiatives effectively.