

A school-based health culture programme for teenagers in medical track education: a Russian study

Submission date 01/04/2026	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 08/04/2026	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 08/04/2026	Condition category Other	<input type="checkbox"/> Individual participant data <input checked="" type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Adolescence is an important time for learning healthy habits. The main aim of this study is to measure the level of health culture (the knowledge, attitudes and behaviours related to health) in adolescents aged 15–18 years who are preparing for a future medical career in Russia and to see whether a school-based health promotion programme can improve it.

Who can participate?

Both male and female adolescents aged 15–18 years who are enrolled in pre-professional medical education programmes at six participating institutions in Russia (Moscow, Bryansk, Magadan, Kaluga, Petropavlovsk Kamchatsky and Syktyvkar). The study also enrolls healthy volunteers (no specific health condition is required for participation). Parents or legal guardians of these adolescents also take part by completing a separate questionnaire.

What does the study involve?

In 2021, participants completed a first questionnaire about their health-related knowledge, attitudes and daily habits. Between 2022 and 2024, a health promotion programme was delivered within the schools. The programme included health monitoring, support for students, adjustments to school workload and activities to involve families. In 2024, participants completed the same questionnaire again. There is no separate control group — the study compares the same participants before and after the programme.

What are the possible benefits and risks of participating?

Participants may benefit from learning more about healthy habits and may receive additional support at school; their overall health awareness and well being may improve. The risks are very low — they are limited to the small amount of time needed to complete the questionnaires (which might cause boredom or minor discomfort) and the routine collection of health data that is already part of school health monitoring.

Where is the study run from?

The study is coordinated by the Institute of Specialized Training “Impulse” at I.M. Sechenov First

Moscow State Medical University (Sechenov University) in Moscow. It is run at six institutions affiliated with Sechenov University across Russia (in Moscow, Bryansk, Magadan, Kaluga, Petropavlovsk Kamchatsky and Syktyvkar).

When is the study starting and how long is it expected to run for?
September 2021 to May 2024

Who is funding the study?
Investigator initiated and funded

Who is the main contact?
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Contact information

Type(s)

Public, Scientific, Principal investigator

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Additional identifiers

Study information

Scientific Title

Health culture formation among adolescents in pre-professional medical education: a multicentre implementation study in Russia

Study objectives

To assess the level and determinants of health culture among adolescents enrolled in pre-professional medical education, and to evaluate the effectiveness of a multicomponent school-based programme designed to strengthen health culture in this population.

Ethics approval required

Ethics approval required

Ethics approval(s)

approved 21/01/2019, Local Ethics Committee of I.M. Sechenov First Moscow State Medical University (Sechenov University) (1/1, Abrikosovsky Lane, Moscow, 119435, Russian Federation; +7 (0)4956229706; iec@staff.sechenov.ru), ref: 16-24

Primary study design

Observational

Secondary study design

Cohort study

Study type(s)

Health condition(s) or problem(s) studied

Adolescent health behavior

Interventions

Prospective single-arm cohort study with a pre-post design. Participants were adolescents aged 15–18 years enrolled in pre-professional medical education at six institutions affiliated with Sechenov University across Russia. Baseline assessment was conducted in 2021, followed by implementation of a multicomponent school-based programme (2022–2024), and follow-up assessment in 2024. The primary measure was an integrative health culture questionnaire covering 13 domains (total score range 13–39, Cronbach's $\alpha = 0.8282$). Secondary measures included self-reported health, morbidity data from preventive examinations and medical records, quality of life, academic performance, and a parallel parental questionnaire. Statistical analysis included descriptive statistics, correlation analysis, and pre-post comparisons.

Intervention Type

Behavioural

Primary outcome(s)

1. Health culture level measured using integrative health culture questionnaire at baseline assessment: 2021 and follow-up assessment: 2024 (post-intervention)

Key secondary outcome(s)

1. Morbidity: overall and disease-specific rates per 1000, derived from preventive examinations and medical records
2. Quality of life measured using standardised questionnaire score
3. Academic performance measured using educational records (average grade)
4. Parental health culture measured using parallel parental questionnaire
5. Health culture competence: proportion of adolescents rated as having high competence based on the relevant domain of the health culture questionnaire
6. Health motivation: proportion of adolescents with high motivation and readiness to form and enact health culture
7. Realised health culture potential: percentage change in potential realisation assessed using a matrix-based tool (informational, behavioural, and relationship-based components)

All key secondary outcomes assessed at baseline (2021) and at follow-up (2024) after completion of the multicomponent programme

Completion date

01/05/2024

Eligibility

Key inclusion criteria

1. Age 15–18 years at baseline (2021)
2. Enrolled in a pre-professional medical education programme at one of the six participating institutions (Moscow, Bryansk, Magadan, Kaluga, Petropavlovsk-Kamchatsky, Syktyvkar)
3. Provision of written informed consent by both the adolescent participant and a parent or legal guardian

Healthy volunteers allowed

Yes

Age group

Mixed

Lower age limit

15 years

Upper age limit

18 years

Sex

All

Total final enrolment

1600

Key exclusion criteria

1. Age <15 years or >18 years
2. Not enrolled in a pre-professional medical education programme at participating institutions
3. Declined to provide written informed consent (adolescent or parent/legal guardian)
4. Inability to complete baseline or follow-up assessments due to relocation or withdrawal from the educational programme

Date of first enrolment

01/09/2021

Date of final enrolment

12/10/2023

Locations

Countries of recruitment

Russian Federation

Sponsor information

Organisation

I.M. Sechenov First Moscow State Medical University (Sechenov University)

Funder(s)**Funder type****Funder Name**

Investigator initiated and funded

Results and Publications**Individual participant data (IPD) sharing plan**

Deidentified individual participant data will be shared upon reasonable request to the corresponding author, subject to institutional approval, participant confidentiality, and applicable ethical requirements. The study protocol and statistical analysis plan will also be made available. Data will not be deposited in a public repository but will be accessible through direct request.

IPD sharing plan summary

Available on request