

Research on the Construction and Development of Youth Health Promotion System in Jilin Province

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Abstract: Adolescent health serves as the cornerstone of national well-being and a vital pillar for sustainable socio-economic development. This study focuses on Jilin Province, employing ecosystem theory and health promotion theory to systematically analyze current adolescent health conditions and existing challenges through literature review, data analysis, and field research. The research establishes a five-pronged framework for adolescent health promotion: policy support, interdepartmental collaboration, service provision, public education, and evaluation monitoring, while proposing concrete development pathways. Key findings reveal multiple challenges including fluctuating physical fitness standards, prominent mental health issues, nutritional imbalances, and insufficient healthy behaviors. Current systems demonstrate significant shortcomings such as fragmented policy coordination, inadequate interdepartmental collaboration, uneven resource distribution, incomplete service coverage, and the absence of long-term evaluation mechanisms. The study recommends enhancing top-level design, improving collaborative mechanisms, upgrading service delivery, strengthening public education, and establishing scientific evaluation systems to comprehensively advance the systematic, professional, and high-quality development of Jilin's adolescent health promotion framework.

Keywords: Adolescents; Health; System Development

1. Introduction

Adolescence is a critical stage for physical and mental development, and its health status directly affects lifelong health and social adaptability. The "Healthy China 2030" Plan Outline clearly proposes the strategic goal of "comprehensively improving adolescent health literacy." As an old industrial base and major agricultural province in Northeast China, Jilin faces multiple challenges such as declining physical fitness among adolescents, increasing mental health issues, and uneven distribution of health resources between urban and rural areas. Building a scientific, systematic, and actionable adolescent health promotion system has become an inevitable requirement to address current practical issues and promote the comprehensive development of adolescents. This article combines provincial realities with theoretical guidance to provide theoretical references and practical pathways for adolescent health promotion work in Jilin Province.

2. The connotation and theoretical basis of adolescent health promotion system

2.1 Definition of connotation

The Youth Health Promotion System is a comprehensive initiative that prioritizes adolescents as its core focus. By integrating resources from government, schools, families, communities, and social organizations, it employs a holistic approach through policy guidance, environmental support, service provision, behavioral interventions, and public education to holistically enhance adolescents' physical, psychological, social adaptation, and behavioral health. Characterized by "prevention-first, full-process intervention, and multi-stakeholder participation," this system emphasizes multiple dimensions including physical health development, emotional well-being management, balanced nutrition, healthy behavior cultivation, and social competence development.

2.2 Theoretical support

Ecological Systems Theory: This framework emphasizes the multi-layered interactions between individual development and their environment. It posits that adolescent health is influenced not only by micro-level systems like family and school, but also by meso-level systems such as communities and peer groups, as well as macro-level systems including policy environments and cultural values. Therefore, health promotion requires transcending single-layer limitations to establish a multi-dimensional support network that coordinates across different levels [1].

The Ottawa Charter on Health Promotion outlines five key action areas: developing health-oriented public policies, creating supportive environments, strengthening community initiatives, enhancing personal health literacy, and reorienting healthcare services. This framework provides a strategic blueprint for building a comprehensive health ecosystem, emphasizing that effective health promotion requires not only behavioral changes at the individual level but also systemic policy reforms and environmental modifications to achieve holistic optimization [2].

3. Current Situation of Youth Health in Jilin Province and Deficiencies of Existing System

3.1 Health status of adolescents

Physical Health Status: According to the 2022 Jilin Province Student Physical Health Monitoring data, 81.2% of primary and secondary school students met physical fitness standards, marking a 2.3 percentage point decrease from 2019. Key indicators including speed, endurance, and flexibility showed fluctuating trends, with rural students achieving a 76.5% compliance rate—significantly lower than the urban 85.8%. Obesity and overweight issues remained prevalent, with the obesity rate reaching 12.7% (up 1.5 percentage points from 2019), showing a higher prevalence in urban areas compared to rural regions.

Mental Health Status: A 2023 survey on adolescent mental health in Jilin Province revealed that 23.1% of teenagers aged 14-18 reported experiencing depressive symptoms, with widespread anxiety, stress, and emotional management challenges [3-4]. Rural adolescents showed particularly high rates of psychological issues, with depression detection rates reaching 25.8% compared to 20.4% in urban areas. Additionally, nearly 30% of surveyed students admitted to "lack of someone to talk to," highlighting a significant gap in social support networks.

Nutrition and Healthy Behaviors: Data reveals that malnutrition rates are 10.3% in rural areas and 5.6% in urban areas of Jilin Province. Rural students exhibit a monotonous dietary pattern with insufficient intake of vegetables, fruits, and high-quality proteins. Meanwhile, urban youth spend excessive screen time, with 41.7% exceeding 2 hours daily—a practice that significantly impacts both visual health and sleep quality.

3.2 Problems existing in the existing health promotion system

Policy Coordination Gap: The policies of education, health, sports, and civil affairs departments operate in silos, lacking effective coordination. For instance, the Jilin Provincial Regulations on Promoting Students' Physical Health and the Jilin Mental Health Education Guidelines have not established mechanisms for data sharing and coordinated actions, resulting in fragmented health interventions.

Uneven resource distribution: Rural schools have only 68.2% coverage of health clinics, significantly lower than the 92.5% in urban areas. There is a severe shortage of professional psychological teachers, with just 31.8% of rural schools having full-time staff. Community health centers are predominantly located in cities, leaving rural youth health services virtually non-existent.

Lack of inter-departmental collaboration: Departments still rely on "strip and block management", lacking a regular and institutionalized collaborative mechanism. For example, there is no synergy in health screening, sports promotion and nutrition improvement, which affects the overall intervention effect [5].

Inadequate evaluation and monitoring systems: There is currently no unified, standardized, and quantifiable evaluation framework for youth health promotion outcomes. Data on physical fitness, mental health, and nutrition are fragmented across different departments, lacking systematic integration

and in-depth analysis, which makes it difficult to fully reflect the actual effectiveness of health promotion efforts.

3.3 Framework of youth health promotion system in Jilin Province

(1) Construction principles

Combining government leadership with multiple participation: Strengthening the central role of the government in policy making, resource integration and organizational coordination, and actively guiding schools, families, communities, enterprises and non-governmental organizations to participate together, so as to form a health governance pattern jointly promoted by the whole society.

Centering on the needs of healthy development of adolescents: Based on the actual health problems faced by adolescents in Jilin Province, we should pay attention to the accessibility, pertinence and effectiveness of services, and promote the transformation of health services from "unified supply" to "precise response".

Prevention is the priority and whole-process intervention is equally important: a coherent health intervention strategy is implemented from primary school to high school around the whole cycle of adolescent growth, focusing on early prevention and graded intervention of obesity, psychological problems, poor vision and lack of healthy behaviors [6].

Urban-rural coordination and adaptation to local conditions: Identify differences between urban and rural areas and formulate differentiated implementation strategies. For example, in rural areas, attention should be paid to improving nutrition and sports facilities, while in urban areas, emphasis should be placed on improving psychological services and guiding healthy behaviors.

(2) The "Five-in-One" System Framework

Policy Support Framework: To establish the Jilin Provincial Youth Health Promotion Regulations as the top-level legal foundation, accompanied by specialized policy documents including the Jilin Student Physical Health Monitoring Implementation Measures, Youth Mental Health Service Standards, and School Food Safety and Nutrition Improvement Action Plan, which clearly define the responsibilities, obligations, and operational mechanisms of all stakeholders.

Multi-department collaboration system: Establish a joint meeting system for youth health work composed of the Provincial Department of Education, Health Commission, Sports Bureau, Civil Affairs Department, and the Provincial Committee of the Communist Youth League. Regular coordination meetings will be held to jointly study major policies, deploy key actions, and coordinate resource allocation, achieving cross-departmental collaborative governance.

Service Integration Framework: By coordinating resources from schools, community health centers, public hospitals, and households, we establish a "one-stop" healthcare network. Schools prioritize building health clinics and counseling rooms while offering health education programs. Communities develop health service centers providing basic checkups, psychological counseling, and nutritional guidance. Hospitals implement campus health screenings and dispatch health management specialists. Families enhance health awareness and support capabilities through parent education programs and health guides [7].

Public Health Education System: Launch initiatives like "Healthy Campus" and "Healthy Family" campaigns, utilizing new media platforms such as WeChat Official Accounts and short video channels to widely disseminate health knowledge. The content covers topics including balanced nutrition, scientific exercise, emotional management, and eye care. In addition, it is necessary to develop age appropriate health education courses and reading materials to enhance students' health literacy.

Evaluation and Monitoring System: Develop a comprehensive assessment framework encompassing physical health, mental well-being, nutritional intake, and behavioral patterns. It is necessary to establish a unified health data management platform throughout the province to achieve real-time collection, sharing, and analysis of multi-source data. Regularly monitor the health status of adolescents throughout the province, compile and publish annual health reports, and provide evidence-based support for policy adjustments and operational improvements.

4. Development path of youth health promotion system in Jilin Province

4.1 Policy optimization: Strengthen top-level design and supporting connection

Accelerate the legislative process of "Jilin Province Youth Health Promotion Regulations", and clarify the objectives, principles, organizational guarantee and legal responsibility of health promotion.

Formulate special action plans to complement the regulations, such as the Three-year Action Plan for the Construction of Sports Facilities in Rural Schools in Jilin Province, the Plan for the Training and Allocation of Teachers for the Mental Health of Adolescents, and the Guidelines for the Improvement of Campus Food Safety and Nutrition, so as to enhance the operability and effectiveness of the policies.

The work of promoting adolescent health should be included in the performance appraisal system of local governments, and the incentive and accountability mechanism should be established to promote the implementation of policies.

4.2 Collaborative linkage: Establish a multi-department cooperation mechanism

A unified provincial platform for sharing adolescent health data will be established to integrate data resources from education, health, sports and civil affairs departments, and realize the interconnection of information such as physical fitness monitoring, health screening and service records.

Interdepartmental joint initiatives have been launched, such as the "Student Health Day" jointly organized by education and health departments, offering physical fitness assessments, psychological lectures, and nutritional counseling. Sports and education authorities have collaborated to promote "Winter Sports in Schools," leveraging Jilin Province's ice and snow resources to develop signature activities like ice skating and skiing.

4.3 Service upgrading: Improve the supply of health services in all scenarios

At the school level: Ensure every primary and secondary school has at least one full-time psychology teacher. In rural and remote areas, the shortage of teachers should be addressed through recruitment by county managed schools or remote tutoring. Strengthen school sports facilities, especially increase indoor venues to cope with cold weather, and implement a "one hour physical exercise per day" plan.

Community level: Youth health service centers should be established in urban communities, and rural areas can expand health service functions by relying on township health centers and village clinics to provide physical fitness testing, simple consultation and health guidance.

At the family level, parents' health awareness and education ability should be improved through parent classes, home visit plans and health science popularization books, so as to promote families to create a healthy and supportive environment.

4.4 Publicity and guidance: Improve health literacy and participation

The "Health Guardian" campus program is implemented to encourage students to participate in health knowledge publicity independently, such as making posters, arranging short plays and recording short videos, so as to enhance the fun and participation of health education.

Through new media platforms such as the official WeChat account "Jilin Province Youth Health", TikTok, and Kuaishou, targeted health-themed content is regularly released, such as stress relief techniques during exam season, prevention of seasonal infectious diseases, and family health recipes, to expand the coverage and influence of publicity.

4.5 Evaluation and monitoring: Building a scientific effect evaluation system

Establish a multi-dimensional evaluation index system, including process indicators (such as policy implementation rate, health education coverage rate), result indicators (such as physical fitness standard rate, depression detection rate) and satisfaction indicators (students, parents, school evaluation of the service).

Annual health monitoring and evaluation are carried out, and the "Jilin Province Youth Health Development Report" is regularly released to publicize the health status and progress of health promotion, and to accept social supervision.

Introduce universities, research institutes or professional institutions as a third party to carry out independent evaluation of the implementation effect of the health promotion system, and promote the continuous improvement and optimization of the system.

5. Case Analysis: The Practice of "Youth Health Protection Action" in Jilin Province

In 2022, Jilin Province focused on the outstanding problems of adolescent health and launched the "Youth Health Protection Action", focusing on the promotion of "three major projects":

Physical Fitness Enhancement Project: 100 rural schools will be selected to establish "Sports Parks" equipped with basketball hoops, table tennis tables, jump ropes, and other facilities. The "Winter Sports in Schools" program will include activities like ski training and curling experiences. By 2023, the average student fitness compliance rate in participating schools is expected to increase by 3.2 percentage points.

Mental Health Initiative: Standardized counseling rooms have been established in 200 primary and secondary schools across the province, staffed with full-time or part-time psychological counselors. The "Sunshine Mental Health Program" offers courses covering emotional management, interpersonal skills, and stress response. In 2023, the detection rate of depressive symptoms among students in these schools decreased by 1.8 percentage points compared to 2022.

Nutrition Improvement Project: To address the issue of inadequate nutrition among rural students, the "Rural Student Nutritional Lunch Program" was implemented, providing free nutritious lunches for students in compulsory education stages in rural areas, ensuring sufficient vegetables, fruits, and high-quality protein in their diets. Monitoring data from 2023 showed that the malnutrition rate among rural students decreased by 2.1 percentage points.

Through the mode of government-led, multi-department collaboration and social participation, the action has effectively verified the feasibility and effectiveness of the "five-in-one" system framework, and provided valuable experience for the promotion of youth health promotion work in the province.

6. Conclusion

Building and improving the youth health promotion system is a key measure for Jilin Province to implement the "Healthy China" strategy and achieve the goal of "Healthy Jilin". Based on theoretical analysis and empirical research, this paper proposes a five-in-one system framework with "policy support, multi-department collaboration, service provision, education and publicity, and evaluation and monitoring" as its core, and clarifies development paths and practical strategies for Jilin Province's actual conditions. In the future, it is necessary to further strengthen provincial-level top-level design, improve legal and policy safeguards, break down departmental barriers to achieve true collaboration, optimize the layout of urban and rural health resources, strengthen health education and publicity and talent team building, and establish and improve long-term monitoring and evaluation mechanisms, so as to comprehensively ensure the healthy growth and all-round development of Jilin's youth.

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References

- [1] World Health Organization. *Ottawa Charter*[R]. 1986.
- [2] Jilin Provincial Department of Education. *2022 Jilin Province Student Physical Health Monitoring Report* [R]. 2023.

- [3] Jilin Provincial Health Commission. *2023 Survey on Adolescent Mental Health in Jilin Province* [R]. 2023.
- [4] Wang Dengfeng. *China Youth Sports Development Report* [M]. Beijing: Social Sciences Academic Press, 2021.
- [5] Li Ling. *Health Promotion Theory and Practice* [M]. Beijing: Peking University Press, 2020.
- [6] Zhang Jianhua, Liu Jiangnan. *International Comparison and Implications of Adolescent Health Promotion Systems* [J]. *Journal of Sports Science*, 2019(4):45-52.
- [7] Chen Yongfa, Xiao Shuiyuan. *Mental Health Service Needs and System Construction for Chinese Adolescents* [J]. *China Journal of Mental Health*, 2022(5):385-391.