



## Investigating and Analyzing the Current Situation of College Students Participating in Local Social Basic Medical Insurance: Based on Empirical Survey from Guangdong Medical University Dongguan Campus

Xiao-min Zhang<sup>1</sup>, Xiao-hua Su<sup>2</sup>, Wei-ping Deng<sup>3</sup>, Xiang-ting Feng<sup>4\*</sup>, Jun-chu He<sup>5\*</sup>

<sup>1</sup>Guangdong Medical University, Dongguan, Guangdong Province, 523808, China. 335157299@qq.com

<sup>2</sup>Guangdong Medical University, Dongguan, Guangdong Province, 523808, China. xiaohuas08@126.com

<sup>3</sup>Guangdong Medical University, Dongguan, Guangdong Province, 523808, China. 2913641730@qq.com

<sup>4</sup>Guangdong Medical University, Dongguan, Guangdong Province, 523808, China. 24890208@qq.com

<sup>5</sup>Guangdong Medical University, Dongguan, Guangdong Province, 523808, China. junchuhe@gdmu.edu.cn

\*Corresponding author email: 24890208@qq.com, junchuhe@gdmu.edu.cn

**Abstract:** The health of college students is directly related to the quality and quantity of national talents. Therefore, it is particularly important to guarantee the medical rights and interests of college students, ensuring that they can receive timely and effective treatment when they encounter diseases. However, the current situation of college students participating in local social basic medical insurance is not optimistic. Based on this, this article takes Dongguan Campus of Guangdong Medical University as an example and explores the participation status and influencing factors of college students in social basic medical insurance through questionnaire survey. It also aims to propose targeted suggestions to increase the participation rate of college students in insurance, strengthen their understanding of the importance of medical insurance, and enable them to better enjoy the protection brought by medical insurance, paving the way for their health and future. At the same time, it aims to contribute to the construction of a social medical security environment.

**Keywords:** college students, Willingness to participate in insurance, Empirical research, Influencing factor

### Introduction

Social basic medical insurance is a social security system aimed at providing basic medical security for insured individuals. It allows for reimbursement or compensation of medical expenses in the event of illness or accidental injury, reducing the financial burden on individuals and families<sup>[1]</sup>. The promulgation of the "Implementation Opinions on Including College Students in the Pilot of Urban Resident Basic Medical Insurance in the Autonomous Region" ensures the continuous and rapid progress of college students participating in urban resident basic medical insurance. It is worth noting that college students are a special social group. They are in an important stage of life, and their understanding and attitudes towards many life issues are in the process of formation and change. Therefore, their understanding and participation in social basic medical insurance may have unique dynamic characteristics<sup>[2]</sup>. However, due to the lack of social work experience and economic resources, college students often cannot receive timely and effective medical security when faced with health problems. Therefore, studying the participation of college students in social basic medical insurance is of great significance for understanding their medical security needs and improving their level of medical security.

This study focuses on college students, with college students from Dongguan Campus of Guangdong Medical University as the research subjects. Through questionnaire surveys, it explores the current situation and influencing factors of college students' participation in social basic medical insurance, aiming to understand college students' willingness and behavior to participate in social basic medical insurance, as well as their understanding of social basic medical insurance. It provides a scientific basis for improving the medical security work of college students, and enhances the participation rate and awareness of college students in insurance.

### Literature review

Studies on the college Medical Insurance have been done by many researchers. Nobles et al.<sup>[3]</sup> conducted a mixed methods study and found that a majority of college students could identify common health insurance terms but struggled with understanding plan types and cost-sharing. Many students reported being confused about their health insurance, with 25% delaying or avoiding medical care due to this confusion. McManus et al.<sup>[4]</sup> conducted an analysis of health insurance plans in 100 four-year colleges in 1988. They found that college health insurance plans varied significantly in terms of benefits, cost-sharing, and catastrophic protections. Most plans offered limited benefits, exposing students to high out-of-pocket costs. Johnson and Severson<sup>[5]</sup> explored the impact of health insurance on college students' lives. Their research



indicated that inadequate health insurance can lead to difficulties focusing on academics and work, increasing stress levels, and reducing overall quality of life among uninsured students. Palmedo et al. conducted a qualitative study on urban college students' perceptions of health insurance<sup>[6]</sup>. They found that informing and educating students about the health insurance enrollment process can increase student enrollment in health insurance, ultimately improving student population health. James et al<sup>[7]</sup> investigated the relationship between health insurance knowledge, self-efficacy, and student healthcare utilization. They found that college students had low knowledge and self-efficacy regarding health insurance. Self-efficacy significantly influenced healthcare utilization. Adegboyega and colleagues conducted a qualitative study among international college students. They found that international students often lacked knowledge about health insurance options, affordability, and had unmet expectations. This underscores the importance of increasing health insurance literacy among international college students. Upadhyay et al. examined factors associated with health insurance literacy and knowledge among undergraduate students. Students who received instruction on health insurance demonstrated higher knowledge and self-efficacy, which are crucial for informed decision-making.

Collectively, these studies highlight several key themes:

College students often struggle with understanding health insurance terms, especially plan types and cost-sharing.

Inadequate health insurance can lead to negative impacts on students' academic performance, work, and overall quality of life.

Effective education and awareness programs can improve health insurance literacy among college students, empowering them to make informed decisions.

## Research design and data source

### Research design

Based on reviewing relevant literature and consulting experts, a survey questionnaire was designed to investigate the understanding of Dongguan urban and rural residents' medical insurance policies among college students at our school. The questionnaire consists of 24 questions and is divided into four sections, including general information about the research subjects, participation in insurance, knowledge of policies, and factors influencing participation.

### Research objects and methods

This study adopted the method of random sampling and selected undergraduate students from Guangdong Medical University Dongguan Campus in freshmen, sophomores, juniors, seniors, and fifth-graders as the research subjects. The questionnaire was designed using the SurveyStar platform and a QR code was generated. The questionnaire was distributed through WeChat, and an online survey was conducted uniformly. The research subjects were informed of the purpose and precautions of this survey, and it was stated that the questionnaire would be anonymous and the collected data would only be used for academic research to alleviate concerns of the research subjects. A total of 4,682 survey questionnaires were sent out, and 4,682 valid responses were collected, resulting in a response rate and validity rate of 100%.

## Results

### General information of the survey participants

Among the 4,682 survey questionnaires, the majority of respondents were freshmen and sophomores, while juniors, seniors, and fifth-graders were in the minority, possibly due to the fact that most were conducting internships or practice outside the campus (Table 1). The gender ratio of the respondents was approximately 1:1.5, with a majority of female students, particularly medical students (55.19%). Based on the gender and major proportions of the research subjects, combined with the fact that our university is a medical school, it can be concluded that the results of this survey are reliable and authentic.

Investigation content	Population	Composition ratio (%)
Grade		
freshmen	1854	39.6
sophomores	1637	34.96
juniors	754	16.1
seniors	402	8.59
fifth-graders	35	0.75
Sex		
male	1832	39.13
female	2850	60.87
Profession		
Medical	2584	55.19
non-medical	2098	44.81
Current study status		
Study in school	4251	90.79

Table 1. General information of the survey participants

**Social basic medical insurance coverage of college students**

Among the surveyed university students, only 15.72% participated in medical insurance in the year prior to the survey, with a majority opting for voluntary purchase and a minority following the trend. When asked if they would be willing to participate in medical insurance in the next academic year, 77.45% of the college students stated that they were not willing to participate. The survey results suggest that the number of college students willing to join social medical insurance is relatively small under completely voluntary circumstances. In terms of medical expenses incurred in the past year, 53.82% of students spent less than 500 yuan, and 24.71% spent between 500 and 1000 yuan (Table 2). Therefore, the vast majority of students feel that purchasing Dongguan social medical insurance is not necessary.

Medical expenses	Number of people	Proportion (%)
Below 500	2520	53.82
500-1000	1157	24.71
1000-3000	686	14.65
3000-5000	168	3.59
More than 5000	151	3.23

Table 2. College Students' Medical Expenditures in the Past Year

**Factors influencing college students to participate in local social basic medical insurance**

According to the survey data, 45.72% of college students choose not to participate in local basic social medical insurance because they have already purchased local urban-rural (urban) medical insurance in their hometowns. Therefore, many students believe that they already have insurance and do not have to participate in Dongguan urban residents' medical insurance again. This is also an important reason for the low medical insurance participation rate of urban residents in Dongguan.

Among the main reasons why college students are unwilling to participate in local social medical insurance, 15.66% of college students believe that they are less likely to encounter major illnesses due to their special age group, and they think that they are healthy and do not need it. This leads to their low self-insurance awareness due to their complacency and shortsightedness. Among the total number of students, 14.09% cannot afford the expensive premiums, indicating that although the government provides partial subsidies for medical insurance, many financially disadvantaged college students choose to give up participation in order to reduce family expenses, resulting in a low participation rate. In addition, 17.97% of students expressed unclear understanding of the policy (Table 3).

Reasons for not having insurance	Number of people	Proportion (%)
Have purchased local health insurance in hometown	1804	45.72
I'm in good health, I don't think I need it	618	15.66
It's too expensive to afford	556	14.09
It is not clear what the policy is	709	17.97
Other reasons	263	6.66

Table 3. Main Reasons for College Students not Participating in Insurance

**College students' understanding of local social basic medical insurance**

The survey results showed that the majority of undergraduate students (84.75%) believe that it is necessary to purchase local social basic medical insurance, and 91.58% of college students believe that this policy has a certain effect in reducing personal medical expenses. College students have insufficient knowledge of the local medical insurance system and related regulations. Among them, more than 60% of college students are not familiar with the relevant policies of local social basic medical insurance, including payment conditions, reimbursement deductible, reimbursement limit, reimbursement ratio, referral policy, reimbursement procedures, and preferential policies (Table 4).

Medical insurance policy	Know very well	General understanding	incomprehension
Payment status	126 (2.69)	1640 (35.03)	2916 (62.28)
Reimbursement of expenses	126 (2.69)	1474 (31.48)	3082 (65.83)
Reimbursement limit	111 (2.37)	1419 (30.31)	3152 (67.32)
Basic medical reimbursement ratio	115 (2.46)	1436 (30.67)	3131 (66.87)
Proportion of medical reimbursement	121 (2.58)	1396 (29.82)	3165 (67.60)

for serious diseases			
Rate of supplementary reimbursement for hospitalization	104 (2.22)	1359 (29.03)	3219 (68.75)
Referral policy	118 (2.52)	1352 (28.88)	3212 (68.60)
Reimbursement procedure	115 (2.46)	1381 (29.50)	3186 (68.05)
Preferential policies for families with financial difficulties	114 (2.43)	1478 (31.57)	3090 (66.00)

Table 4. College Students' Awareness of Local Social Basic Medical Insurance (people, %)

### **Discussion**

As a social security mechanism, medical insurance has important practical significance and far-reaching impact on college students<sup>[8]</sup>. Taking the Dongguan Campus of Guangdong Medical University as an example, through investigating and analyzing the status quo of college students participating in local social basic medical insurance, some noteworthy phenomena have been found.

In terms of participation, although our country encourages college students to participate in medical insurance, the survey results show that college students still have relatively weak awareness and low participation rate. We must acknowledge that many college students have the misconception that "young people will not get sick and do not need to purchase medical insurance," which deviates from the understanding of medical insurance. They may think that medical insurance is a consumption and overlook its intended function, which is to provide economic support for unexpected illnesses. They overlook that medical insurance is not only for protection when they are sick, but also an important method for risk prevention and future planning. On one hand, this skewed understanding affects their enthusiasm for purchasing medical insurance; on the other hand, it also makes them more concerned about the price of insurance rather than its comprehensive benefits.

From the perspective of insured policies, the level of understanding of medical insurance policies among college students directly influences their willingness and behavior to participate in insurance. Research shows that college students generally have a limited understanding of medical insurance policies and have shortcomings and blind spots. Most college students have a basic understanding of the content of medical insurance policies, but only at a superficial level and lack a clear understanding of the deeper meanings and substantial provisions of the policies. For example, while most of them know that purchasing medical insurance can alleviate the financial pressure when they fall ill, they are not clear about the specific reimbursement ratios, reimbursement processes, and expense limits of the insurance<sup>[9]</sup>.

In addition, some college students believe that the cost of social basic medical insurance is high and unaffordable due to limited family economic conditions, leading them to choose not to participate in insurance. The non-participation of these students to a certain extent weakens the universality and coverage of social basic medical insurance.

### **Recommendations**

To address these issues, we propose some specific solutions. First, schools and governments have a responsibility to strengthen students' knowledge of medical insurance, cultivate their insurance awareness, make them aware of the importance of participating in medical insurance, and enhance their understanding of the provisions and operational procedures of insurance<sup>[10]</sup>. Through various channels and forms of propaganda (such as lectures, promotional materials, promotional videos broadcasted on campus, student unions, clubs, and student parent groups, etc.), we should strengthen the promotion and education of the significance of insurance and insurance knowledge for college students, improve the scope and intensity of promotion, and enhance college students' awareness of the importance and necessity of medical insurance. Carry out medical insurance knowledge popularization activities in various occasions such as campuses and communities, provide comprehensive popularization of medical insurance knowledge to college students through diverse and entertaining forms, and enhance their awareness of medical security and ensure the safety of their own health. At the same time, students should actively participate in lectures about insurance, pay attention to their own health issues, and deepen their understanding of medical insurance knowledge through online resources to improve their risk awareness.

To provide a convenient, timely, and professional counseling platform for college students, a medical health consultation hotline is established. College students can consult and communicate with professional medical personnel through phone calls, WeChat, emails, and other means to obtain professional medical health guidance and advice. The consultation hotline can specifically address college students' questions regarding health management, common diseases, mental health, living environment, etc., helping them solve doubts and issues related to medical and health matters, enabling college students to conveniently access various medical and health consultations. Additionally, personalized and targeted medical health guidance is provided, guiding college students to establish a scientific health concept and correct medical knowledge, enhancing their medical health literacy and awareness.

To enhance college students' insurance awareness, implementing a moderate mandatory participation policy is an effective measure<sup>[11]</sup>. This not only prevents individuals from not purchasing insurance due to perceiving a low probability of illness but also provides appropriate discounts or subsidies to financially disadvantaged students, thereby reducing their financial burden and better safeguarding their rights and interests, fully realizing the external benefits of college student medical insurance.

In summary, we must regard increasing the medical insurance coverage rate among college students as one of the important tasks in current medical insurance work, motivating college students to actively participate in medical insurance, ensuring their physical and mental health, and laying a healthy foundation for the future of the country.

### **Conclusion**

In summary, this study highlights the current challenges in college students' participation in local social basic medical insurance, revealing a significant gap in their awareness and participation rates due to misconceptions about their health, limited knowledge of insurance policies, perceived high costs, and alternative hometown insurance coverage. To address these issues, the study recommends intensifying educational efforts to promote the importance of medical insurance, establishing a medical health consultation hotline for students, and implementing a moderate mandatory participation policy with financial support for disadvantaged students. Ultimately, increasing medical insurance coverage among college students is deemed essential for their well-being and the nation's future health, offering valuable insights to guide initiatives in enhancing students' medical security awareness and participation in insurance.

**Acknowledgments:** This research work was supported by the student financial assistance project of Guangdong Medical University in 2020(Grant No.4dj20004), and College Students Innovative Experimental Project in Guangdong Medical University in 2023(Grant No.S202310571087). We also acknowledge the support of the teaching reform project of "New Medical " Teaching Steering Committee of Guangdong Province in 2023 (Grant No.175).

### **REFERENCES**

- 
- [1] Liu K, Liu W, Frank R, & Lu C. (2022). Assessing the long-term effects of Basic Medical Insurance on catastrophic health spending in China. *Health Policy Plan.* 13;37(6):747-759.
- [2] Palmedo PC, Murphy EK, Mateo KF, & Gallo J. (2022). What do urban college students really think about health insurance? A qualitative study. *J Am Coll Health.* 68(1):68-78.
- [3] Nobles, A. L., Curtis, B. A., Ngo, D. A., Vardell, E., & Holstege, C. P. (2019). Health insurance literacy: a mixed methods study of college students. *Journal of American College Health,* 67(5), 469-478.
- [4] McManus, M., Brauer, M., Weader, R., & Newacheck, P. (1991). The adequacy of college health insurance coverage. *Journal of American College Health,* 39(4), 177-185.
- [5] Johnson, J., & Severson, E. J. (2010). The impact of health insurance on college students' lives.
- [6] Palmedo, P. C., Murphy, E. K., Mateo, K. F., & Gallo, J. (2020). What do urban college students really think about health insurance? A qualitative study. *Journal of American College Health,* 68(1), 68-78.
- [7] James, T. G., Sullivan, M. K., Dumeny, L., Lindsey, K., Cheong, J., & Nicolette, G. (2020). Health insurance literacy and health service utilization among college students. *Journal of American College Health,* 68(2), 200-206.
- [8] Upadhyay SSN, Merrell LK, Temple A, & Henry DS. (2022). Exploring the Impact of Instruction on College Students' Health Insurance Literacy. *J Community Health.* 47(4):697-703.
- [9] Nobles AL, Curtis BA, Ngo DA, Vardell E, & Holstege CP. (2019). Health insurance literacy: A mixed methods study of college students. *J Am Coll Health.* 67(5):469-478.
- [10] Hamid SA, Khanam M, Azim MR, & Islam MS. (2021). Health insurance for university students in Bangladesh: A novel experiment. *Health Sci Rep.* 4(4):e382.
- [11] Djahini-Afawoubo DM, & Aguey ST.(2022). Mandatory health insurance and health care utilization in Togo. *BMC Health Serv Res.* 14;22(1):1520