

Survey on the Current Status of Health Information Literacy Among College Students in Yunnan Province and Exploration of Pathways for Improvement—Taking a Local University as an Example

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Abstract

This paper takes college students from a local university in Yunnan as the research object, mainly using the questionnaire survey method to investigate the health information literacy of college students. It analyses the health information literacy of college students from the basic situation, the current status of health information literacy, health self-management, and other aspects. Measures such as training college students to obtain health information actively, improving their comprehension and evaluation capabilities, and strengthening practical application are proposed to effectively enhance the level of college students' health information literacy.

Keywords

College students; Health information literacy; Current situation research; Path exploration.

1. Research Background

The report of the 20th National Congress of the Communist Party of China proposed advancing the Healthy China initiative, explicitly stating that people's health is a key indicator of national prosperity and strength, thereby highlighting the strategic value of health information literacy [1]. As the core component of health literacy in the information age, health information literacy represents the deep integration of information literacy and health literacy. It primarily refers to an individual's ability to access, understand, and utilise basic health information and services to make sound health decisions [2]. In response to this national strategy, the National Health Commission launched the Three-Year Action Plan for Enhancing National Health Literacy (2024-2027), aiming to comprehensively elevate public health literacy through systematic health education and knowledge dissemination [3, 4]. This initiative underscores the urgency of improving health information literacy among the public, particularly young people. As a core force in societal development, college students' health information literacy directly impacts both individual physical and mental well-being and overall societal health levels. Amidst the current information explosion, the mixed quality of health information intensifies the difficulty of information screening. In Yunnan, a region with relatively scarce educational resources, the health information literacy of university students in local institutions faces even more severe challenges. Grounded in the realities of Yunnan's local universities, this study analyses the current status and issues of university students' health information literacy, exploring regionally targeted and effective improvement pathways. This holds significant practical significance for empowering university students' autonomous health management and advancing the implementation of the Healthy China strategy [5].

2. Overview of the Basic Situation of the Survey

This study primarily utilised a questionnaire survey, directed at a cohort of college students from various institutions within Yunnan Province. A random sampling method was employed to select students across different grades and academic fields, ensuring the sample's breadth and representativeness. The survey encompassed both liberal arts and science/engineering colleges to reflect a comprehensive picture of the student body. A total of 1,200 questionnaires were disseminated, with 1,174 valid responses ultimately collected, translating to a response rate of 97.8%. Out of the 1,174 students surveyed, 478 attended liberal arts colleges while 696 attended science and engineering colleges. In terms of familial backgrounds, 66.01% of the students hailed from rural families, while 9.71% derived from townships. The majority of their parents had limited educational attainment: most fathers had only completed junior high school, and the majority of mothers had an education level of elementary school or lower. The primary occupation of the parents was farming. As the surveyed students were from a university located in Yunnan Province, the majority of them originated from rural areas in western China. Regarding family income levels, 42.08% were categorised as low-income, 29.3% as lower-middle-income, 20.61% as middle-income, 5.71% as upper-middle-income, and 2.3% as high-income. Notably, 23.08% of the surveyed students were only children. A significant 79.05% of the students' living expenses were solely covered by their families, with only a minimal percentage of students relying on part-time jobs or financial assistance from others.

3. Analysis of the Current State of College Students' Personal Health Information Literacy

College students exhibit limited health information awareness and suboptimal information screening capabilities. The survey reveals that only 21.47% of students find obtaining health information "very effective" in promoting health, 45.32% consider it effective, while 4.94% have never attempted it and are ambiguous about its utility. In the context of formulating information retrieval strategies, 52.98% of students can develop effective methods for accessing health information, whereas 47.02% cannot. Students display distinct preferences for obtaining health information. Specifically, 81.94% employ search engines, 63.8% use social media platforms like WeChat, Weibo, and QQ, and 68.06% utilise discussion forums such as Zhihu and Baidu Ask. Interestingly, most students predominantly access health information through popular online platforms, with professional medical sites (e.g., DXY, 39 Health Network, or institutional websites) being less frequently visited. A mere 12.61% of students regularly engage with health-promoting literature, contrasted with 76.41% who do so occasionally, and 10.99% who never engage with such materials. In terms of health insurance, a majority of students remain uninformed, with only 15.84% indicating awareness. These findings underscore that college students possess a limited understanding of health information, often overlooking its importance in their daily lives and heavily relying on prevalent online platforms, which makes them susceptible to misinformation during the information screening phase.

College students exhibit limited capabilities in analysing and judging health information. In a survey assessing individuals' self-perceived health status, it was revealed that the majority of students perceive their health to be good. Specifically, 32.96% consider their health status to be average, 2.98% view it as poor, and 0.68% believe it is very poor. In-depth interviews reveal that many students possess only a superficial understanding of "health", using the absence of sickness as the sole criterion for judgment. They often fail to recognise hidden or potential health issues. This suggests that college students' health information literacy and social adaptation cognition remain underdeveloped. Survey results indicate that, regarding daily health concerns, 62.86% of students lack sufficient sleep; 62.44% have an unbalanced diet; 63.2% lack regular exercise (resulting in obesity and poor physical fitness); 49.57% experience

psychological issues such as emotional instability, high stress, and depression. These findings suggest underlying health issues exist. Regarding the purpose of seeking health information, 79.56% of students seek health information primarily for their own health issues, while 53.49% do so for the health concerns of their family and friends. Additionally, 61.41% aim to enhance their knowledge of diseases and health, 52.64% seek more scientific lifestyles, 55.62% look for answers to everyday life questions, and 26.49% engage in casual browsing. These results underscore the strong motivation college students have in seeking health information. Despite their general learning and comprehension abilities, their limited professional knowledge hinders their capacity to analyse and judge health information, resulting in challenges in understanding.

Many students lack self-control and struggle with self-health management. The “2020 China College Students’ Health Survey Report” indicates that while the overall health status of Chinese college students is good, 86% of these students reported experiencing health issues in the past year. When assessing their sleep, exercise, and dietary habits, students rated their sleep quality the lowest, with 30% expressing dissatisfaction with their sleep patterns. Furthermore, nearly 30% of students felt their exercise levels were insufficient [6]. This study’s survey also uncovered numerous concerns regarding college students’ lifestyle habits and exercise routines. In terms of dietary habits, only 27.09% of students consume regular and scientifically balanced meals three times a day. Most students have irregular eating patterns, frequently consuming beverages with artificial colours or preservatives and high-fat foods. Only 10.73% of students avoid beverages with artificial colours or preservatives, and just 4.09% never eat high-fat foods. Regarding sleep habits, 47.1% of students often stay up late, 50.85% occasionally stay up late, and only 2.04% never stay up late. These detrimental lifestyle habits collectively impact health. Notably, only 7.84% of students engage in daily physical exercise, with the majority either rarely participating or exercising fewer than twice a week. Interviews revealed that while most students are cognizant of the health risks associated with unhealthy habits, their poor self-control prevents effective management of these issues, leading them to consistently choose unhealthy lifestyles. This suggests that despite having access to and understanding of health information, college students struggle to apply this knowledge in their daily lives, underscoring a significant disconnect between health awareness and actual behaviour.

The ability of college students to utilise health information requires enhancement. A survey revealed that only 23.76% of students frequently apply the health knowledge they have gleaned, with 73.17% applying it occasionally, and a concerning 3.07% never utilising this knowledge. This suggests that the majority of students do not attribute significant importance to health information in their daily lives. When confronted with health issues, 42.67% of students responded appropriately, whereas 56.22% occasionally did so, and a mere 1.11% never responded appropriately. In scenarios of physical discomfort, 40.37% of students sought immediate medical assistance, 56.22% did so occasionally, while 3.41% never sought prompt medical attention. These findings indicate that students often neglect the significance of their physical well-being. Furthermore, some students were observed neglecting to thoroughly read medication labels, expiration dates, and usage instructions. Such behaviours not only highlight gaps in students’ application of health information but also underscore the need for better integration of health knowledge into their daily routines.

4. Discussion and Recommendations Based on Survey Results

Survey data reveal that college students at a specific university in Yunnan Province encounter significant challenges in health information literacy. Although they demonstrate some familiarity with this concept, their awareness of health-related information and understanding

of mental health remain underdeveloped. Notably, the ability to access and accurately interpret health information requires further enhancement. Moreover, a majority of these students lack adequate self-control, pointing to an area for potential growth in personal health management. To address these concerns, it is imperative for the state and pertinent educational bodies to augment their investment in the health management of college students. This can be achieved by bolstering the infrastructure of health management faculty teams and ensuring adequate allocation of equipment resources within universities. Such measures would substantially bolster efforts to promote health information literacy education. Higher educational institutions should prioritise imparting theoretical knowledge, methodological frameworks, and skill training related to health information literacy. Leveraging external collaborations to establish a unified health information resource space can foster an optimal learning environment. This integrated approach, combining both online and offline modalities, will empower students to actively harness their institution's unique resources, thereby facilitating comprehensive health literacy acquisition and enhancing their self-health management capabilities.

The enrichment of health information resources is essential for cultivating college students' abilities to actively access such information, thereby enhancing their health information awareness. Notably, Yunnan Province, compared to central and eastern regions, suffers from a relative dearth of health information educational resources. Consequently, it is imperative for local universities in Yunnan to establish collaborative relationships with medical and health institutions, public health entities, and other relevant organisations to conduct health education activities collectively. By leveraging the expertise and resources of these institutions, joint health education programs and activities can be developed, providing students with firsthand experience of health service processes through active learning and practice. This approach will deepen their understanding and recognition of health information. Modern information technology tools, such as online courses, digital libraries, and health information platforms, can be utilised to cater to the individual learning needs of different students by providing diverse learning resources. Furthermore, hosting more lectures on health information can guide college students in obtaining and mastering a broader range of health information through various channels and methods. These lectures not only enhance students' professional understanding of health information but also enable them to directly access authoritative and professional health information through face-to-face interactions with experts and scholars. By doing so, students can master the skills required to correctly screen information and recognise the significant role of health information resources in personal growth and social development. This approach continually enhances their demand for health information and improves their health information awareness.

Enhance the ability to discern and evaluate health information, accurately identifying beneficial knowledge within this domain. Universities ought to establish specialised health education courses and integrate them into the compulsory curriculum, ensuring every student receives a thorough and systematic health education. The content of these courses should encompass basic health knowledge, nutrition, mental health, disease prevention, and other pertinent topics, with the objective of equipping college students with a comprehensive health knowledge system. Students should be encouraged to broaden their understanding by reading health-related books, journals, and reputable websites to augment their health knowledge. Through the analysis of real-life case studies within these courses, students should learn to identify biases, misinformation, and false content in health information, thereby fostering a critical evaluation of the health information they encounter. When faced with an array of health information, college students should maintain a clear perspective, critically examining and analysing the information, and avoiding the blind acceptance or dissemination of unverified health information [7]. For each piece of information, it is imperative that college students

conduct a meticulous analysis and evaluation to ascertain its authenticity, reliability, and applicability, thereby extracting valuable information from the vast quantity of health information available.

Enhancing scientific health education, bolstering physical exercise, and fostering optimal living habits are paramount. Universities ought to form coaching teams that include sports training specialists, scholars in health medicine, and other relevant professionals. These teams should lead health education initiatives encompassing areas such as public health, sports knowledge, healthcare, rehabilitation training, first aid procedures, mental health, self-discipline management, and the development of scientific schedules. Utilising surveys on college students' health literacy, institutions should assess students' health statuses, their interest in physical activities, and their exercise routines. This data can then be leveraged to offer personalised health recommendations and to devise strategies for the enhancement of students' health literacy. It is essential to ensure students get adequate sleep, avoid staying up late, and refrain from overexertion. A balanced approach to study and rest time is crucial for maintaining energy levels. Through nutrition education and effective canteen management, students can be guided towards a balanced diet. This would encourage them to consume nutrient-dense foods like vegetables and fruits while limiting their intake of high-calorie and high-fat foods. Students should be encouraged to engage actively in physical activities such as running, swimming, and yoga. Incorporating regular physical exercise into their daily routines can significantly boost their physical fitness and immunity [8].

Enhancing the practical utilisation of health knowledge and augmenting college students' capacity to apply health information are paramount. Merely acquiring theoretical knowledge is insufficient in elevating college students' health information literacy; the transformative application of this knowledge into practical skills for everyday life is vital. Higher educational institutions should proactively implement health promotion initiatives and inspire student involvement in health research, education, and other experiential activities. This will foster an improvement in their health information literacy through practical engagement. Activities such as health knowledge contests, lectures, and themed weeks can deepen students' comprehension and application of health information via active participation. These experiences aim to cultivate the students' ability to use health information literacy to address real-world challenges, integrating the acquired knowledge into their daily routines, thereby fostering healthy habits and lifestyles. By effectively leveraging public health and medical services, students can achieve optimal physical health, mental clarity, and emotional vitality [9]. Furthermore, internships and community service projects, undertaken through project-based learning and team collaboration, provide students with opportunities for in-depth research and practical investigations into specific health topics or challenges. Such experiences expose students to the dynamics of social health work, reinforcing their sense of health responsibility and enhancing their practical competencies, ultimately deepening their application of health information literacy through tangible experiences.

5. Conclusion

In today's rapidly evolving information environment, improving college students' health information literacy necessitates the collective efforts and support of numerous stakeholders, encompassing the students themselves, higher education institutions, and educational authorities. As the cornerstone for the development of college students' health literacy, school-based health education holds paramount importance [10]. Higher education institutions are charged with the responsibility to devise systematic and scientifically rigorous health information literacy programs that are specifically tailored to address the current health information literacy levels of college students and their distinct needs. These programs should

equip students with the skills to effectively seek, evaluate, filter, and organise pertinent health information, thereby substantially elevating their health information literacy and empowering them to manage their health scientifically and independently. Furthermore, it is imperative to bolster the construction of a campus health culture and cultivate an environment that places a high premium on health and esteems health information literacy. By concentrating on advancing college students' health information literacy capabilities and championing their physical and mental health progression, we can ultimately raise the bar of China's public health service standards and its overarching health information literacy levels.

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