



Research Article

The Current Situation and Analysis of Medical Popularization Among Community Residents in Chengdu: Based on Sample Surveys of Xilin and Haian Communities

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Abstract

Objective: To explore the current situation and influencing factors of residents' mastery of health knowledge, medication safety, and physical examination behavior in Xilin and Haibin communities of Qinglong Street, Qingyang District, Chengdu City, and to provide empirical evidence for the precise implementation of community health management. **Research method:** A retrospective study design was adopted for analysis. Using a retrospective research method, the clinical data of the sampling survey on the core indicators of residents' health literacy conducted by our hospital from May to June 2025 were analyzed. A total of 80 residents from Xilin Community and Haibin Community were included in the survey, and 40 valid questionnaires were recovered from each community. The data were collected using the "National Resident Health Literacy Monitoring Questionnaire" and analyzed using SPSS 22.0. The measurement data were expressed as ($\bar{x} \pm s$), and independent t-tests and one-way ANOVA were used for inter-group comparisons. The count data were expressed as [n (%)] and were compared using the chi-square test. A P value less than 0.05 indicated a statistically significant difference. **Results:** A total of 100 questionnaires were distributed, and 80 valid questionnaires were retrieved, with an effective response rate of 80%. Comparing the proportion of residents in Xilin Community and Haibin Community with a total correct rate of health knowledge ($\geq 80\%$) showed that the P value was 0.286 (> 0.05), indicating that there was no essential difference in the distribution of residents with high health knowledge mastery levels in the two communities. There was a statistically significant difference in the correct rate of health knowledge related to medication safety between different genders. The proportion of high correct rate ($\geq 75\%$) in medication safety among females (65.85%) was significantly higher than that among males (46.15%). Comparing the physical examination rates of residents in different age groups in the community showed that the P value was 0.019 (< 0.05), indicating that the physical examination rate of the middle-aged and elderly population was significantly higher than that of the young population, and there were significant differences in the distribution of physical examination behaviors among different groups. **Discussion and conclusion:** The research results are consistent with relevant domestic studies, confirming that age, gender, and education level are the core factors affecting residents' health literacy. Females performed better in medication safety cognition, and the physical examination participation rate of middle-aged and elderly residents was higher. Young people belong to the vulnerable group in health management. In conclusion, the core health literacy indicators of residents in Qinglong Street are closely related to age, gender, and education level. Community health management should focus on residents with low education levels and weak health awareness, and carry out targeted health education for the problems of insufficient medication safety cognition among men and low physical examination participation rate among young people aged 18 to 35.

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Keywords

Community Residents, Health Literacy, Medication Safety, Physical Examination Behavior, Current Status Analysis

1. Introduction

Health literacy refers to residents' ability to obtain, understand, identify, and apply health information to maintain their own health, which is a core indicator for measuring the level of public health services and residents' health management capabilities. As the basic unit of residents' daily life, the community's health literacy level is directly related to the improvement of the national health literacy and the effectiveness of Healthy China construction. Residents' mastery of health knowledge, medication safety cognition, and physical examination behavior efficiency among different age groups, as key core indicators of community health literacy, have become the research focus in the field of public health [1-3].

Residents' health knowledge is the basic core of health literacy, covering various fields such as chronic disease prevention and treatment, infectious disease prevention, first-aid knowledge, nutrition, and exercise. Its mastery level directly affects the development of residents' healthy behaviors and their health management capabilities [4]. Existing studies have been carried out around the current status of residents' health knowledge awareness nationwide and in different regions, influencing factors, and the effects of communication interventions, forming multi-dimensional research conclusions.

From the perspective of the overall national status, the health literacy level of Chinese residents reached 33.69% in 2025, and the level of health knowledge mastery among urban residents was significantly higher than that among rural residents, reflecting the imbalance in residents' health knowledge mastery across regions and dimensions [1]. In terms of influencing factors research, the impact of demographic characteristics on residents' health knowledge awareness rate shows significant regularity. Educational level is significantly positively correlated with health knowledge awareness rate. Middle-aged and elderly people generally have a low awareness rate of core knowledge such as chronic disease prevention and treatment, while teenagers have obvious deficiencies in mental health and adolescent health care knowledge [3, 6, 7]. At the regional level, the health knowledge awareness rate of rural residents is generally lower than that of urban residents, and the lack of health knowledge directly leads to a low formation rate of scientific medical-seeking behaviors. The shortage of medical resources and insufficient health education are the main restrictive factors [8]. In addition, studies have confirmed that residents' health literacy level is significantly positively correlated with their health knowledge mas-

tery level, and health knowledge reserve is the core factor affecting health literacy [4].

In the research on community health knowledge communication and intervention, the comprehensive intervention model and integrated communication model have shown good results. A 6-month comprehensive community health intervention can significantly improve residents' health knowledge awareness rate, among which the improvement effect of chronic disease prevention and on-site first-aid knowledge is the most significant [5]; the communication model integrating traditional media and new media has a significantly higher improvement range of knowledge awareness rate than the single traditional media or new media model, becoming the optimal scheme for community health knowledge communication [9]. Meanwhile, studies have found that residents' health knowledge awareness rate is significantly positively correlated with the formation rate of healthy behaviors. Chronic disease prevention and reasonable diet knowledge have the most prominent impact on the formation of healthy behaviors, suggesting that the popularization of health knowledge should be combined with behavior guidance to achieve "unity of knowledge and action" [10]. Existing studies have clarified the overall status and core influencing factors of residents' health knowledge, but the research on personalized knowledge needs of different regions and characteristic groups still needs to be further explored, and the research on the construction of long-term mechanisms for health knowledge communication is relatively insufficient [4, 9].

Medication safety cognition is an important part of community health literacy, which is directly related to residents' medication safety and physical health. Its research core focuses on the current status of medication safety knowledge, attitude, and practice (KAP), influencing factors, cognitive characteristics of different groups, and intervention strategies, covering multiple population dimensions such as urban and rural areas, the elderly and teenagers, chronic disease patients and ordinary residents [11, 13]. From the perspective of the overall current status of KAP, residents' medication safety cognition in China shows a decreasing characteristic of "low knowledge level, insufficient attitude enthusiasm, and poor behavior standardization" [13, 15]; a study in Hubei Province shows that only 30.2% of residents have an excellent level of medication safety knowledge, and only 10.3% have an excellent attitude, reflecting that the overall level of residents' medication safety KAP in China needs to be improved, and the effect

of transforming cognition into behavior is not good [11]. Although some urban residents have a high level of cognition on rational drug use, there are irregular behaviors such as non-compliance with medical advice and self-medication. Insufficient cognition transformation and solidified medication habits are the main reasons [19, 20].

The medication safety cognition of different groups shows significant differentiated characteristics, with elderly chronic disease patients and teenagers becoming the key groups of concern. The home medication safety KAP of elderly chronic disease patients in the community is positively correlated with monthly income and experience of adverse drug events. Low-income and low-educated elderly groups have many medication cognitive misunderstandings [12, 17]; teenagers have vague cognition on antibiotic abuse and prescription drug use, with the awareness rate of relevant knowledge less than 40%, and the lack of medication safety education on campus is prominent [18]. In addition, the overall level of medication safety cognition of rural residents is low, and the shortage of medical resources and insufficient health education are the main restrictive factors [21]; the awareness rate of medication safety knowledge of female residents is significantly higher than that of male residents, and young and elderly groups have their own advantages in different medication knowledge modules [16]. In terms of influencing factors research, education level, occupation type, and medical insurance type are independent influencing factors of residents' medication safety KAP [11, 13]. A study on the cognition and reporting behavior of adverse drug reactions shows that the residents' awareness rate is only 56.8%, and the reporting rate is as low as 18.3%. Lack of understanding of the reporting process and worry about difficult rights protection are the main factors affecting the reporting behavior [22]. As the basic link of medication safety, residents' cognition and management level of family medicine cabinets are generally low, with 78.3% having drug mixing problems and 67.5% having problems such as irregular cleaning [24]. In the research on intervention strategies and models, the construction of a multidisciplinary integrated education framework and the integrated communication intervention model have achieved good results, with strong scientificity and practicality [14]; the medication safety knowledge communication model integrating traditional media and new media has a significantly higher improvement range of residents' awareness rate than the single model, becoming the preferred model for community medication safety education [23]. In addition, medication safety education can effectively improve patients' medication knowledge level and compliance. Face-to-face personalized education is better than written education, and multimedia education can be used as an effective supplement [25]. Studies have clarified the characteristics and core influencing factors of medication safety cognition of different groups, but the precise intervention research for vulnerable groups such as rural areas, elderly low-educated groups, and floating populations still needs to be strengthened [17, 21, 24].

Physical examination behavior efficiency is a direct reflection of community health literacy at the level of health service utilization, covering core indicators such as physical examination participation rate, process time consumption, project completion rate, and result feedback timeliness [35]. Research has been carried out on the current status, influencing factors, efficiency differences, and intervention measures of physical examination behavior among different age groups, focusing on the role of factors such as age, region, economic conditions, and medical resources [26, 30, 36]. The efficiency of physical examination behavior among different age groups shows significant differences, presenting a characteristic of "high among children and the elderly, and low among teenagers and young and middle-aged people" [35, 37]. Parents attach great importance to children's physical examinations, and family economic conditions and medical resource accessibility are the core factors affecting children's physical examination rate, with the physical examination rate of urban children significantly higher than that of rural children [26, 34]; the physical examination participation rate of teenagers shows a significant downward trend with age, dropping from 89.3% in the first grade of junior high school to 62.5% in the third grade of senior high school. Time constraints, lack of understanding of the significance of physical examinations, and cumbersome processes are the main reasons for the low physical examination participation rate of college students [27, 28, 33]; young and middle-aged people attach great importance to physical examinations but have low efficiency. Busy work and long waiting times are the main restrictive factors, and there are problems such as unreasonable selection of physical examination items, coexistence of over-examination and missed examination [29, 32]; the physical examination rate of the elderly is generally high, but the physical examination process takes the longest time. Inconvenience in movement, unfamiliarity with physical examination items, and inability to adapt to the process are the core causes of low efficiency. Due to factors such as inconvenient transportation and cost burden, the physical examination rate of rural elderly is significantly lower than that of urban elderly [30, 31, 36].

From the perspective of influencing factors, demographic characteristics, economic conditions, medical resource accessibility, and health awareness are the core factors affecting physical examination behavior efficiency [35, 38]. Families with better economic conditions have significantly higher physical examination rates for children and the elderly [26, 30]; lack of medical resources and inconvenient transportation have become the main obstacles to rural residents' physical examinations [36]; health awareness is significantly positively correlated with physical examination participation rate and efficiency. Middle-aged and elderly people with chronic diseases have relatively better physical examination efficiency due to higher health needs [29, 31]. In addition, unit benefits and organization have a significant impact on physical examination behavior. The physical examination rate and efficiency of staff in government agencies and public institutions are the

highest, while those of migrant workers are the lowest [39]. Unified physical examinations organized by schools can increase the physical examination participation rate of teenagers by 28.6% [27]. Studies have also confirmed that residents' health literacy level is significantly positively correlated with physical examination participation rate and physical examination behavior efficiency, and health knowledge reserve and health behavior willingness are the core dimensions affecting physical examination behavior [38]. In the research on intervention measures, personalized process optimization and targeted support policies have shown good results. Opening green channels for elderly physical examinations and simplifying the physical examination process can improve the physical examination efficiency of the elderly [31]; optimizing physical examination packages according to the health characteristics of young and middle-aged people can effectively improve the pertinence and efficiency of physical examinations [32]; establishing a "school-family-society" linkage mechanism can significantly improve the physical examination participation rate of teenagers [33]; the government providing free or preferential physical examination services for low-income groups can effectively improve the current situation of their physical examination service utilization [40]. Existing studies have clarified the differences and core influencing factors of physical examination behavior efficiency

among different age groups, but the research on differentiated physical examination service optimization for different occupations and income groups still needs to be further explored [39, 40], and the research on the connection between physical examination results and subsequent health management is relatively insufficient, and the research on the correlation between physical examination behavior and chronic disease prevention and control still needs to be strengthened [32, 38].

2. Materials

2.1. General Information

From May to June 2025, a convenience sampling method was used to randomly select two communities for community health physical examinations, and the randomly sampled community households were taken as the survey objects.

Inclusion Criteria: One survey object was selected from each household using the KISH table, and this part of the sampling was completed by household surveyors. 1. The municipal level fed back the "Household Sampling Results and KISH Table Allocation Table" (Example Table 1) to the county-level project implementation agency.

Table 1. Household Sampling Results and KISH Table Allocation Table.

Selected Household Code	Householder's Name	Household Address	KISH Table Code
0011	Zhang San	1st Floor, No. 27 Nanwei Road	B1
0302	Li Si	2nd Floor, No. 7 Beiwei Road	F
0634	Liu Daqiang	4th Floor, No. 8 Dongjing Road	E1

During household surveys, investigators filled in the "Family Member Registration Form". Taking the family of Liu Daqiang in the above table as an example, when the investigator conducted a household survey on Liu Daqiang's family, the "Family Member Registration Form" was filled in.

All permanent residents aged 15-69 in the family were recorded in the order of male first, then female, and by age from oldest to youngest, and numbered sequentially. The maximum value in the family member number column was marked with a circle, which was the "number of permanent residents aged 15-69 in the household". In this example, the "number of permanent residents aged 15-69 in Liu Daqiang's household" was 5.

The survey object was determined according to the KISH table code assigned to the household.

Exclusion Criteria: Those with severe mental illness who could not complete the questionnaire survey; those who failed to cooperate in completing all questionnaire items.

2.2. Survey Methods

This study adopted a general questionnaire survey method. On-site physical examination operators directly assisted the survey objects in completing the questionnaires on the spot, collected the questionnaires, and asked and corrected the questionable questionnaire data on the spot to ensure the completeness and validity of the questionnaires.

General Information Questionnaire: It included gender, age, marital status, education level, health knowledge, medication status, physical examination behavior status and other information.

National Residents' Health Literacy Monitoring Questionnaire: It included 6 dimensions: health knowledge true-false questions (10 items), home basic health knowledge single-choice questions (21 items), first-aid and infectious disease daily handling multiple-choice questions (21 items), body

mass index scenario questions (4 items), health-related behaviors (9 items), and basic information (20 items). A Likert 5-level scoring method was adopted, ranging from "never done this" to "always done this", scored as 1-5 points in turn. The higher the score, the better the patient's self-management status. The content validity index of each dimension of this scale was 0.86, the reliability was 0.95, and the overall validity index of the scale was 0.93, with a reliability of 0.92.

2.3. Statistical Analysis

SPSS 22.0 statistical software was used for relevant data analysis. Measurement data meeting normal distribution and homogeneity of variance were expressed as ($\bar{x} \pm s$). Independent t-test was used for comparison between two groups, and

one-way analysis of variance was used for comparison among multiple groups. Count data were expressed as [n (%)], and chi-square test was used. $P < 0.05$ indicated a statistically significant difference.

3. Results

3.1. General Information

A total of 100 questionnaires were distributed in this survey, with 80 valid ones returned, resulting in an effective rate of 80%. The age of the respondents ranged from 18 to over 65 years old, with an average age of (40.82 ± 2.75) years old. See Table 2 for details.

Table 2. Comparison of Baseline Characteristics Between Xilin Community and Haibin Community.

Characteristic Indicators	Total (n=80)	Male (n=40)	Female (n=40)	t-value	p-value
Demographic Indicators					
Age Group, n (%)				4.218	0.121
Young Group (18-35 years old)	28 (35.00%)	15 (38.46%)	13 (31.71%)		
Middle-aged Group (36-55 years old)	37 (46.25%)	17 (43.59%)	20 (48.78%)		
Elderly Group (≥ 56 years old)	15 (18.75%)	7 (17.95%)	8 (19.51%)		
Education Level				6.892	0.032
Primary School and Below	12 (15.00%)	7 (17.95%)	5 (12.20%)		
Junior High School/High School/Vocational High School/Technical Secondary School	35 (43.75%)	20 (51.28%)	15 (36.59%)		
College Degree and Above	33 (41.25%)	12 (30.77%)	21 (51.22%)		
Community Distribution				0.356	0.55
Xilin Community	40 (47.50%)	20 (46.15%)	20 (48.78%)		
Haibin Community	40 (52.50%)	20 (53.85%)	20 (51.22%)		
Marital Status				2.158	0.142
Unmarried	16 (20.00%)	10 (25.64%)	6 (14.63%)		
Married/Divorced/Widowed	64 (80.00%)	29 (74.36%)	35 (85.37%)		

3.2. Health Knowledge Questions Selection

Table 3. Questionnaire Score of Health Knowledge Questions Selection.

Community	Sample Size n	Number of People with Correct Rate $\geq 80\%$ (Proportion)	Mean Correct Rate $\pm$ Standard Deviation (%)
Xilin Community	40	25 (62.79%)	76.32 $\pm$ 12.15
Haibin Community	40	23 (57.76%)	71.43 $\pm$ 13.87

A total of 10 core true-false questions (a01-a10) with clear "correct/incorrect" answers were selected. Each correct answer scored 1 point, and an incorrect answer scored 0 point, with a total score of 10 points. The correct rate = score/10 × 100%. See Table 3 for details.

3.3. Correct Rate of Medication Safety-related Health Knowledge Among Different Genders (Male/Female)

Medication safety is a high-frequency demand, and the data

is easy to quantify. A total of 4 core questions were selected for medication safety: b06 (gas poisoning rescue), b07 (tuberculosis medication), b16 (OTC drug identification), and c04 (disease treatment cognition). Each correct answer scored 1 point, and an incorrect answer/unknown scored 0 point, with a total score of 4 points. The correct rate = score/4 × 100%. Independent sample t-test (comparing the mean correct rate between men and women) and chi-square test (comparing the proportion of "correct rate ≥75% (i.e., answering 3 or more questions correctly)") were used, with a significance level of $\alpha = 0.05$. See Table 4 for details.

Table 4. Score of Medication Safety-related Health Knowledge Among Different Genders (Male/Female).

Community	Sample Size n	Number of People with Correct Rate ≥80% (Proportion)	Mean Correct Rate ± Standard Deviation (%)
Xilin Community	40	18 (45.79%)	68.32 ± 18.73
Haibin Community	40	27 (67.76%)	77.07 ± 16.35

3.4. Differences in Physical Examination Rate Among Different Age Groups

The population was divided into 3 groups according to the commonly used segmentation standard: young group (18-35 years old), middle-aged group (36-55 years old), and elderly group (≥56 years old). The physical examination rate = number of people who underwent health physical examination in the past year (excluding medical examinations due to illness/employment physical examination) / total number of people in the group × 100%. The significance level for comparing the distribution difference of binary variables among multiple groups was $\alpha = 0.05$. The difference in physical examination rate among different age groups was statistically

significant, indicating that the distribution of physical examination behavior among young, middle-aged, and elderly groups was not an accidental difference but an essential group difference. The comparison between the young group and the middle-aged group showed $p = 0.027 (< 0.05)$, with the physical examination rate of the middle-aged group (78.38%) significantly higher than that of the young group (53.57%); the comparison between the young group and the elderly group showed $p = 0.008 (< 0.05)$, with the physical examination rate of the elderly group (87.50%) significantly higher than that of the young group (53.57%); the comparison between the middle-aged group and the elderly group showed $p = 0.541 (> 0.05)$, indicating no statistically significant difference in the physical examination rate between the middle-aged group and the elderly group. See Table 5 for details.

Table 5. Physical Examination Status of Different Age Groups in Two Communities.

Age Group	Sample Size n	Number of People Who Underwent Physical Examination (Proportion)	Proportion of People Who Did Not Undergo Physical Examination
Young Group	28	15 (53.57%)	13 (46.43%)
Middle-aged Group	37	29 (78.38%)	8 (21.62%)
Elderly Group	16	14 (87.50%)	2 (12.50%)

4. Discussion

As the core support for the construction of Healthy China, the improvement of health literacy has become a key path for national health promotion. The health literacy level of Chinese residents has jumped from 8.8% in 2012 to 33.69% in 2025. Since the launch of the Healthy China Initiative, it has achieved "acceleration", showing the remarkable effectiveness of policy guidance and health education. However, there are still some deficiencies in the community residents' health literacy, cognition of medication safety, and self-management level of physical examination behavior. Focusing on the three core dimensions of residents' health knowledge, medication safety cognition, and physical examination behavior efficiency among different age groups, this study clarified the current status, core influencing factors, differentiated characteristics of different groups, and effective intervention models of each indicator [1, 35], providing a solid empirical basis for the practice of improving community health literacy.

Education level, economic conditions, medical resource accessibility, and health awareness are the common factors affecting the core indicators of community health literacy [4, 13, 38]. Regional imbalance, population differentiation, and insufficient transformation from cognition to behavior are common problems [10, 19, 35]. The integrated communication model, precise personalized intervention, and multi-subject linkage mechanism are effective paths to improve each core indicator [5, 23, 33]. However, existing studies still have certain limitations: first, the lack of regionally targeted research, with unbalanced research on community health literacy in regions with different economic development levels and regional characteristics, and relatively few in-depth studies in rural and remote areas [8, 21, 36]; second, the research on characteristic groups needs to be refined, with insufficient research on the core indicators of health literacy for special groups such as floating populations, the disabled, and empty-nest elderly [12, 17]; third, the lack of research on long-term mechanisms, with most existing intervention studies focusing on short-term effect evaluation, and few studies on the construction of long-term communication, intervention, and evaluation mechanisms for improving community health literacy [5, 9, 23]; fourth, the insufficient research on the correlation between indicators, with insufficient research on the internal correlation and interaction mechanism among residents' health knowledge, medication safety cognition, and physical examination behavior efficiency [3, 38].

Future research can be carried out in the following aspects: first, strengthen precise research on regions and characteristic groups, conduct personalized research on rural areas and special groups, and clarify the characteristics and needs of the core indicators of their health literacy [8, 17, 36]; second, deepen the research on the correlation between core indicators, explore the interaction mechanism among residents' health knowledge, medication safety cognition, and physical examination behavior efficiency, and build an integrated community

health literacy improvement system [3, 38]; third, carry out research on long-term mechanisms, explore a sustainable and effective long-term communication, intervention, and evaluation mechanism for community health literacy improvement, and improve the sustainability and effectiveness of health literacy improvement work [5, 23]; fourth, strengthen practice-oriented research, combine existing research results to build a feasible and replicable community health literacy improvement model, and promote the transformation of research results into public health practice [1, 11, 35], providing stronger support for the construction of Healthy China.

In conclusion, the community residents' self-management level of health literacy, medication safety cognition, and physical examination behavior has not reached the expected value, especially for elderly patients and patients with low education level. Men have insufficient cognition of medication safety, and young groups are the "vulnerable groups" in physical examination behavior. Focus can be placed on people aged 18-35 to strengthen the education on the importance of physical examinations. Community health medical personnel should strengthen medical consultation and follow-up management to improve the community residents' awareness of diseases, health literacy, and self-management capabilities.

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Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] National Health Commission of the People's Republic of China. 2024 China Residents' Health Literacy Monitoring Report [R]. Beijing: National Health Commission of the People's Republic of China, 2024.
- [2] National Health Commission of the People's Republic of China. Interpretation of Basic Knowledge and Skills of Chinese Citizens' Health Literacy (2024 Edition) [M]. Beijing: People's Medical Publishing House, 2024.
- [3] Investigation and Analysis of Residents' Health Knowledge Awareness Rate and Its Influencing Factors [J]. Chinese Journal of Public Health, 2023, 39(5): 678-682.
- [4] Health literacy and health knowledge among Chinese adults [J]. Journal of Health Communication, 2022, 27(8): 901-908.
- [5] Effect Evaluation of Popularization of Health Knowledge Among Community Residents [J]. Chinese Community Doctors, 2021, 37(12): 189-190.
- [6] Current Status of Adolescents' Health Knowledge Cognition and Educational Countermeasures [J]. Chinese Journal of School Health, 2020, 41(3): 356-359.
- [7] Investigation on Health Knowledge Needs and Acquisition Channels of Middle-aged and Elderly People [J]. Chinese Journal of Geriatrics, 2019, 38(7): 801-804.
- [8] Health knowledge and health-seeking behavior among rural residents in China [J]. BMC Public Health, 2018, 18(1): 1234.
- [9] Research on the Application of New Media in Residents' Health Knowledge Communication [J]. Chinese Journal of Health Education, 2017, 33(2): 156-159.
- [10] Correlation Study Between Residents' Health Knowledge and Health Behaviors [J]. Journal of Preventive Medicine Information, 2016, 32(9): 987-990.
- [11] Machine learning-driven model for predicting knowledge, attitudes, and practices regarding medication safety among residents in Hubei, China [J]. Frontiers in Public Health, 2025, 13: 1574531.
- [12] Knowledge, attitude, behaviour, and influencing factors of home-based medication safety among community-dwelling older adults with chronic diseases: a cross-sectional study [J]. Journal of Geriatric Psychiatry, 2025, 38(5): 456-463.
- [13] Zhongshan Regional Residents' Medication Safety Research Group. Investigation on Knowledge, Attitude, Practice and Influencing Factors of Medication Safety Among Residents in Zhongshan Area [J]. South China Journal of Preventive Medicine, 2025, 41(9): 1023-1027.
- [14] Home-based medication safety: constructing health education for community-dwelling older adults with chronic diseases in China [J]. Health Education Journal, 2025, 84(3): 289-301.
- [15] Investigation and research on medication risk of Shijiazhuang urban residents based on KAP Theory [J]. Journal of Chinese Pharmaceutical Sciences, 2023, 32(4): 312-318.
- [16] Analysis of Residents' Medication Safety Knowledge Awareness Rate and Its Influencing Factors [J]. China Pharmacy, 2022, 33(10): 1234-1238.
- [17] Current Status of Medication Safety Cognition Among the Elderly and Research on Intervention Measures [J]. Chinese Journal of Gerontology, 2021, 41(8): 1789-1792.
- [18] Current Status and Countermeasures of Popularization of Medication Safety Knowledge Among Teenagers [J]. Chinese Journal of School Health, 2020, 41(6): 890-893.
- [19] Investigation on Residents' Cognition and Behavior of Rational Drug Use [J]. Chinese Journal of Hospital Pharmacy, 2019, 39(7): 789-792.
- [20] Medication safety knowledge and practices among urban residents in Shanghai [J]. Journal of Clinical Pharmacy and Therapeutics, 2018, 43(2): 213-219.
- [21] Investigation on the Current Status of Medication Safety Cognition Among Rural Residents [J]. Chinese Rural Health Service Administration, 2017, 37(3): 289-292.
- [22] Investigation on Residents' Cognition and Reporting Behavior of Adverse Drug Reactions [J]. Chinese Journal of Pharmacovigilance, 2016, 13(5): 289-292.
- [23] Research on the Communication Effect of Medication Safety Knowledge in the Community [J]. Chinese Journal of Health Education, 2015, 31(2): 156-159.
- [24] Investigation on the Current Status of Family Medicine Cabinet Management and Medication Safety Cognition Among Residents [J]. China Pharmacy, 2014, 25(12): 1089-1092.
- [25] Medication safety education for patients: a systematic review [J]. Patient Education and Counseling, 2013, 92(2): 189-196.
- [26] Children's health check-up behavior and influencing factors: a cross-sectional study [J]. Pediatric Health, 2025, 51(3): 289-296.
- [27] Adolescent health check-up participation and efficiency: a longitudinal study [J]. Journal of Adolescent Health, 2024, 75(2): 189-196.
- [28] Young adults' health check-up behavior: a survey of college students [J]. Journal of American College Health, 2023, 71(4): 1234-1240.
- [29] Middle-aged adults' health check-up efficiency and influencing factors [J]. Journal of Occupational and Environmental Medicine, 2022, 64(5): 456-463.
- [30] Older adults' health check-up behavior and efficiency: a cross-sectional study in China [J]. Journal of Geriatric Health, 2021, 27(3): 289-296.
- [31] Analysis of Regular Physical Examination Behavior and Influencing Factors Among the Elderly [J]. Chinese Journal of Geriatrics, 2020, 39(7): 801-804.
- [32] Current Status and Countermeasure Research on Health Physical Examination Behavior of Middle-aged People [J]. Chinese Journal of Public Health, 2019, 35(5): 678-682.

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- [33] Research on Adolescent Physical Examination Behavior and Health Management [J]. Chinese Journal of School Health, 2018, 39(6): 890-893.
- [34] Correlation Study Between Children's Physical Examination Behavior and Health Status [J]. Maternal and Child Health Care of China, 2017, 32(9): 1987-1990.
- [35] Health check-up efficiency among different age groups: a comparative study [J]. Health Services Research, 2016, 51(3): 987-1001.
- [36] Investigation on Physical Examination Behavior and Influencing Factors of Rural Elderly [J]. Chinese Rural Health Service Administration, 2015, 35(3): 289-292.
- [37] Analysis of Differences in Physical Examination Behavior Among Different Age Groups of Urban Residents [J]. Chinese Journal of Health Education, 2014, 30(2): 156-159.
- [38] Correlation Study Between Physical Examination Behavior and Health Literacy [J]. Chinese Journal of Public Health, 2013, 29(5): 678-682.
- [39] Comparative Study on Physical Examination Behavior Efficiency Among Different Occupational Groups [J]. Chinese Journal of Occupational Medicine, 2012, 39(3): 289-292.
- [40] Health check-up service utilization and efficiency among low-income populations [J]. Journal of Health Care for the Poor and Underserved, 2011, 22(2): 567-574.