

Health Literacy and Physical Fitness Status among Young Adult Urban Residents of Yueyang City under the Background of Healthy China

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Abstract: With the background of Healthy China strategy, this paper aims to investigate the health literacy status of urban residents in Yueyang City and its influencing factors under the background of Healthy China strategy, analyze the influencing factors, and put forward corresponding suggestions to promote the further improvement of health literacy status and health level of residents in Yueyang City, and lay a certain foundation for the realization of healthy China strategy. By sending out an online questionnaire, the paper investigated 450 urban residents aged 18-45 years old in 9 districts and counties of Yueyang City, conducted a survey on their occupation, educational background, marriage, monthly income and BMI index, and conducted a survey on 7 dimensions including national fitness action, eating habits, tobacco control action and the health of the elderly, reaching the following conclusions: When it comes to their level of awareness to the different initiatives of the government, it can be shown that they are very much aware of the policy on smoking inside campuses. This can be attributed to the fact that they are young adults and most of them just finished their college lives. Their level of awareness to the care for mothers and children are manifestation of being young parents. They are aware also about the national campaign of the government on fitness and wellness which could inspire them to maintain a strong and healthy body. Their level of literacy on health promotion for the elderly as well as their safety and protection on their work places needs improvement because it will affect their level of effectiveness and productivity in their workplaces.

Keywords: Health China, Health Literacy, Yueyang City Urban Residents, Tobacco Control Campaign.

1. Introduction

Health is an inevitable requirement to promote the all-round development of human beings, and is the basic condition for economic and social development. To realize the health and longevity of the people is an important symbol of national prosperity and rejuvenation, and it is also the common aspiration of the people of all ethnic groups in China.

Universal health is the fundamental goal of building a healthy China. Based on the two focus points of the whole population and the whole life cycle, the provision of equitable and accessible, systematic and continuous health services to achieve a higher level of health for all. We should continue to improve the system, expand services and improve the quality of services, so that all people can enjoy needed, quality and affordable health services such as prevention, treatment, rehabilitation and health promotion, and give priority to addressing the health problems of key groups such as women and children, the elderly, the disabled and low-income groups. It is necessary to cover the whole life cycle, identify a number of priority areas in view of the major health problems and major influencing factors at different stages of life, strengthen intervention, realize the whole process of health services and health protection from the fetus to the end of life, and comprehensively safeguard people's health.

Promoting a healthy China is an important foundation for building a moderately prosperous society in all respects and basically realizing socialist modernization. It is a national strategy to comprehensively improve the health quality of the Chinese nation and achieve coordinated development between people's health and economic and social development. It is a major measure to actively participate in global health governance and fulfill international

commitments under the 2030 Agenda for Sustainable Development. The next 15 years will be an important period of strategic opportunities for promoting the building of a healthy China.

The implementation of Healthy China strategy is closely related to the level of national health literacy, and the improvement of health literacy level is also an important part of the country to achieve the strategic goal of "healthy China". Health literacy, as an important part of evaluating the development of health cause, is also an important factor affecting health, and has different degrees of influence on the quality of life of individuals, groups and society. Therefore, residents' health literacy is not only an important indicator to measure health care, but also a systematic reflection of civilized society, economic and social development. The improvement of people's health literacy has increasingly become an important issue. The World Health Organization emphasizes that health literacy is an important indicator to predict people's health status, and the improvement of its literacy level can effectively reduce social costs and alleviate health inequities.

1.1. Statement of the Problem

This study intended to survey the level of health literacy and physical fitness status as assessed by the young adult urban residents in Yueyang City under the background of healthy China. Put forward policy suggestions to improve the health literacy and physical fitness of young adult urban residents in Yueyang City, so as to improve the health level of residents and lay a foundation for the realization of the overall goal of healthy China.

Specifically, it tried to answer the following questions in this research:

- 1) What is the profile of the respondents?
- 2) What is the level of health literacy as assessed by the urban residents in Yueyang City under the background of healthy China ?
- 3) Is there a significant difference in the assessment of the respondents on the level of health literacy of urban residents in Yueyang City under the background of healthy China when the profile is taken as test factors?
- 4) What factors have an important impact on the health literacy of urban residents in Yueyang City?
- 5) Based from the findings of the study, what action plan can be made to improve the health literacy level of urban residents in Yueyang City?

1.2. Significance of the Study

This study aimed to determine the level of health literacy of urban residents in Yueyang City, Hunan Province, and analyze the effects of factors such as sex, age, occupation and educational background on the health literacy of urban residents in Yueyang City, so as to provide a focus for intervention measures to improve the health level of urban residents in Yueyang City.

1.3. Scope and Delimitations

This study focused on the level of health literacy as assessed by the urban residents in Yueyang City. In this study, the choice of the respondents was at random. The selected samples can better reflect the overall level.

The study was conducted among urban residents in Yueyang city, ranging in age from 18 to 45 years old. The effects of different age, sex, occupation and education level on health literacy was explored.

The objective of this study was to investigate and analyze the health literacy and physical status of young urban residents in Yueyang City, understand their health status and grasp of health-related knowledge, and propose corresponding solutions to existing problems, so as to improve the health literacy and health level of young urban residents in Yueyang City.

2. Literature Review

Li Xuanxuan et al. (2019) and He Wenjing (2017) pointed out that the improvement of residents' health level is closely related to the level of residents' health literacy. Therefore, cultivating a healthy lifestyle and improving personal health literacy is the only way. The "Health Knowledge Popularization Action" ranked first among the 15 major actions of the Healthy China Action, further clarifying that improving health literacy is a prerequisite for promoting the health of the whole people. The core of health literacy is to let residents learn to take the initiative to pay attention to and maintain their health, so that everyone can truly realize that they are the first responsible person for health.

The development of health literacy in China started relatively late. In 2005, with the support of the public welfare Fund of the Ministry of Science and Technology, the China Health Education Center started the research on health literacy, which kicked off the curtain of health literacy research. In 2007, the former Ministry of Health convened more than 100 experts and scholars in the field of health, repeatedly deliberated on the basic content of health literacy, lasted for a year, in January 2008, the former Ministry of Health issued No. 3 announcement "Chinese citizens' health literacy - Basic Knowledge and skills (trial)", Its basic content

is 66 basic health knowledge and skills that Chinese residents should have at this stage, referred to as "Health Literacy 66". This is the first government document in the world to define the health literacy of citizens. On this basis, the former Ministry of Health organized experts to compile the "Health Literacy 66 - Chinese residents' Health Literacy Reading", which more specifically elaborated the core content of the "Health 66". In August 2008, the Action Plan for promoting Health Literacy of Chinese citizens (2008-2010) was issued, which laid a solid foundation for comprehensively carrying out health literacy work in China. In 2012, The State Council issued the "Twelfth Five-Year Plan for the National Basic Public Service System" and the "Twelfth Five-Year Plan for the Development of health Undertakings", both of which put forward the "health literacy level of urban and rural residents reaching 10% in 2015" as an indicator of basic medical and health services. In 2014, the National Health Literacy Promotion Action Plan (2014-2020) was issued, and it was proposed that by 2020, the national health literacy level should be raised to 20%. In 2016, The State Council issued the Outline of the "Healthy China 2030" Plan, proposing that by 2030, the level of health literacy should reach 30%. On July 9, 2019, the Healthy China Action Promotion Committee issued the Healthy China Action (2019-2030), which highlights the important status of health literacy as the first indicator of the important indicators of Healthy China Action, and puts forward the expected requirements that the level of health literacy should exceed 22% by 2022, and that by 2020, the level of health literacy should exceed 22%. The level of health literacy of Chinese residents has reached 23.15%, which has exceeded the expected target. In 2021, the Notice of the Office of the Healthy China Action Promotion Committee on the issuance of the Key Points of the Healthy China Action 2021, the first task of which is to formulate normative documents for the release and dissemination mechanism of all-media health science knowledge, to promote the popularization of health knowledge and improve the level of health knowledge of residents.

3. Methodology

3.1. Research Design

This study utilized the Quantitative method specifically the descriptive comparative survey design. The questionnaire was designed in combination with the health literacy measurement questionnaire issued by the national health department.

3.2. Sampling Method (Local, Population, Technique)

The study took place in Yueyang, Hunan Province, China. This study adopted the method of random sampling to conduct a questionnaire survey in 9 administrative areas in 3 urban areas, 4 counties and 2 county-level cities under the jurisdiction of Yueyang City. The administrative areas which will be part of the study are Yueyang Lou District, Junshan District, Yunxi District, Yueyang County, Xiangyin County, Pingjiang County, Huarong County, Miluo City, Linxiang City. In each administrative area, 450 questionnaires were randomly distributed to urban residents aged 18-45, a total of 450 questionnaires.

The questionnaire was distributed randomly to the urban residents of Yueyang city through their emails or wechat.

3.3. Data Gathering Procedure

The researcher randomly distributed the 450 questionnaires to urban residents aged 18-45 years old in 9 counties and districts of Yueyang City through emails. After receiving, invalid questionnaires will be eliminated and valid questionnaires will be retained according to the questionnaires filled in.

3.4. Statistical Treatment

Excel was used to sort out the data, and SPSS23.0 was combined to analyze the health literacy of residents.

Descriptive analysis.

The frequency and percentage was used for the statement of the problem #1.

The mean and standard deviation was used for statement of the problem #2.

The t-test and analysis of variance(ANOVA) was used for the statement of the problem #3.

The answers to the statement of the problem #4 was grouped thematically or by themes.

3.5. Ethical Considerations

Questionnaire design: On the basis of extensive reference to relevant materials and literature, this study combined with the relevant contents of the citizen health literacy survey released by the health department, formulated a questionnaire, conducted expert consultation, discussion and modification, and formed a questionnaire to ensure the rationality of the questionnaire design.

Questionnaire recovery and statistics: After collecting questionnaires through the emails/wechat, invalid questionnaires, such as blank questionnaires and unfinished questionnaires, will be excluded, and valid questionnaires will be retained to ensure the scientific nature of this study.

4. Results and Discussion

Level of health literacy as assessed by the urban residents in Yueyang City under the background of healthy China in terms of the following:

Table 1. Level of health literacy as assessed by the young adults of urban residents in Yueyang City in terms of National Fitness Action

National Fitness Action	Mean	SD	Verbal Interpretation	Rank
1.Our national government has a plan for the national fitness advocacy that benefit us	3.58	0.66	Strongly Agree/Highly evident	2
2.There are enough facilities for sports and recreational activities	3.28	0.82	Strongly Agree/ Highly evident	3
3.There are enough budget for sports and recreational activities per city	3.20	0.87	Agree/Evident	4
4.Our local government has a fitness and wellness program for the community	3.08	0.90	Agree/Evident	5
5.Teaching of physical activities and sports in schools are required	3.64	0.59	Strongly Agree/ Highly evident	1
Composite Mean	3.36		Strongly Agree /Highly evident	

Legend: N-450;Parameter limits: 1-1.00-1.75-Strongly disagree;2-1.76-2.50- Disagree ;3-2.51-3.25-Agree ;4-3.26- 4.00-Strongly agree.

Table 1 shows the level of health literacy of the respondents in terms of the national fitness action of their government. In general , the respondents strongly agreed that the national fitness action of the government of the government is highly evident. This is evident in the composite mean result of 3.36.

Looking closely at the mean results of the different indicators , indicator #5," Teaching of physical activities and sports in schools are required" received the highest mean value of 3.64. the respondents strongly agreed that the teachings pf physical education and sports are highly evident in the tertiary education. Because it is a mandatory subject tin their curriculum from basic education until the tertiary level. Followed by indicator #1," Our national government has a plan for the national fitness advocacy that benefit us" with a mean value of 3.58 which could mean the national health awareness campaign is a national advocacy and it is highly evident in the different programs that they offer . The indicator which received the lowest mean value of 3.08 is indicator #4 , "Our local government has a fitness and wellness program for the community". Based on this result , it can be inferred that there is a need for the local officials to put up a fitness or wellness program per locality to uplift the fitness conditions of the people living there . There is a need

also to put up fitness common fitness or wellness centers where they can do their daily or weekly exercise program.

Table 2 shows the level of health literacy of the respondents in terms of their dietary habits. In general , the respondents strongly agreed that their level of dietary habits is highly evident. This is evident in the composite mean result of 3.26.

Looking closely at the mean results of the different indicators , indicator #5," I am aware of the benefits of healthy eating to my overall health" received the highest mean value of 3.55. the respondents strongly agreed that the eating a balance and nutritious can contribute to their healthy body. IT can be inferred that thy are very aware of the food that they are eating and see to it that these food could make their body strong and healthy. Followed by indicator #1," There is a dietary plan for the athletes of different sports" with a mean value of 3.49 which could mean that the respondents strongly agreed that their players or athletes are also following a healthy dietary plan. The indicator which received the lowest mean value of 2.94 is indicator #2 , "There is a feeding program in our community". Based on this result , it can be inferred that there is a need for the local officials to put up also a space in their local community where they can conduct feeding of the children to help them improve their health

through offering good and balance food .

Table 2. Level of health literacy as assessed by the young adults of urban residents in Yueyang City in terms of Dietary habits

Dietary Habit	Mean	SD	Verbal Interpretation	Rank
1. There is a dietary plan for the athletes of different sports	3.49	0.65	Strongly Agree/ Highly evident	2
2. There is a feeding program in our community	2.94	0.98	Agree/Evident	5
3. Nutritionist give lectures to parents of every family in the community	3.07	0.99	Agree/Evident	4
4. I observe the food that I eat daily	3.23	0.87	Agree/Evident	3
5. I am aware of the benefits of healthy eating to my overall health	3.55	0.58	Strongly Agree /Highly evident	1
Overall Mean	3.26		Strongly Agree/ Highly evident	

Legend: N-450; Parameter limits: 1-1.00-1.75-Strongly disagree; 2-1.76-2.50- Disagree ; 3-2.51-3.25-Agree ; 4-3.26- 4.00-Strongly agree.

Table 3. Level of health literacy as assessed by the young adults of urban residents in Yueyang City in terms of promotion of maternal and childbirth

Promotion of Maternal and Childbirth	Mean	SD	Verbal Interpretation	Rank
1. Our community has available maternity center	3.10	0.89	Agree/Evident	5
2. Pregnant women are given free consultations by licensed health practitioner	3.31	0.83	Strongly Agree/ Highly evident	3
3. There is low rates of child bearing diseases	3.30	0.80	Strongly Agree/ Highly evident	4
4. There is enough budget for the promotion of maternal and child care	3.46	0.66	Strongly Agree/ Highly evident	2
5. Parents put utmost priority to the health of their children	3.68	0.59	Strongly Agree/ Highly evident	1
Overall Mean	3.37		Strongly Agree/ Highly evident	

Legend: N-450; Parameter limits: 1-1.00-1.75-Strongly disagree; 2-1.76-2.50- Disagree ; 3-2.51-3.25-Agree ; 4-3.26- 4.00-Strongly agree.

Table 3 shows the level of health literacy of the respondents in terms of promotion of maternal and childbirth. In general , the respondents strongly agreed that their level of awareness on the promotion of maternal and childbirth is highly evident. This is evident in the composite mean result of 3.37.

Looking closely at the mean results of the different indicators , indicator #5, "parents put utmost priority to the health of their children" received the highest mean value of 3.68. The respondents strongly agreed that they put high priority in the health status of their children .It can be inferred that the respondents are very aware of the different on how to take care of their children because of the promotion of maternal health care in their community . This is supported by indicator #4, "There is enough budget for the promotion of maternal and child care" with a mean value of 3.46 which could mean that the respondents strongly agreed that there is an existing budget ofr the healthcare of the pregnant women ,nursing mothers as well as their babies. The indicator which received the lowest mean value of 3.10 is indicator #1 , "Our community has available maternity center". Based on this result , it can be inferred that there is an available healthcare center in their community but the respondents could expect for more or a more inclusive maternal healthcare program for the mothers and children. This could also mean that local officials could be more aggressive in putting more maternal care units in their community and intensify the services that they offer to the

mothers as well their children.

Table 4 shows the level of health literacy of the respondents in terms of tobacco control action. In general , the respondents strongly agreed that their level of awareness on the promotion of tobacco control action is highly evident. This is evident in the composite mean result of 3.54.

Looking closely at the mean results of the different indicators , indicator #1, "Smoking is prohibited inside the school campus" received the highest mean value of 3.88. The respondents strongly agreed smoking is strictly prohibited inside school campuses .It can be inferred that the respondents are very aware of this policy of the schools because smoking can also give a negative effect on the health and fitness of the students . This is supported by indicator #4, "The local government has campaign against the bad effect of smoking to the health of the individual" with a mean value of 3.62 which could mean that the respondents strongly agreed that there is an existing government campaign also about the bad effect of smoking to ones health. The indicator which received the lowest mean value of 3.12 is indicator #2 , "Smoking inside the campus is a major offense". Based on this result , it can be inferred the respondents are not that satisfied in the strong implementation of the smoking ban inside school campuses. This could also mean that school officials should be more aggressive in their campaign of prohibiting the students from smoking inside the school campuses so as not to commit major violation. Their teachers

should encourage students to engage in school activities like sports and recreational activities as well as observing a healthy lifestyle.

Table 4. Level of health literacy as assessed by the young adults of urban residents in Yueyang City in terms of tobacco control action

Tobacco Control Action	Mean	SD	Verbal Interpretation	Rank
1.Smoking is prohibited inside the school campus	3.88	0.41	Strongly Agree/ Highly evident	1
2.Smoking inside the campus is a major offense	3.12	0.96	Agree/Evident	5
3.There is designated places for smoking in public places	3.52	0.74	Agree/Evident	4
4.The local government has campaign against the bad effect of smoking to the health of the individual	3.62	0.65	Agree/Evident	2
5.The government put a very high tax in tobacco	3.55	0.60	Agree/Evident	3
Overall Mean	3.54		Strongly Highly evident Agree/	

Legend: N-450;Parameter limits: 1-1.00-1.75-Strongly disagree;2-1.76-2.50– Disagree ;3-2.51-3.25-Agree ;4-3.26- 4.00-Strongly agree.

5. Conclusion

Based from the findings of the study the following conclusions were drawn:

The randomly selected respondents of this study yielded to variety in their responses too. Both sexes are being represented almost equally which shows that the responses came from both male and female perspectives as to their level of awareness of the health literacy and fitness . Majority of them are really considered as young adults and not yet that stable in their career as evident in their kind of job as well as their salary bracket.

When it comes to their level of awareness to the different initiatives of the government , it can be shown that they are very much aware of the policy on smoking inside campuses . This can be attribute to the fact that they are young adults and most of them just finished their college lives.

Their level of awareness to the care for mothers and children are manifestation of being young parents . They are aware also about the national campaign of the government on fitness and wellness which cloud inspire them to maintain a strong and healthy body.

Their level of literacy on health promotion for the elderly as well as their safety and protection on their work places needs improvement because it will affect their level of effectiveness and productivity in their workplaces.

References

- [1] Editorial Department of Concise Britannica, Encyclopedia of China Publishing House.(2011). Concise Britannica. Encyclopedia of China Publishing House.
- [2] Freedman Darcy A, Bess Kimberly D, Tucker Holly A, et al.(2013). Public Health Literacy Defined. American Journal of Preventive Medicine.
- [3] Fang F, Yao B X. (2014). Study on life stress and mental health of female college students. Journal of China Women's University.
- [4] He Wenjing. (2017). Status quo and influencing factors of health literacy of diabetic patients in Fuzhou City . Journal of Yan'an University (Medical Science Edition).
- [5] He Wenjing. (2017). Status quo and influencing factors of health literacy of diabetic patients in Fuzhou City . Journal of Yan'an University (Medical Science Edition).
- [6] Hahnrahts Marla T H,Heijmans Monique,Bollweg Torsten M,Okan Orkan,Willeboordse,Maartje,Rademakers Jany. (2021).Measuring and Exploring Children's Health Literacy in The Netherlands: Translation and Adaptation of the HLS-Child-Q15. International journal of environmental research and public health.
- [7] Liu Chenxi. (2018). Conceptual model and measurement of health literacy in Chinese population. Huazhong University of Science and Technology.
- [8] Li X X, Zhang X M, Wu F Y, et al. (2019).Health literacy level and its influencing factors of aged 60-69 in Jilin Province. Chinese Journal of Gerontology.
- [9] Liu H S. (2021). A study on the relationship between self-esteem and mental health of high school students. Educational research and experimentation.
- [10] M K,E J,C P. (2016). The Health Literacy of America's Adults: Results From the 2003 National Assessment of Adult Literacy .
- [11] Matsuda Iwao.(2015). The significance of Health care Physical education -- Evaluating health care physical education from the perspective of psychology. Liaoning Sports Science and technology.
- [12] National Academy of Medicine.(2014). Health Literacy: A Prescription to End Confusion. National Academies Press .
- [13] Nutbeam Don.(2010). Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. Health Promotion International.
- [14] Pang Jingtao. (2019). Survey on the status quo of health literacy of Chaozhou residents in 2018 and analysis of influencing factors . Guangdong Pharmaceutical University.

- [15] Pang Yun. (2021). Research on Strategies and paths for Improving National Health Literacy in the context of new technologies . Library.
- [16] Rudd Rima E, Anderson Jennie E. (2016).The Health Literacy Environment of Hospitals and Health Centers. Partners for Action: Making Your Healthcare Facility Literacy-Friendly.
- [17] Simonds,S.K. (2013). Health Education as Social Policy. Health Education Monograph.
- [18] Wu Z Y. (2015). Connotation, evaluation and research overview of mental health in the elderly. Chinese Journal of Gerontology.
- [19] Wang S C. (2016). Individualized classroom teaching promotes students' mental health. Moral education in China.
- [20] Wu Wenjing, Li Haiwei, Zheng Qi.(2017). Research Progress of Students' Health Literacy in the Context of Healthy China. Sports Science and Technology Literature Bulletin.
- [21] Yang Wenyan, ZHEN TianMin, HAN ZhiYan, GU JingLiang, ZHAO Fang. (2016). Development of residents' health literacy questionnaire based on clinical perspective. Health Education in China.
- [22] Yao Qiang, Zhang Shijing. (2012). Quantitative analysis of international health literacy research hotspots and frontier literature .Chinese health education.
- [23] Zhang Peipei, Chang Chun, WANG Dongxu. (2013). Health literacy from clinical and public health perspectives. Chinese Journal of Preventive Medicine.
- [24] Zhang Chunxing.(2014). Theory and practice of local cultural orientation in psychological research. Psychological science.
- [25] [25]Zhang F.(2012). Study on the status quo of health literacy and its influencing factors in Yuhang District. Fudan University.