

# Study on the Needs of Health Care for Establishment of Regional Health Care Plan-Focused on Cheonan City

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## ABSTRACT

The purpose of this study is to utilize the health services of Cheonan citizens as a basic data for establishing the 7th Regional Health Plan (2019 ~ 2022), respectively. Tools for measuring the health care needs of the subjects were revised and supplemented by the tools of the Community Health Survey. The data was collected from 440 Cheonan citizens by structural questionnaire. The collected data were analyzed with the SPSS 18.0 program. As a result of analyzing the satisfaction of the current medical care projects and health promotion programs, the vaccination was the highest at 3.37 out of the 4 points, the non - smoking service was 3.43, respectively. As a result of comparison between area A and area B, statistically significant differences were found in the prevention of epidemics ( $t = -2.359$ ,  $p = .019$ ), Management of mental disease ( $t = -2.027$ ,  $p = .045$ ) and oriental medicine treatment ( $t = -2.698$ ,  $p = .007$ ). In addition, there was a statistically significant difference in the oral care program ( $t = -2.008$ ,  $p = .046$ ). Also in analyzing the needs of the health care services and health promotion programs, arthritis management was the highest at 3.50, obesity management and oral health were 3.41. As a result of comparison between area A and area B, There was also a statistically significant difference in non - smoking ( $t = -2.512$ ,  $p = .012$ ) and obesity management ( $t = -2.508$ ,  $p = .012$ ). To improve the health potential of citizens and the ability to cope with the risk factors of diseases through the provision of the health promotion program.

**Keywords:** health care plan, need, satisfaction, health promotion, health care

## Introduction

In the meantime, the healthcare environment is changing, such as changes in disease patterns, an increase in the elderly population, a decrease in fertility, and an increase in the demand for health and welfare services. In order to implement the division of medicine and promote health promotion projects, the need for basic data for establishing health plans and developing health promotion programs is increasing.

Local health projects in local governments are being carried out in public health centers, which are first-line

local health institutions. They need to be organized, manpower and financed so that the roles and functions of public health centers can be performed well<sup>1</sup>. The public health center is the only public health institution in the county, county, and county, and it functions mainly as a preventive centered healthcare service, which is not profitable due to its functional merits and is avoided by private medical institutions. It is located in an area where local residents can use it economically<sup>2,3</sup>.

The task of the public health center as a front line for the health administration is to broadly fulfill the primary health care needs of the local residents and at the same time to provide a new approach to the health management of the residents<sup>4,5</sup>. In other words, by developing and expanding basic health services such as disease prevention and health promotion projects, it is urgently required to re-establish functions and roles so as to actively cope with primary health care and new healthcare demand for local residents

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In particular, local health care plans should improve the efficiency of health care projects by coordinating plans to meet the health care environment and national health care policy, and provide comprehensive, high quality health care services to the locals. It is desirable to establish a local health care plan focusing on opinions of users of public health centers in order to continuously carry out preventive activities such as health promotion and health education that meet the needs of local residents and systematically promote the contents of various businesses.

The Local Health Law stipulates that the head of local autonomous governments should set up a local health care plan every four years and establish an annual plan every year<sup>6,7</sup>. In addition, in the □National Health Promotion Act□, The plan for establishing and implementing a detailed plan for the promotion of public health is stipulated, and the importance of the local health care plan is increasing<sup>8</sup>.

In addition, the World Health Organization (WHO) recommends regularly calculating health policy indicators, health-related social and economic indicators, healthcare management indicators, and health status indicators as indicators for evaluating the performance of health care policies<sup>9,10</sup>.

Korea has conducted a nationwide health index survey every four years since 1983. This survey is a sample survey to establish a national health care plan. Therefore, there is a limit to utilize the results in establishing the health care plan in different municipalities whose overall situation is different.

To establish a health care plan, comprehensive data on community health issues as well as health-related health indicators are needed. The results of this survey will serve as an index not only for evaluating the performance of the health projects that have been promoted but also for establishing the health center plan of the public health center that meets the needs of the citizens.

In order to promote the health business and the health promotion project for Cheonan citizens efficiently, the health level, needs of residents, for the 7th Regional Health Care Plan (2019 ~ 2022).

## Method

**Data Collection:** The purpose of this study was to investigate the purpose of the study, the voluntary participation, and the confidentiality of the information

in written form and to inform citizens in Cheonan city who agreed to participate in the study. Participants were assured of their right of refusal to participate or to withdraw from the study at any stage. The anonymity and confidentiality of participants was assured. The data are collected through questionnaires from July 11 to August 23, 2018. 472 questionnaires were collected, but 440 copies were used, excluding 32 copies of the questionnaire which were unclear or missing.

## Instruments

**Health service satisfaction:** Tools for measuring health service satisfaction were revised and supplemented by the tools of the Community Health Survey<sup>11</sup>. The items were divided into two categories: medical care projects and health promotion programs. It was rated on a four-point scale from one point representing ‘very satisfied’ to four points representing ‘very positive’. The higher the score, the higher the satisfaction of health service, and The Cronbach’s  $\alpha$  was 0.976.

**Health care needs:** Tools for measuring health care needs were revised and supplemented by tools from the Community Health Survey [11]. The items were divided into two categories: health care projects and health promotion programs. It was rated on a four-point scale, 4 points for ‘very necessary’, 3 points for ‘necessary’, 2 points for ‘not necessary’ and 1 point for ‘not necessary at all’. The higher the score, the higher the need for health care projects. The Cronbach’s  $\alpha$  value for health care needs was 0.959.

**Data Analysis:** The collected data were analyzed with the SPSS 18.0 program:

- The frequencies and percentages of the general characteristics of the subjects were calculated.
- To analyze the differences in the health service satisfaction and health service need according to the residence of the subjects, t-test was done.

## Results

**General Characteristics:** Table 1 presents the general characteristics of the subjects. Table 1 presents the general characteristics of the subjects. 41.4% of males and 57.3% of females had the highest age of 20 ~ 49, 73.6% of the total. The highest educational level was 60.6% for college graduates and 28.7% for high school graduates. The marital status was the highest with 55.1% and the unmarried was 36.2%.

**Table 1: General Characteristics n = 440**

Categories		Total		A-area		B-area	
		n	%	n	%	n	%
Gender	Male	182	41.4	109	41.4	73	41.2
	Female	252	57.3	149	56.7	103	58.2
	No answer	6	1.4	5	1.9	1	0.6
Age (years)	20~29	101	23.1	68	26.0	33	18.8
	30~39	133	30.4	75	28.6	58	33.0
	40~49	88	20.1	50	19.1	38	21.6
	50~59	79	18.0	47	17.9	32	18.2
	60~69	21	4.8	9	3.4	12	6.8
	70~79	12	2.7	9	3.4	3	1.7
	80 over	4	0.9	4	1.5	0	0.0
Education	Over college	266	60.6	155	58.9	111	63.1
	High school	126	28.7	79	30.0	47	26.7
	Middle school	22	5.0	12	4.6	10	5.7
	Elementary school	18	4.1	13	4.9	5	2.8
	No answer	7	1.6	4	1.5	3	1.7
Housemate	Alone	159	36.2	103	39.2	56	31.8
	Spouse	242	55.1	136	51.7	106	60.2
	Bereavement	11	2.5	9	3.4	2	1.1
	Separation	3	0.7	0	0.0	3	1.7
	Divorce	4	0.9	1	0.4	3	1.7
	No answer	20	4.6	14	5.3	6	3.4

**Health Service Satisfaction**

**Medical care projects:** As a result of analyzing the satisfaction of the current medical care projects, the vaccination rate was the highest at 3.37 points from 4 points, 3.29 points for health education, 3.27 points for prevention of epidemics and 3.27 points for Maternal and child health, and 3.25 points for physical therapy. As a result of comparison between A-area and B-area, vaccination in A- area was the highest at 3.32 and prevention of epidemics in B-area was 3.48. In addition, statistically significant differences were found in the prevention of epidemics (t = -2.359, p = .019), Management of mental disease (t = -2.027, p = .045) and oriental medicine treatment (t = -2.698, p = .007). Table 2 shows the details.

**Table 2: Difference in satisfaction of health care services by region**

Division	Total		A-area		B-area		t	p
	M	SD	M	SD	M	SD		
General treatment	3.14	1.30	3.05	1.25	3.27	1.36	-1.660	.098
Health examination	3.24	1.97	3.13	1.36	3.41	2.62	-1.337	.182
Physical therapy	3.25	1.53	3.14	1.46	3.40	1.61	-1.723	.086
Vaccination	3.37	1.26	3.32	1.21	3.44	1.33	-.928	.354
Oral Health	3.22	1.57	3.13	1.46	3.36	1.70	-1.460	.145
prevention of epidemics	3.27	1.45	3.13	1.28	3.48	1.65	-2.359	.019*
Health education	3.29	1.39	3.20	1.27	3.43	1.54	-2.657	.098

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Maternal and child health	3.27	1.24	3.18	1.15	3.40	1.35	-1.723	.086
Management of mental disease	3.14	1.50	3.02	1.37	3.33	1.72	-2.027	.045*
Management of chronic disease	3.17	1.38	3.08	1.26	3.31	1.53	-1.622	.106
oriental medicine treatment	3.20	1.61	3.03	1.39	3.47	1.86	-2.698	.007**

\* p&lt;0.5, \*\* p&lt;0.01

**Health Promotion Programs:** As a result of analyzing the satisfaction of health promotion programs of the subjects, the non - smoking service was the highest with 3.43 points out of the 4 points, the exercise was 3.31, and the non – alcohol and nutritional service was 3.26. As a result of comparison between A-area and B-area, it was found that smoking and non - smoking projects in A and B-area had the highest satisfaction rate of 3.38 and 3.50, respectively. In addition, there was a statistically significant difference in the oral care program ( $t = -2.008$ ,  $p = .046$ ), and the details are shown in Table 3.

**Table 3: Difference in satisfaction of health promotion programs by region**

Division	Total		A-area		B-area		t	p
	M	SD	M	SD	M	SD		
Non - smoking	3.43	1.24	3.38	1.18	3.50	1.32	-0.948	.344
Exercise	3.31	1.36	3.21	1.16	3.47	1.61	-1.848	.066
Non - alcohol	3.26	1.44	3.14	1.24	3.43	1.67	-1.931	.054
Nutrition	3.26	1.32	3.17	1.18	3.40	1.50	-1.645	.101
obesity	3.23	1.36	3.14	1.18	3.37	1.58	-1.668	.096
Mental health(Stress, Depression)	3.24	1.46	3.12	1.26	3.41	1.70	-1.906	.058
Oral health	3.24	1.42	3.12	1.25	3.41	1.63	-2.008	.046*

\* p&lt;0.5

### Health Care Needs

**Health Care Services:** As a result of analyzing the needs of the health care services in table 4, arthritis management was the highest at 3.50 points out of 4 points, followed by hypertension management project 3.45, cerebrovascular disease 3.44, diabetes management 3.35, and mental illness management 3.31. As a result of comparing the area A and the area B, hypertension management was the highest in the area of 3.43, and the area of the area B had the highest requirement of the diabetes management 3.50. There is no statistically significant difference in the degree of need for health care projects between the two regions.

**Table 4: Difference in demand for health care services by region**

Division	Total		A-area		B-area		t	p
	M	SD	M	SD	M	SD		
Hypertension management	3.45	.75	3.43	.68	3.47	.84	- .563	.573
Diabetes management	3.35	.88	3.42	.70	3.50	.83	-1.103	.271
Mental illness management	3.31	.96	3.31	.86	3.42	.90	-1.249	.212
Disability Management	3.30	.85	3.26	.86	3.39	1.09	-1.364	.173
Management of cerebrovascular disease	3.44	.81	3.27	.80	3.34	.92	- .905	.366
Dementia Patient Management	3.28	.85	3.40	.75	3.50	.88	-1.252	.211
Cancer management	3.22	.89	3.22	.80	3.38	.92	-1.911	.057
Arthritis management	3.50	.75	3.20	.74	3.25	1.07	- .544	.587

**Health Promotion Programs:** Table 5 shows the results of analyzing the needs of health promotion programs of the subjects. Obesity management and oral health were the highest at 3.41 points, followed by 3.36 points for non - smoking and 3.35 points for exercise and nutrition, respectively. As a result of comparison between A-area and -area, the smoking and non - smoking activities in A and B-area were 3.42 and 3.60, respectively. There was also a statistically significant difference in non - smoking ( $t = -2.512$ ,  $p = .012$ ) and obesity management ( $t = -2.508$ ,  $p = .012$ ).

**Table 5: Difference in demand for health promotion services by region**

Division	Total		A-area		B-area		t	p
	M	SD	M	SD	M	SD		
Non - smoking	3.36	.90	3.42	.70	3.60	.81	-2.512	.012*
Exercise	3.35	.95	3.29	.82	3.46	1.01	-1.890	.059
Non - alcohol	3.29	.85	3.30	.90	3.42	1.03	-1.231	.219
Nutrition	3.35	.91	3.25	.81	3.35	.90	-1.207	.226
obesity	3.41	.81	3.27	.77	3.49	1.07	-2.508	.012*
Mental health(Stress, Depression)	3.29	.85	3.35	.75	3.50	.87	-1.912	.057
Oral health	3.41	.83	3.24	.69	3.37	1.04	-1.616	.107

\*  $p < 0.5$

### Discussion

The purpose of this study is to investigate the satisfaction and needs of health care services in Cheonan city residents and provide necessary materials for long - term planning, strategy development, and project evaluation of the health care services.

Analysis of the needs of the subjects' health care business showed that they were arthritis management, hypertension management, management of cerebrovascular disease, diabetes management, and mental illness management. Also, the needs of health promotion projects were in the order of obesity management, oral health, non - smoking, exercise and nutrition.

Today, with the increase in income, people's desire for a healthy life is expressed in various ways. With the rapid economic growth and development of medical technology, the average life span of people has been extended and the aging society has been rapidly progressing<sup>1</sup>. Thus, unlike in the past, where the health perspective focuses on preventive behaviors that are specific to disease, there is a need to improve the environment in relation to nutrition, exercise, stress adaptation, immune enhancement, and control of health risk factors. It is time to enter the era of health promoting that requires comprehensive health problems including interactions with the social environment.

Until now, the health center's health project has been mainly responsible for public health projects such as maternal and child health projects, preventive projects, family planning and tuberculosis projects for acute infectious diseases and some primary care. Most of the medical services rely heavily on the private sector, so preventive health services and health care services have been managed separately<sup>8</sup>. However, due to the implementation of the national health insurance system and the dramatic changes in disease patterns, the health service delivery system must be established and the functions of the public service sector should be strengthened<sup>12, 13</sup>.

This study will provide basic data on the establishment and evaluation of the local health policy actively coping with the changing social environment, regional environmental characteristics and the local health care environment through surveys of the health care situation of Cheonan citizens. In order to effectively and actively respond to healthcare problems, active healthcare policies are required instead of passive methods that rely on treatment after illness. Therefore, it is believed that Cheonan citizens will improve their quality of life by improving their health potential and coping with the risk factors of disease through the practice of health care by themselves and the provision of various programs of public health centers.

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## REFERENCES

1. Ahn DK. Study on improving the connection system among public medical institution; Focusing on the city of Chuncheon [dissertation]. Chuncheon (Korea): Kangwon National University; 2012.
2. Jung CS, Lee G. Goals, strategic planning, and performance in government agencies. *Public Management Review*. 2013; 15(6):787-817.
3. Park SY, Jang MY, Park SH, Na BJ, Kim EY, Kim SY. Factors of health care expenditure of local government. *Health Policy and Management*. 2013; 23(1):59-65.
4. Kim YH. A study on effects of users' satisfaction in local health and medical center -Focused on Paju-city. *Gyeonggi-Do-Korean Journal of 21st Century Social Welfare*. 2013; 10(1):193-209.
5. Byun YW. An Study on The Use of Long-term Home Care Service in Agricultural Districts. *Korean social security studies*. 2010;26(3):283-308.
6. Cheonan city. 6th Cheonan city regional health care plan. Cheonan (Korea);2015.
7. Jang MH. Effects of local health planning [dissertation]. Seoul (Korea): Seoul National University; 2014.
8. Ju DK. A research on the realities of physical activity and exercise for the establishment of the health care programs of Pohang city. Gyeongju (Korea): Uiduk University; 2007.
9. Ministry of Health and Welfare. National health service guidelines. Seoul: 2011.
10. Ministry of Health and Welfare. National health promotion comprehensive plan, Seoul: 2013.
11. Center of Disease Control and Prevention (CDC). 2017 regional health survey. Osong (Korea);2018.
12. Lee SA. A study on public health center users' satisfaction with local health and medical services [dissertation]. Daegu (Korea): Keimyung University; 2007.
13. Youn JH, Lee YG, Choi DG, Jang SH. Comparative analysis of the factors affecting the degree of consumer satisfaction in the community social services investment. *Korean Association of Health and Medical sociology*. 2015; 38:201-223.