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A Study on the Consciousness Survey about COVID19

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Abstract

In relation to COVID-19 disease, the health beliefs of college students attending the Department of Health are investigated and the relationship with preventive health activities is confirmed.383 students attending the Department of Health at the university located in the C area were surveyed for their belief in health and the degree of preventive health behavior against new infectious diseases. Correlation with technical statistics was investigated using SPSS 20.0.According to the survey on the awareness of new infectious diseases, the highest question was whether the severity of the disease would be very high if a new epidemic occurred in the future, and whether the possibility of a new epidemic in Korea is high. The lowest was the question of whether the government thinks the drug injection is sufficient to cope with various new influenza outbreaks and whether it can clearly explain the new epidemic diseases.Since knowledge and beliefs about new infectious diseases have a positive relationship with health behaviors, it is important to prepare education and guidelines to ensure thorough compliance with preventive health behaviors.

Keywords:COVID-19; Department of health;Health belief; Pandemic; Preventive health behavior..

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INTRODUCTION

While the threat of disease has always existed in the world as mankind exists, in terms of global proliferation, such as the recent COVID-19 crisis, rapid propagation, lack of vaccines and treatments, high mortality rates and discontinuation of daily life, COVID-19 faces an unprecedented situation that goes beyond the level of infectious diseases that mankind has experienced so far (Lyu H S., 2020). As fear and anxiety spread due to the prolonged global spread of Corona 19, hoarding of daily necessities in other countries has rarely occurred in Korea. It is interpreted that thorough personal hygiene management such as washing hands and wearing masks, practicing social distance, continuous prevention of living, and transparent disclosure of information by the Central Anti-Disaster Headquarters of the Korea Centers for Disease Control and Prevention on the status of Corona19 have helped ease public anxiety and enhance the government's confidence in infectious disease prevention management, thereby preventing social confusion. In other words, the development of ICT technology (big data utilization capacity), high smartphone penetration rate, economic capacity, robustly built quarantine and medical health services, and high civic participation awareness are attracting attention as factors for success

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(Jung K M., 2020).

However, young people other than those with underlying diseases with high mortality rates and those subject to senior citizens have a relatively low sense of crisis over infectious diseases, which often serve as a medium for secondary infections, so it is urgent to find out the degree of awareness of COVID-19 among college students and to take remedial measures to cope with them. Several studies have identified the relationship between disease awareness and preventive action. The extent of awareness and knowledge affect the performance of infection control (Cho G Y., 2011), and the existence of specific guidelines or the completion of education have a positive effect (Kim I O*et al*., 2014). In the study of nurses' awareness of patient safety culture, awareness of infection control, and performance, there were statistically significant differences in infection control performance depending on final education, agency characteristics, patient safety education, infection control education, marriage, final education, agency characteristics, position, and patient safety education (Seong G R.,2018). As such, the study of infection control among medical workers raised the need for detailed measures by checking the level of awareness and performance of infection control, which is correlated with the level of awareness to improve practical performance.

On the other hand, the health belief model was developed by social psychologists in the 1950s by The U.S. Public Health Service to explain the lack of people's participation in early detection and prevention of diseases and is used as a basis for theoretical concepts in predicting and explaining individual health behaviors (Rosenstock I M *et al*., 1994). The health belief, or behavioral cues, that will force an individual to practice appropriate health precautions, refers to an individual's perceptual behavior of health and disease that affects changes in the individual's preventive behavior, which interacts with other factors. It has also been considered for the purpose of studying health prevention behaviors due to various diseases as a representative model of individual health prevention activities, and has been used in a wide variety of ways, providing different meaningful results depending on the subject (Jo S E *et al*., 2012).

Preventive research on disease has been actively conducted in the medical field, which has developed into a health new model (Rosenstock I M *et al*., 1994)in the traditional medical field. The health belief model is widely used as a conceptual framework to predict health behaviors related to the prevention of infections in individuals (Jo S E *et al*., 2012). In the health belief model, it is used as a predictor of personal perceptual sensitivity and severity to dangerous situations, of high benefit, of low perceived disability, of higher probability of transition to health behavior when given a proper trigger for action, which has a major impact on an individual's preventive health behavior (Erkin, Ö., 2012; Guvenc, G., 2011).

Therefore, this study was conducted to prepare for continuous future threats by examining the health beliefs of college students involved in COVID-19 disease, identifying how they affect preventive health behaviors, and developing effective measures.

MATRIALS & METHODS

Research subjects

To investigate the health beliefs and preventive health behaviors of college students in relation to COVID-19, a new infectious disease, 383 college students were surveyed in the Department of Health at the university located in the C area.

Research period

The survey was conducted online from May 3-6, 2020. It was targeted at college students who heard about the purpose of the study and voluntarily agreed.

Measurement tools 1 - Recognition of new infectious diseases

Recognition of new infectious diseases is a clear description of new infectious diseases, interest in the process of Pandemic progression, predictability of new infectious diseases, adequacy of WHO

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response to recent Pandemics, excellence of government response capabilities, appropriateness of government drug stockpiles, adequacy of future vaccination antiviral products, adequacy of experts' predictions, severity of new infectious diseases, and prediction national crisis levels. Questioned on a five-point scale (Lee K H., 2017).

Measurement tools 2 - Health beliefs

Health beliefs include the sub concepts of sensitivity, severity, benefit, disability, and instrumentation of action in order to control disease (Lee K H., 2017).. Sensitivity is the degree to which one is aware of the risk of getting a disease. Severity is the perception of becoming serious if you get a disease or don't treat it. Benefit is the degree to which you are aware of the benefits of doing preventive actions. Disability is a negative perception of certain health behaviors. An instrument of action is an arbitration that can motivate you to participate in a particular act. In this study, it refers to the score measured by a tool made by Park by modifying and supplementing the health myth tool for MERS. Using the Likert five-point scale, a score of five is 'very much' and a score of 'very much not', meaning that the higher the score, the higher the health belief.

Preventive health behavior

Preventive health behavior refers to activities performed by people who believe they are healthy and can avoid diseases for the purpose of preventing or early detection of diseases without symptoms such as diseases. In this study, it refers to the score measured by Park as a tool modified and supplemented by a nursing student's preventive health behavior measurement tool for MERS, and the higher the score, the higher the practice.

Data analysis

The data collected for the purpose of this study used the following analysis method using SPSS20.0 statistic program.

First, an average and percentage of the target sociodemographic characteristics were calculated.

Second, an average and a standard deviation were calculated to analyze the target’s health beliefs, preventive health behaviors.

Third, a correlation analysis was conducted to investigate the relationship between health beliefs, preventive health behaviors.

RESULTS AND DISCUSSION

Sociodemographic characteristics of subjects

The results of sociodemographic characteristics of subjectsare shown in table1. The study included 17.0% of male students and 83% of female students. The school year was 46.2% for first grade, 20.9% for second grade, 14.1% for third grade and 18.8% for fourth grade. 65.3% said they were in good health, 28.5% said they were "normal," and 6.3% said they were "bad." As for the level of study that you think is normal, 58.5% said they are not good, 20.9% said they are not good, and 20.6% said they are good. As for the economic level of your family, 62.1% said "the economy is normal," 23.8% said "the economy is well-off," and 14.1 % said "the economy is poor.

Table 1: Sociodemographic characteristics of subjects

		N	%
Sex	Male	65	17.0
	Female	318	83.0
Grade	1st	177	46.2
	2nd	80	20.9
	3rd	54	14.1
	4th	72	18.8

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One's own health condition	Bad	24	6.3
	Normal	109	28.5
	Good	250	65.3
Your own level of study	Not good	80	20.9
	Normal	224	58.5
	Good	79	20.6
Level of economy in one's own family	Poor	54	14.1
	Normal	238	62.1
	Well-off	91	23.8

Survey on education on new infectious diseases

The results of survey on education on new infectious diseasesare shown in table 2. 54.3% of students said they had received training on managing new infectious diseases such as MERS (MERS) and coronavirus infections-19 (COVID-19), while 45.7% said they had never received education. When asked, "Do you feel the need for education on the management of new infectious diseases such as MERS and COVID-19?" 97.9% of students said they needed it was necessary. 91.1% of the students said they would participate in the education on the management of new infectious diseases such as MERS (MERS) and coronavirus infections-19 (COVID-19) in the future if they had a chance.

Table 2: Survey on education on new infectious diseases

		N	%
Have you been trained in managing infections of new infectious diseases such as MERS, COVID-19?	Yes	208	54.3
	No	175	45.7
Do you feel the need for training in managing infections of new infectious diseases such as MERS, COVID-19?	Yes	375	97.9
	No	8	2.1
If you have a chance, would you participate in training on managing infections of new infectious diseases such as MERS, COVID-19?	Yes	349	91.1
	No	34	8.9

Awareness of new infectious diseases

The results of awareness of new infectious diseasesare shown in table 3. The results of the survey on awareness of new infectious diseases showed that the clear explanation for new infectious diseases was 3.26±0.84 and that of interest in the process of Pandemics was 4.20±0.73. Forecasts of the possibility of new infectious diseases were 4.21±0.67, and 2.83±0.89 for the adequacy of WHO response to Pandemics recently. The excellence of government response capability was 3.38±1.06, and the appropriateness of securing government drug stockpiles was 2.94±0.86. Forecasts of the shortage of future vaccination antiviral drugs were 3.78±0.74, while the adequacy of experts' predictions was 3.45±0.73. The severity prediction for new infectious diseases in the future was 4.23±0.67 and the validity of the national infectious disease crisis phase classification and judgment criteria was 3.65±0.84.

Table 3: awareness of new infectious diseases

	M	SD
1. Can you clarify the new epidemic trend (Pandemic)?	3.26	.84
2. Did you continue to be interested in the process through the news of the recent outbreak of infectious diseases?	4.20	.73

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3. Do you think there is a high possibility of a new wave of Pandemics in our country?	4.21	.67
4. Do you think the WHO's response to the recent Pandemic of infectious diseases was appropriate?	2.83	.89
5. Do you think the government's response to the recent Pandemic of infectious diseases was appropriate?	3.38	1.06
6. Do you think there's enough to secure the government's anti-viral drugs (vaccination and antiviral drugs) to counter the pandemic of flu?	2.94	.86
7. Do you think vaccinations and anti-viral drugs will be scarce in the future of the new infectious disease Pandemic?	3.78	.74
8. Do you think the experts' predictions of a new wave of infectious diseases in the past were appropriate?	3.45	.73
9. Do you expect the severity of the disease to be very high considering the COVID-19 event if a new Pandemic occurs in the future?	4.23	.67
10. Do you think the classification and judgment criteria for the national infectious disease crisis stage were appropriate in the event of COVID-19 Pandemic?	3.65	.84

The degree of health belief and the degree of preventive health behavior

The results of the degree of health belief and the degree of preventive health behaviorare shown in table 4. The health belief for new infectious diseases was 3.62±0.33, and the degree of preventive health behavior was 3.40±0.36.

Table 4: The degree of health belief and the degree of preventive health behavior

Health belief	3.62	.33
Preventive health behavior	3.40	.36

Differences in health belief according to sociodemographic characteristics

The differences in health belief according to sociodemographic characteristics and the results are shown in table 5.

Table 5: Differences in health belief according to sociodemographic characteristics

		M	SD	t/F
Sex	Male	3.6000	.32617	-0.552
	Female	3.6251	.33575	
Grade	1st	3.5322	.30351	8.112** (b>a, c>a, d>a)
	2nd	3.7173	.31237	
	3rd	3.6802	.34371	
	4th	3.6833	.37021	
One's own health condition	Bad	3.5472	.29748	1.995
	Normal	3.5813	.31851	
	Good	3.6451	.34206	
Your own level of study	Not good	3.5872	.31601	0.747
	Normal	3.6214	.33139	
	Good	3.6523	.35801	

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Level of economy in one's own family	Poor	3.7062	.26652	4.284* (a>b)
	Normal	3.5825	.33336	
	Well-off	3.6681	.35791	

Differences in preventive health behavior according to sociodemographic characteristics

The differences in preventive health behavior according to sociodemographic characteristics and the results are shown in table 6.

Table 6: Differences in preventive health behavior according to sociodemographic characteristics

		M	SD	t/F
Sex	Male	3.4015	.36336	-0.147
	Female	3.4088	.36232	
Grade	1st	3.3237	.36463	6.534** (a<b, a<c)
	2nd	3.5013	.33546	
	3rd	3.4963	.32036	
	4th	3.4431	.37297	
One's own health condition	Bad	3.3083	.46711	7.573*(b<c)
	Normal	3.3110	.34382	
	Good	3.4592	.34920	
Your own level of study	Not good	3.3525	.38417	4.311* (b<c, a<c)
	Normal	3.3915	.35896	
	Good	3.5089	.33135	
Level of economy in one's own family	Poor	3.4296	.30196	4.019* (b<c)
	Normal	3.3697	.37788	
	Well-off	3.4934	.33922	

The relationship between health belief and preventive health behavior

The results of the relationship between health belief and preventive health behaviorare shown in table 7. The degree of health belief and preventive health behavior for new infectious diseases was positively correlated and statistically significant.

Table 7: The relationship between health belief and preventive health behavior

	Health belief
Preventive health behavior	.434 (0.000)

CONCLUSION

From the first half of 2020, the spread of COVID-19 has brought about unprecedented changes in various sectors around the world and enormous impacts on politics, economy and society as a whole, including social distance keeping, telecommuting, online classes, mass unemployment. Health beliefs are the subjective beliefs of individuals who want to take to prevent disease. In other words, it is the individual's health beliefs that are the basis of preventive actions. In the 2020 COVID-19 crisis, countries around the world praise the excellence of K-disaster, but at one time, they believed that the new infectious disease was more vulnerable to the elderly or the underlying disease and swept their hearts against the public sentiment from the youth. This was a situation in which the correct understanding and knowledge of disease, the implementation of

social consensus, and the health beliefs of individuals were very important variables in the transition to action and is in line with the results of this study. Individual health beliefs include perceived sensitivity, severity, benefit, disability, and behavioral instruments. College students have the potential to carry out the disease to themselves, the negative consequences of the disease, the positive benefits of the recommended health actions, the obstacles that hinder or prevent the practice of the recommended health actions, and the mine that allows them to practice preventive health actions. External factors, etc. should be carefully examined to deal with positive results.

The crisis in COVID-19 is still ongoing, affecting each member of society as a whole in the long run without ending in the short term. A lot of social work shifts to non-face-to-face and online. Some argue that non-face-to-face culture and digitalization are progressing rapidly and that it is difficult to revert to the situation before COVID-19. The way of working at industrial sites is changing drastically, and countries around the world are facing an economic crisis due to the worst recession. Each country's response is surprisingly different, resulting in an exchange rate and a fatality rate. In small terms, it is well understood that the individual's sense of health has a profound impact on the rate of infectious diseases in each country.

Therefore, it is necessary to humbly deal with unknown infectious diseases by preparing relevant education and guidelines to prevent infection and thoroughly following preventive health actions.

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