Impact Factors Relating to Effectiveness of Health Information in Company and Public Services Workers of Urban-Rural City

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Abstract
This study was conducted, based on a specific population group composed of company workers and public services workers residing in one of urban-rural city, to reach relating factors with utilizing health information. This study surveyed 213 company workers and public services workers residing in urban-rural city who were aged more than 20 during the period of February 5th 2007 to February 9th 2007.

Concern on health, utility of health information, challenge thoughts, funny and interesting of health information, experience of using health information, household income were significantly associated with intention to use of health information. In conclusion, we should target and consider to this results for planning projects or program on health information.

Keywords: Company Workers, Health Information, Public Services Workers

1. Introduction

One of most popular concern of people is the health. Health related industry is tremendously growing status, especially mass media deal the health information most importantly. Already health fitness center and various sports are boomed. Concern in health problems was increased from 37% in 1998 to 44% in 2002. In future, it will be more increased rapidly.

According to this trend and situation, people more need on health information. Health information also relatively increased quantitative amount of health information. And the channel of health information are multi-dimensionally widened (eg. internet, SNS, magazine, broadcasting etc.). Acquisition routes of health information were internet 49.3%, friend or neighbor 24.8%, hospital 15.9%, mass media 10% respectively.

The related factor of internet using for seek health information were gender (women), age group (30-40 years), higher educational attainment, and lower status of health.

This study was tried to identify a impact factors related the effects of such health-related informations and figure out the population needs, actual contact of health-related informations (e.g. health-related commercials, brochures, magazines, etc.) as well as moreover the population's needs and characteristics of desired health-related informations in the future based on a specific population group composed of company workers and public services workers residing in one of urban-rural city.

Objectives of this study were the investigation on health concern and status, and identification of relating factor with utilizing health information.
2. Methodology

This study was performed to evaluate the health concern and status, and identification of relating factor with utilizing health information of 213 company workers and public services workers residing in one of urban-rural city from February 5 to February 9, using structured self-assessment questionnaires. A total of 6 companies were selected. Surveys which were carefully made and revised beforehand regarding health-related informations, were distributed to be filled out and were collected for analysis in all 6 companies. The survey was conducted after explaining the purpose of this study and obtaining informed consent.

Questionnaires were surveyed systematically in previous studies and developed. Major question were categorized as follows: general characteristics (gender, age, marital status, household income), challenges feeling and attitude, concern in health, health information (include characteristics of acquisition on health information), health status, utilization of health information (funny and interesting, convenience, utility, and intention to use health information) etc.

The Chi-square test, t-test, and ANOVA were applied to assess the differences between the groups. Factors with p < 0.1 or biological plausibility were selected for regression analysis to identify contributing factors.

3. Findings

3.1 Univariate Analyses

Men and Women among the objects of our survey were 57.5%, and 42.5% respectively. Distribution of score of concern on health by general characteristics and challenge feeling and attitude is shown in Table 1. Higher educational attainment group had significantly greater score on health than lower education attainment group (p<0.01).

Educational attainment and marital status had significantly different variables in experience rate of health information (p<0.01). However, educational attainment and challenge feeling and attitude showed significant difference experience rate of health information in ordinary days (p<0.05) (Table 2).

We analyzed on the component of using health information; funny and interesting, regularity, convenience and utility (Table 3). In dimension of funny and interesting, educational attainment and challenge feeling and attitude were significant different variables (p<0.05). In dimension of regularity, challenge feeling and attitude only was significant different variables (p<0.05). However, we did identify any significant variables (Table 3).
Table 2. Status of acquisition of health information by general characteristics, health status, and challenge feeling and attitude, and concern on health

| Variables                      | Experience rate of health information per month | p-value* | Experience rate of health information in common days | p-value* |
|-------------------------------|-----------------------------------------------|----------|------------------------------------------------------|----------|
| Gender                        |                                               |          |                                                      |          |
| Men                           | 57 (28.8%)                                    | 0.756    | 38 (20.3%)                                           | 0.613    |
| Women                         | 43 (21.7%)                                    |          | 25 (13.4%)                                           |          |
| Age (years)                   |                                               |          |                                                      |          |
| 39                            | 40 (20.1%)                                    | 0.707    | 19 (10.1%)                                           | 0.438    |
| 40–49                         | 41 (20.6%)                                    |          | 31 (16.4%)                                           |          |
| 50                            | 19 (9.5%)                                     |          | 13 (6.9%)                                            |          |
| Educational attainment        |                                               |          |                                                      |          |
| High school                   | 37 (19.0%)                                    | 0.001    | 24 (13.1%)                                           | 0.023    |
| College                       | 63 (32.3%)                                    |          | 39 (21.3%)                                           |          |
| Marital status                |                                               |          |                                                      |          |
| Single                        | 27 (13.9%)                                    | 0.008    | 11 (6.0%)                                            | 0.875    |
| Married                       | 72 (37.1%)                                    |          | 50 (27.2%)                                           |          |
| Household income              |                                               |          |                                                      |          |
| High                          | 27 (17.3%)                                    | 0.414    | 12 (8.1%)                                            | 0.312    |
| Medium                        | 45 (28.8%)                                    |          | 33 (22.3%)                                           |          |
| Low                           | 15 (9.6%)                                     |          | 11 (19.6%)                                           |          |
| Expenditure on medical care per month |                                           |          |                                                      |          |
| High                          | 33 (23.4%)                                    | 0.403    | 19 (14.3%)                                           | 0.855    |
| Medium                        | 45 (31.9%)                                    |          | 30 (22.6%)                                           |          |
| Low                           | 4 (2.8%)                                      |          | 2 (1.5%)                                             |          |
| Challenge feeling and attitude|                                               |          |                                                      |          |
| High                          | 8 (4.1%)                                      | 0.449    | 2 (1.1%)                                             | 0.009    |
| Medium                        | 29 (15.0%)                                    |          | 17 (9.3%)                                            |          |
| Low                           | 61 (31.6%)                                    |          | 45 (24.6%)                                           |          |

* by chi-square test

3.2 Multiple Regression Analysis

Beta and p-value of contributing factors calculated for factors relating to intention to use of health information are shown in Table 4. Concern on health, utility of health information challenge feeling and attitude, funny and interesting of health information, experience of using health information, household income were significantly associated with intention to use of health information (Table 4).

4. Discussion and Conclusion

The scopes of health information are expanding trend due to socioeconomic development. Recently, more positive healthy behaviour like physical activity, leisure time activity, and healthy lifestyle are popular in Korean peoples. So health related advertising and information are increasing.

Consumer should investigate new health information for health promotion and disease prevention, and
Table 3. Evaluation on the component of using health information by general characteristics, health status, and challenge feeling and attitude, and concern on health

| Variables                  | Funny and interesting | p-value* | Regularity | p-value* | Convenience | p-value* | Utility | p-value* |
|----------------------------|-----------------------|----------|------------|----------|-------------|----------|---------|----------|
| Gender                     |                       |          |            |          |             |          |         |          |
| Men                        | 1.81±0.73             | 0.447    | 1.93±0.80  | 0.769    | 2.15 ± 0.95 | 0.367    | 2.26±0.90 | 0.579    |
| Women                      | 1.73±0.69             |          | 1.96±0.77  |          | 2.03 ± 0.94 |          | 2.19±0.79 |          |
| Age(years)                 |                       |          |            |          |             |          |         |          |
| 39                         | 1.63±0.57             | 0.163    | 1.99±0.83  | 0.836    | 2.25 ± 0.99 | 0.197    | 2.26±0.81 | 0.935    |
| 40–49                      | 1.89±0.86             |          | 1.92±0.82  |          | 1.98 ± 0.90 |          | 2.22±0.90 |          |
| 50                         | 1.81±0.57             |          | 1.92±0.65  |          | 2.09 ± 0.91 |          | 2.22±0.87 |          |
| Educational attainment     |                       |          |            |          |             |          |         |          |
| High school                | 1.90±0.67             | 0.013    | 1.87±0.75  | 0.218    | 2.10 ± 0.86 | 0.876    | 2.32±0.81 | 0.141    |
| College                    | 1.65±0.77             |          | 2.01±0.83  |          | 2.12 ± 1.01 |          | 2.14±0.87 |          |
| Marital status             |                       |          |            |          |             |          |         |          |
| Single                     | 1.58±0.55             | 0.192    | 1.92±0.73  | 0.964    | 2.28 ± 1.09 | 0.417    | 2.25±0.87 | 0.447    |
| Married                    | 1.82±0.75             |          | 1.95±0.81  |          | 2.06 ± 0.91 |          | 2.22±0.85 |          |
| Household income           |                       |          |            |          |             |          |         |          |
| High                       | 1.63±0.54             | 0.082    | 1.90±0.73  | 0.149    | 2.29 ± 1.02 | 0.360    | 2.31±0.98 | 0.496    |
| Medium                     | 1.88±0.84             |          | 2.09±0.86  |          | 2.09 ± 0.87 |          | 2.24±0.81 |          |
| Low                        | 1.58±0.50             |          | 1.75±0.79  |          | 1.96 ± 1.08 |          | 2.04±0.93 |          |
| Expenditure on medical care per month |  |          |            |          |             |          |         |          |
| High                       | 1.63±0.56             | 0.331    | 1.98±0.84  | 0.424    | 2.18 ± 0.98 | 0.840    | 2.35±0.72 | 0.245    |
| Medium                     | 1.82±0.81             |          | 2.05±0.86  |          | 2.11 ± 0.89 |          | 2.11±0.90 |          |
| Low                        | 1.67±0.71             |          | 1.67±0.71  |          | 2.00 ± 0.87 |          | 2.00±0.76 |          |
| Challenge feeling and attitude |          |          |            |          |             |          |         |          |
| High                       | 2.07±0.80             | 0.040    | 2.00±0.85  | 0.022    | 2.47 ± 0.92 | 0.054    | 2.79±0.89 | NA       |
| Medium                     | 1.89±0.73             |          | 2.14±0.88  |          | 2.22±0.91  |          | 2.56±0.84 |          |
| Low                        | 1.68±0.68             |          | 1.81±0.67  |          | 1.96±0.90  |          | 1.98±0.78 |          |

* by t-test or one-way ANOVA

acquire new technology and skill. These are common characteristics in consumer who oriented to behavioural pattern and explore adequate information. Cause of non-contact of health-related information is occupied and acknowledge. Measure of gain of information is that internet, TV/Radio program is most common. There are factors that are marriage state, health status, challenge thought affected use intention. In the large, health-related information is wanted that income level, health status, challenge consciousness, health-relate concern, fun of information, utility of life is related. multiple regression analysis, putting general characteristics (age, sex) and health status, socioeconomic status, education level, health insurance, fun of information, utility of life factors as a dependent variable. As a result of analysis, health information gaining pathway was significantly influenced by lifestyle, age, education levels.

Summarized result of this study, educational attainment and challenge thought were significant variable in acquisition of health information. Most of previous studies showed women pursue more than men. This result can be from women's
Table 4. Impact factors relating to intention to use of health Information by regression analysis

|                                | B   | SE   | β    | p-value |
|--------------------------------|-----|------|------|---------|
| Concern on health             | -0.215 | 0.052 | -0.280  | 0.000  |
| Utility of health information | 0.187 | 0.052 | 0.254  | 0.000  |
| Challenge feeling and attitude | -0.219 | 0.073 | -0.211 | 0.003  |
| Funny and interesting of health information | 0.178 | 0.064 | 0.196  | 0.006  |
| Experience of using health information | 0.233 | 0.093 | 0.175  | 0.013  |
| Household income              | -0.173 | 0.086 | -0.159 | 0.047  |
| Expenditure on medical care per month | -0.024 | 0.098 | -0.020 | 0.809  |
| Convenience of health information | 0.072 | 0.051 | 0.102  | 0.161  |

* household income status; low=1, medium=2, high=3, Expenditure on medical care per month; low=1, medium=2, high=3, Challenge feeling and attitude; low=1, medium=2, high=3

preventive health behaviour, humanitarian viewpoint, and knowledge of health, and responsibility for family members. However, our result showed no significant difference. It may be due to difference of race and other characteristics.

Consumer who had more knowledge on health information use more health information. More easier get health information will facilitate consumer capacity, and increase market share in healthy food. Thereafter, we can conclude that consumers who get more health information can have high motivation of preventive health.

Concern to health is significant variable in utilization of health information in previous studies. Acquisition on health information is important in determining process for getting health items. It would be deterministic role for attitude formation that effect purchase behaviour. Thereafter right acquisition of health information will most important in preventive health behaviour.

The result of intention to use of health Information controlling with various fixed variables, concern on health, utility of health information, challenge feeling and attitude, funny and interesting of health information, experience of using health information, household income were significantly associated factors. This result means important implication on practical utility and funny and interesting of health information.

This study has some limitations. Our study population was in limited person and area of one urban-rural city of Korea. Also, this study has methodological limitation of questionnaire survey. However, it was a preliminary study in the study precludes definitive conclusions on impact factors related the effects of such health-related informations. We would like to recommend exploring this study's objectives for further research.

In conclusion, we should target and consider to concern on health, utility of health information challenge feeling and attitude, funny and interesting of health information, experience of using health information, household income in planning projects or program on health information.

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6. References

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