

Factors associated with tobacco and alcohol use*

Eun Jin Choi†, Chang Woo Kim*

Korea Institute for Health and Social Affairs

** Yongin University*

CONTENTS

I. Introduction	IV. Discussion
II. Research Method	V. Conclusions
III. Research Findings	References
	Abstract

I. Introduction

Personal healthy living practice was a personal behavior field; however, it can be changed by interacting with the social and cultural environments(Green, 1991). The healthy living practice project among the health promotion projects of our Government has been centered on stop-smoking, quit-drinking, exercise and nutrition. Out of these healthy lifestyles for the nation, the

problems of smoking and drinking are known as the major causes of raising the risk of various health problems and diseases. Smoking and drinking are different risk factors, but have a common characteristics in using addictive substances.

The New General Plan for Public Health Promotion of the Government aims at decreasing the percentage of the male smokers to 30% (2.5% for the female smokers) by 2010(Korea Institute for Health

* This study included secondary analysis of the 2007 Korea Welfare Panel Survey Data.

Corresponding Author: Eun Jin Choi

Korea Institute for Health and Social Affairs

Jinhungro 268, Bulgwang-dong, Eunpyeong-gu, Seoul, 122-705 Korea

Tel : +82-2-380-8249, e-mail : eunjin@kihasa.re.kr

Article submitted 8 December 2008, Revised 6 January 2009, Approved 20 December, 2008

and Social Affairs & Ministry of Health and Welfare, 2005). The policy includes smoking cessation clinic, stop-smoking education and public relations projects through public health centers along with the cigarette regulation policy enforcement. The smoking percentage of the adult male in our country had reached the top in 1980 with 79.3%, then it was lowered to 73% in 1994 and showed average of 0.45% drop each year. Around 10 years after the activation of smoking cessation projects along with the establishment of the National Health Promotion Law in 1995, it was dropped to 57.8% in 2004, so average of 1.5% had been reduced each year for that period. As a result of various and strong smoking cessation policies such as the increase of cigarette price on December, 2004 and expansion of non-smoking areas, the smoking rate was dropped to 42.0% on December 2007(Ministry of Health, Welfare, and Family Affairs, 2008). However, the smoking rate is still high and the reducing trend has slowed, but the amount of cigarette delivery has not been reduced.

The policy goal of drinking rate was 52% by the year 2010. The objectives of the temperance project mainly are to reduce the amount of alcohol consumption, to reduce the drinking rate of adults, workers, college students and adolescents, to reduce the dangerous drinking activities and to reduce drinking related problems(Korea Institute for

Health and Social Affairs & Ministry of Health and Welfare, 2005). The main contents of the temperance project among the healthy living practice project of the national health promotion project conducted by metropolitan and local public health centers are temperance education for adolescents, adult temperance education, temperance campaign and public relations.

To exercise the smoking cessation project and temperance project in the Government level effectively, a project strategy should be developed in near future. The factors affecting the smoking and drinking of the population can be the important basis of the development of the health promotion project strategy. In Korea, researches on social and economical characteristics of the population in relation to the current status of smoking and drinking are scattered and researches analyzing the affecting factors on general smoking and drinking rates of the country are insufficient. In addition, there exists disparity of health status and health risks in the public. People with low income are more likely to experience devastating conditions than the people with high income. Low income level can be a risk factor for ill health(Woo, 2007). There is also economic inequality in utilization of health care services(Han, 2002). Children of low income families are more likely to experience health problems and health risks of chronic illness(Song, 2008). Globally, tobacco production is related to

poverty, and smoking worsen the health of the poor. Marketing of tobacco products can benefit the rich, not the poor.¹⁾

The main purpose of this study was to analyze the status of smoking and drinking according to income level and the factors associated with smoking and drinking by using the national survey data from the Korea Welfare Panel Survey.

II. Research Method

1. Secondary Analysis of Data

This research analyzed the second year (2007) data of the Korea Welfare Panel Survey.²⁾ The Korea Welfare Panel was consisted of samples representing the whole country, sufficiently collected data from low income families and surveyed 6,580 families. For this study we used personal data for those who were 20 years old or older, and analyzed with the total of 13,456 individuals. The subjects of the data consisted of two parts based on the 60% of median income of the regular income before receiving public assistance. This criterion was from the The Korea Welfare Panel structure.

The questionnaire items in the Korea

Welfare Panel survey included perceived health status, utilization of medical services, having chronic illnesses, smoking status(average daily consumption amount of cigarettes during the past one year), drinking status(frequency and amount of alcohol consumed, and alcohol related problems), depressive symptoms(Epidemiologic Studies Depression Scale ; CESD-11), and self-esteem(Rosenberg Self-esteem scale) items.

2. Major Variables of the Study and the Statistics Program Used

We analyzed demographic characteristics (age, sex, income level, and education), health threatening activities (smoking and drinking) and subjective health recognitions. Characteristics of the health threatening activities and their relevance in relation to a person's social status, social environment satisfaction level and mental health level were analyzed.

Smoking and drinking related variables included psychological issues (depression symptoms and self-esteem), satisfaction level and use of welfare services. Other variables were also selected for analysis of general families and low income families and demographic characteristics by age and sex. In relation to health and medicines, we used variables such as subjective health level and the frequency of health and medical facility visits.

For descriptive statistical analysis,

1) Tobacco and Poverty(Produced by PATH Canada and Work for a Better Bangladesh) 2001. <http://www.who.int/tobacco/resources/publication/s/wntd/2004/en/>

2) Korea Welfare Panel Survey: <http://koweps.re.kr/>

regression analysis and logistic analysis, the SPSS 12.1 was used.

III. Research Findings

1. Rate of Smoking and Drinking of the Subjects

There was significant differences when analyzed variables according to the income classification, smoking and drinking rates from the 2007 data(Table 1). The smoking rate of the general families was 26.6% and it was 23.1% for the low income families. In male population of those older than 30 years old, low income group people were more likely to smoke cigarettes than the general income population. In the result of the Chi square analysis, the smoking rate showed significantly different relationships with the different age groups, gender and income level.

For the variable of alcohol use, the drinking rate was higher even in the general families. The rate of not drinking at all in the general families was 36.7% and it was 58.4% in the low income families. Because the data used in this analysis was cross-sectional, we were not able to find out the trend of the drinking status among the population.

In case of the 2007 data, the subjective health level were healthy (15.4%), relatively healthy (44.9%) and so on, the subjective health level in the 2005 National Nutrition

Survey (Ministry of Health and Welfare, 2005) were very good (4.8%), good (42%) and so on. It was shown that the types of differences of the health level due to the income differential were appeared similarly. The health level gets worse if a person is a older female in the low income class. The question on the subjective health level is not an objective measure of health level. However, since it is an important variable to show the health level, it is required to be continuously evaluated.

2. Multivariate Analysis on Smoking and Drinking Variations and Other Health Related Variations

In the multivariate analysis on the smoking and drinking variations and other health and medicine, annual frequency of health and medical facility visits and subjective health level, we could analyze the significant differences between the low income families and general families. The amount of alcohol consumption, frequency of drinking and amount of smoking showed the relations in amount between them. A person who claimed to have bad health visited health and medical facilities more and had a high relations with smoking and drinking. However, we found that the more they dissatisfied, the more they smoked. (Table 2).

As a result of conducting a simple regression analysis centered on the frequency

of health and medical facility visits, the average number of outpatient visits to a health and medical facilities showed a significant relation to the level of education, drinking, smoking, depression, age, income level and subjective health level, and it showed around 21% of expression power in the simple regression analysis (Table 3). However, the drinking and smoking variables and the frequency of health and medical

facility visits appeared in this regression analysis have a negative relation; therefore, it may not explain the precise relation. As a result of the logistic regression analysis, the variables increasing the risks of smoking and drinking were depression symptoms, young ages of 20's and 30's, equal to or less than highschool graduation of education, male and low income families (Table 4, Table 5).

<Table 1> Selected Demographic Characteristics of the Study Population

(Unit : %)

		20-29	30-39	40-49	50-59	60-69	70+	Total
Gender	Male	12.2	21.1	19.7	14.3	16.4	16.3	45.7
	Female	12.7	17.8	16.3	13.8	18.1	21.2	54.3
	Total	12.5	19.3	17.9	14.0	17.3	19.0	100.0
income level	General	16.4	25.8	21.2	15.5	12.9	8.2	64.3
	Low-income	5.4	7.6	11.9	11.4	25.4	38.4	35.7
	Total	12.5	19.3	17.9	14.0	17.3	19.0	100.0
Smoking status by income level		20-29	30-39	40-49	50-59	60-69	70+	Total
General	Male	48.1	60.7	57.2	47.9	36.6	24.2	50.3
Low Income	Male	47.4	71.0	62.9	54.1	43.4	33.2	46.5
General	Female	4.1	3.4	4.0	3.9	3.6	9.3	4.2
Low income	Female	4.7	5.3	6.3	10.5	5.9	8.9	7.5
Alcohol use by income level								
General	Never	25.4	28.7	30.3	42.5	53.5	65.5	36.7
	Less than Once a Week	55.4	44.1	38.8	28.9	22.3	18.3	37.7
	2-3 Times a Week	16.4	21.8	20.4	17.4	12.1	7.4	17.6
	More than 4 Times a Week	2.9	5.4	10.4	11.2	12.2	8.9	8.1
Low Income	Never	33.6	38.7	44.0	53.9	62.5	68.9	58.4
	Less than Once a Week	56.6	37.3	30.0	24.0	19.0	14.5	22.5
	2-3 Times a Week	7.4	18.8	15.5	12.6	9.7	6.1	9.9
	More than 4 Times a Week	2.5	5.1	10.5	9.5	8.8	10.5	9.1

N=13,456

<Table 2> Relations Analysis Chart Among Major Health Related Variables

	Subjective Health Level	Frequency of Health and Medical Facilities Visits	Average Amount of Smoking a Year	Average Amount of Drinking a Year	Number of Glasses per Drinking	General Satisfaction Level
Subjective Health Level	1					
Frequency of Health and Medical Facilities Visits	0.407**	1				
Average Amount of Smoking a Year	0.091**	-0.093**	1			
Average Amount of Drinking a Year	0.192**	-0.151**	0.358**	1		
Number of Glasses per Drinking	0.144**	-0.121**	0.376**	0.419**	1	
General Satisfaction Level	0.331**	-0.160**	-0.076**	0.038**	0.017	1

Note: The subjective health level are ① Very Healthy ② Relatively Healthy ③ Midium ④ Relatively Not Healthy ⑤ Very Unhealthy; The general satisfaction level used the 5 point scale from Very Satisfactory (5) to Very Unsatisfactory (1).

<Table 3> Regression Analysis between the Smoking and Drinking Factors and Other Factors and the Frequency of Health and Medical Facility Visits

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-13.207	2.992		-4.413	0.000
Level of Education	-1.476	0.211	-0.082	-7.006	0.000
General Satisfaction Level	0.533	0.368	0.014	1.448	0.148
Average Amount of Drinking a Year	-1.615	0.272	-0.051	-5.932	0.000
Average Amount of Smoking a Year	-1.070	0.311	-0.030	-3.445	0.001
Depression Point	0.238	0.029	0.085	8.211	0.000
Self-esteem Total	0.087	0.067	0.013	1.309	0.191
Age(Adult)	2.004	0.211	0.112	9.512	0.000
Income level	1.375	0.597	0.022	2.303	0.021
Health Level	7.640	0.295	0.273	25.928	0.000
Dependent Variable: Frequency of Health and Medical Facility Visits					
R Square = 0.214398; Adjusted R Square = 0.213824; Std. Error of the Estimate = 26.51785					

<Table 4> Logistic Analysis between Smoking Factors and Other Related Factors

	B	S.E.	Wald	df	Sig.	Exp(B)
Suspected Depression	0.500547	0.076719	42.56748	1	0.000	1.650
Age Group in 20's and 30's	0.418275	0.069046	36.69855	1	0.000	1.519
Less than High School Graduation of Education	0.457075	0.06966	43.0531	1	0.000	1.579
Male	2.620227	0.085395	941.4896	1	0.000	13.739
Low Income status	0.194116	0.072724	7.124785	1	0.008	1.214
High Risk Drinker	0.925793	0.062673	218.2054	1	0.000	2.524
Constant	-3.60081	0.111527	1042.417	1	0.000	0.027

<Table 5> Logistic Analysis between High Risk Drinking Factors and Other Related Factors

	B	S.E.	Wald	df	Sig.	Exp(B)
Suspected Depression	0.090107	0.068832	1.713678	1	0.191	1.094
Age Group in 20's and 30's	0.522065	0.064357	65.80397	1	0.000	1.686
Less than High School Graduation of Education	0.098134	0.064703	2.300324	1	0.129	1.103
Male	1.543096	0.064321	575.5476	1	0.000	4.679
Low Income Status	-0.46401	0.066373	48.87386	1	0.000	0.629
Smoker	0.915287	0.062822	212.27	1	0.000	2.497
Constant	-1.53292	0.081766	351.4768	1	0.000	0.216

IV. Discussion

This study tried analysis on low income status factors associated with smoking and high risk drinking. The smoking and high risk drinking factors had been reported to be important health promotion factors along with eating habits and exercising and to have relations with each other(Choi, 2004). Some study showed that drinking problem was

related to low self-esteem and social dysfunction(Choi, 2005). Another study also showed similar results related to alcohol use with low income status(Park, 2002). The alcohol use problem with low income status was related to lowered social function. Problematic drinking lowered the ability of solving problems. Foreign countries' report produced results that manual workers are more likely than others to die from alcohol use(Hemstrom, 2002).

Some research showed that smokers with low income were hard to quit smoking(Chun, 2006). Smoking was related to other mental health issues. As shown in this analysis finding, as a person smoked and smoked more, the depressive symptoms seemed significantly increased. Similar finding has frequently appeared in the smoking studies of both adult males and adult females(Kim & Kim, 2001). Low tobacco price could be a factor to increase the rate of smoking among the vulnerable people and increase the social inequality(Main, et al, 2008). The Korean government have tried to increase the tobacco tax in 2004(Ministry of Health, Welfare, and Family Affairs, 2008).

For the drinking problem, such as the high risk drinking, increases higher risk of alcohol dependency and other diseases. In this data analysis, the high risk drinking showed a significant risk level in the age group of the 20's and the 30's. The drinking problem accompanies depression symptoms and other psychiatric problems and it has been reported to have close relation with smoking as well(Cho et al, 1998; Choi& Kim, 2007).

The research of Rehm et al. (2003) studied the burden of abuses given by the amount of alcohol consumption and drinking patterns. The amount of alcohol consumption was negatively related to the mouth cancer, pharynx cancer, esophageal cancer, breast

cancer, unipolar depression, alcohol use disorder, high blood pressure, bleeding infarction and liver cirrhosis, and it is analyzed that heart diseases and damage especially had negative relations with drinking patterns along with the amount of consumption. The researches on health findings related to the alcohol consumption have showed conflicting results between positive findings and negative findings and are still in much debates. There have been some research findings that the low risk drinking has some health benefits. It has been reported that little drinking was effective on reducing the risk of the coronary artery disease, restrictive cardiomyopathy, stroke, diabetics, osteoporosis and dementia. However, the FDA of the USA did not allow prescribing alcohol as the medicine to reduce the risk of the coronary artery heart diseases. It was because about 10% of the alcohol users have high probability of becoming alcohol dependent and family members, relatives and even strangers around alcohol users may be damaged. The Australian government also developed a guide not to recommend drinking for health benefits due to the fact that drinking had more damages than benefits. Especially the government recommended exercising, stop-smoking and appropriate diet rather than drinking for reducing the risk factors of heart diseases. Since it was fairly possible for people who

want to have positive health effects to take the benefit by improving the living habits of exercising and nutrition, it is not recommended to drink for positive effects(Choi & Kim, 2007).

For both smoking and high risk drinking issues, demographic and sociological variables such as sex, age, education levels and income levels were analyzed to be the significant influence factors. Those who were males with age group of 20's and 30's, educational attainment less than high school graduation and from a low income family, the level of health risk factor appeared to be high. In general, females were more likely unhealthy than males. The health risk factors such as smoking and drinking showed higher rate in the low income level. Even in the health and nutrition survey results in 2005, persons in the low income class were experiencing poorer health in health level and limitation of activities.

V. Conclusion

This study aimed at analysing the socio-economical factors related to smoking and drinking behaviors using the Korea Welfare Panel data. For the smoking status of the population, females in the low income group were more likely to smoke than those in the general income group. For the male

population of those older than 30 years old, males in the low income group were more likely to smoke than those in the general income group. For those older than 50 years old, low income group were more likely to use alcohol than the general income groups.

There was some limitation in this study. Since the variables to analyze the smoking and the high risk drinking were very limited in the Welfare Panel Data, it also was limited to analyze the influence factors based on theories.

It is important to note that smoking and alcohol use behaviors are related to psychosocial factors in addition to economic factors. Depression and other psychological factors such as stress can increase the probability of smoking and drinking. Health promotion policy and programs need to address this kind of psychological and socioeconomic issues more frequently. Health professionals need to develop and research on the equity issues of health promotion factors.

References

- Cho, Sung Jin, Seo, Kook Hui, Seo, Dong Woo, Cho, Maeng Jae, 1998, Analysis of Socio-Demographic Characteristics and Risk Factors of Highly Suspected Alcohol Dependency Group - Subjected

- on the National Probability Samples-, Journal of the Korean Psychological Association, Vol. 37 Number 6: 1186-1200.
- Cho Hyunsoon, 2005. A Study on the Program Development of Job Preparation for Better Job seeking Efficiency of the Low-income Unemployed with Drinking Problem: Focused on practice model of Generalist social work, Seoul Women's University Graduate School, Doctoral Dissertation.
- Choi, Eun Jin, Kim, Chang Woo, 2007. Analytical Research on High Risk Drinking Behavior Based on the Characteristics of Adult Drinkers, Journal of the Korean Society of Alcohol Science: 29-38.
- Choi, E.J. 2004. Relationship of smoking with self-perceived health and selected health behaviors, Journal of Korean Society for Health Education and Promotion, 21(4): 35-49.
- Chun, Y. W, 2006. Factors associated with success of smoking cessation at smoking-cessation clinic of a public health center, ChoongAng University Doctoral Dissertation.
- Brownson et al., 1998. Chronic Disease Epidemiology and Control, American Public Health Association.
- Green LW & Kreuter MW, 1991. Health Promotion Planning: an educational and environmental approach, Mountain View, CA: Mayfield.
- Han, D.W. 2002. Inequity in The Utilization of Health care Services in Korea, Kyunghee University Doctoral Dissertation.
- Hemstrom, O. 2002. Alcohol-related deaths contribute to socioeconomic differentials in mortality in Sweden. Eur J Public Health. Dec;12(4):254-62.
- Kim, Ok Soo, Kim, Kye Ha, 2001. Comparative Study on Social Support, Depression, Drinking and Smoking of Female College Students and Working Women, Journal of the Adult Nursing Association, Vol. 13, Number 3: 363-372.
- Korea Institute for Health and Social Affairs, Ministry of Health and Welfare, 2005. The New General Plan for Public Health Promotion Establishment.
- Lopez AD, Collishaw NE, Piha T. 1994. A descriptive model of the cigarette epidemic in developed countries. Tobacco Control, 3(3):242-247.
- Main C. Thmas S., Ogilvie D., Stirk L, Petticrew M., Whitehead M., Sowden A., 2008. Population tobacco control interventions and their effects on social inequalities in smoking: placing an equity lens on existing systematic reviews, BMC Public Health, May 27(8) 178.

- Ministry of Health, Welfare, and Family Affairs, 2008. Action for Smoke-Free Korea 2008.
- Park, Jung-Sook, 2002. A Study on the Risk and Protective Factors Influencing Alcohol Use Disorder of the Urban Low Income Group, Seoul Women's University Graduate School, Doctoral Dissertation.
- Rehm J., Fischer B. 1997. Measuring harm: implications for alcohol epidemiology. In: Plant M., Single E., Stockwell T.(Eds) Alcohol: minimizing the harm. London: Free Association Press.
- Song, J. S., 2008. Analysis of Vulnerable Children's health status, Master's thesis-- Wonkwang University Graduate School of Administration : Department of Social Welfare.
- Song, Sun Hui, Hah, Eun Hye, Song, Dong Ho, 2002. Mental and Social Variable Causes Related to the Smoking of Adult Males: Subjected on the Visitors of the Health Promotion Center of A General Hospital. Journal of the Korean Psychological Association: Health, Vol. 7 Number : 447-461.
- Woo, Hye Kyung, 2007. Equity in health attributable to income and labor status in wage-earners, Seoul National University Graduate School of Public Health, Mater's thesis.

ABSTRACT

The objectives of this study were to analyze the socio-economical factors related to smoking and drinking behaviors using the Korea Welfare Panel data. The key variables were sex, age, frequency of health and medical facilities visit, subjective health level, smoking level, drinking level, depression symptoms, and low income level. Since the health variables in the Welfare Panel data were limited, the analysis was exploratory. In male population of those older than 30 years old, low income group people were more likely to smoke cigarettes than the general income population. In the result of the Chi square analysis, the smoking rate showed significantly different relationships with the different age groups, gender and income level. According to the descriptive analysis, persons with low income level were more likely to experience health risk behaviors and showed more medical service utilization. The utilization of the local public health centers was 4.6% for the low income level and 1% for the general level. The higher smoking rate was associated with the younger age, and the lower income. The smoking rate in the age category from 20 to 29 was 23.3% for the general level and 25% for the low income level. On the other hand, the drinking rate was even higher in the general families. The rates of non use of alcohol was 36.7% in the general families and 58.4% for the low income families.

For both smoking and high risk drinking issues, demographic and sociological variables such as sex, age, education levels and income levels were analyzed, and there wer significant relationships. Health risk factors were serious for males, with age groups of 20's and 30's, lower education level, and in a low income family. In general, females were more unhealthy. The rates of smoking and drinking were higher in the low income level. Even in the health and nutrition survey results in 2005, persons in the low income class were experiencing poorer health in health level or the degree of action restriction.

Since the effects of the health promotion could not be measured in a short period of time, it has not been easy to create the basis for the substantial effects. Factors related to health risks needs to be continuously studied using data from diverse field.

Key Words: Low income families, Smoking, Drinking, Health risk

〈국문초록〉

저소득층의 음주 및 흡연 관련 요인

본 연구의 목적은 한국복지패널데이터의 흡연음주 현황과 관련 건강위험요인을 연구분석하는 데 있다. 성, 연령, 외래의료이용횟수, 주관적 건강수준, 흡연수준, 음주수준, 우울증상, 저소득 등이 주요 분석변수였다. 복지패널데이터에 있는 건강변수가 제한된 관계로 분석도 제한적으로 실시되었다. 흡연율은 성별 차이가 컸고, 특히 연령이 젊을수록 높았으며, 저소득층에서 더 높았다. 20-29세 연령층의 경우 흡연율이 일반계층은 23.3%였고, 저소득층에서는 25%였다. 20대남성흡연율은 일반가구 48.1%, 저소득가구 47.4%로 큰 차이가 없었으나 30대에서는 일반가구 60.7%, 저소득가구 71.0%로 가장 큰 차이를 나타내었다. 여성의 경우 전 연령층에서 저소득층이 흡연율이 높았고 50대에서 일반가구 3.9%, 저소득가구 10.5%로 가장 큰 차이를 나타내었다.

음주율 특성을 보면 일반가구에서 음주율은 오히려 높게 나타났는데, 일반가구는 전혀 안마신다는 비율이 36.7%, 저소득가구는 58.4%였다. 흡연과 고위험 음주문제 모두에서 성별, 연령과 교육수준, 소득계층 등의 인구사회학적 변수가 유의한 영향요인인 것으로 분석되었다. 남성, 이십대 및 삼십대 연령층, 고졸이하의 학력, 저소득 가구일수록 건강위험요인의 정도가 높은 것을 알 수 있었다. 전반적으로는 여성의 건강이 더 안 좋다. 저소득층 여성의 흡연율은 일반가구 여성의 흡연율보다 높은 것으로 나타났다. 저소득층일수록 건강위험행동을 경험하고, 더 많은 의료서비스 경험이 있는 것으로 나타났다. 한편 보건소 이용경험은 저소득층은 4.6%, 일반계층은 1% 정도였다. 2005년도의 건강영양조사결과에서도 건강수준이나 활동제한의 정도가 각 연령별로 분석해도 저소득층일수록 더 안 좋은 상태인 것으로 나타난 바 있다.

본 연구에서 흡연과 음주와 관련된 심리적 요인과 소득수준의 요인이 유의한 영향력이 있음을 알 수 있었다. 특히 건강위험행동과 관련하여 개인의 심리적 요인에 대하여 향후 심층적인 연구를 할 필요가 있다. 사회경제적 어려움으로 인하여 개인이 경험하는 우울과 같은 심리적 요인이 건강위험행동을 지속하게 하는 요인이 될 수 있기 때문이다.

주제어: Low income families, Smoking, Drinking, Health risk