



Income and Education's Influence on Health Behaviors

Tatiana Cordova ¹, Darryl White, M.D. ², Sandra K. Burge, PhD ¹

¹ University of Texas Health Science Center at San Antonio, San Antonio, TX 78229

² Family Practice Residency Program, Harlingen, TX 78550



ABSTRACT

The overall health of the population is strongly related to four health behaviors; smoking, drinking, exercise, and diet. Many conditions determine these behaviors, income and education included. Previous studies show that education correlates with income, drinking and smoking status. A cross-sectional survey of patients' health behaviors was conducted in seven family practice residency program clinics across the state of Texas where medical students surveyed 150 consecutive adults. Correlations between income and education and drinking behaviors proved to be statistically significant, while smoking, diet and exercise were not related to either income or education.

INTRODUCTION

The health of an individual is deeply influenced by personal surroundings and background. Socioeconomic status, for example, has a strong impact on all four health behaviors. ¹ Studies indicate that people with lower socioeconomic position and lower education are more likely to be smokers, overweight, low physical activity and incur high health risk behaviors. ² Educated people have shown to have healthier lifestyles. Specifically, by not smoking, drinking only in moderation, exercising regularly, and watching their diet, educated people are typically healthier. ³ Higher levels of education reduces the economic hardships that come with life, and improve the possibilities of finding a fulfilling career, thus affecting overall health. Studies have also shown that higher educated people are less likely to smoke, and have better health, economic status, and "personal/social resources". ³ People with basic education levels are three times more likely to smoke than those with a college education or higher. ⁴ In this study we examined the relationship between income and education and health behaviors of patients in seven Family Practice clinics in Texas.

MATERIALS AND METHODS

This cross-sectional survey of patients' health behaviors was conducted in seven family medicine residency program clinics across the state of Texas. At each site, medical students surveyed 150 consecutive adult patients who presented for routine outpatient care, for a total of 1078 respondents. Surveys addressed four health behaviors (tobacco and alcohol use, physical activity, and diet), stage of behavioral change, health status including BMI and chronic conditions, and demographic characteristics, including income and education.

	Drinking			Diet						Smoking			RAPA scores			
	Nondrinker	Safe drinker	Unsafe drinker, >2 drinks/day or binge drinker	Fruit/vegetable servings per day			Fast/fried food servings per week			Never	Previous	Current	rarely do any activity	under-active	under-active regularly	active
				0-3	4 or 5	6 or more	0-3	4 to 5	6 or more							
Income less than \$1000	75.70%	3.80%	20.50%	27.90%	41.10%	31.00%	34.10%	40.10%	25.80%	62.10%	16.00%	22.00%	4.40%	38.10%	15.90%	41.50%
\$1000 to \$1999	70.30%	9.30%	20.30%	31.70%	40.30%	28.00%	32.90%	34.60%	32.50%	58.20%	19.70%	22.20%	3.00%	36.00%	15.70%	45.30%
\$2000 to \$2999	62.80%	14.00%	23.20%	28.40%	45.70%	25.90%	34.80%	37.70%	28.00%	70.40%	13.60%	16.00%	2.00%	29.80%	19.00%	49.20%
\$3000 or higher	49.60%	18.20%	32.20%	25.30%	43.20%	31.50%	27.30%	34.80%	37.90%	65.70%	17.90%	16.30%	3.30%	34.40%	17.30%	45.00%

	Drinking			Diet						Smoking			RAPA scores			
	Nondrinker	Safe drinker	Unsafe drinker, >2 drinks/day or binge drinker	Fruit/vegetable servings per day			Fast/fried food servings per week			Never	Previous	Current	rarely do any activity	under-active	under-active regularly	active
				0-3	4 or 5	6 or more	0-3	4 to 5	6 or more							
Education Less than high school diploma	76.80%	3.80%	19.40%	30.70%	38.50%	30.70%	37.30%	38.60%	24.20%	65.90%	12.90%	21.20%	4.90%	32.60%	17.90%	44.60%
High school diploma	67.20%	7.70%	25.10%	29.60%	45.60%	24.80%	31.30%	34.60%	34.10%	60.10%	17.90%	22.00%	3.30%	36.50%	16.20%	44.00%
More than high school diploma	57.60%	18.50%	23.90%	26.50%	38.70%	34.80%	32.70%	35.80%	31.50%	66.60%	17.40%	16.00%	2.00%	35.00%	19.40%	43.60%

RESULTS

Of 1078 respondents, 75% were women, 49% were Hispanic, and 28% were Caucasians. Ages ranged from 18 to 94, with a mean of 43 years.

Level of education was related to income. People with less than a high school education earned less than those with a high school education or higher. (p=.000)

Most people in all income and education levels did not drink alcohol. High income and high education predicted drinking in general, and unsafe drinking in particular. (p=.000) At all income and education levels, most people were nonsmokers. Although not statistically significant, those with a high school education or less were more likely to be current smokers, while those with an education beyond high school were more likely to be previous smokers, but have quit since. (p=.084) Diet and exercise did not correlate significantly with either education or income levels.

DISCUSSION

- Safe and unsafe drinking is more likely to occur in educated people with high incomes.
- Diet and exercise were not related in any way with varying levels of income and education in this study. Smoking showed a modest association with education, but did not reach significance.

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