

CANCER RISK PERCEPTION PREDICTORS FOR TOTAL BODY SKIN EXAMINATIONS: A CROSS-SECTIONAL STUDY USING HINTS 2017 DATA

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INTRODUCTION

The purpose of this study is to examine demographic characteristics and cancer risk avoidance perceptions as predictors of having a skin examination by a healthcare provider.

WHY WE CARE

1

Approximately 20% of the U.S. population will develop skin cancer during their lifetime and annual treatment costs for skin cancer are more than eight billion dollars.

2

Advancements in skin cancer screening methods have led to a 3% increase in early diagnosis of melanoma over the past decade.

3

One method of screening for skin cancer is a total body skin examination. Although a total body skin examination is quick, inexpensive, and non-invasive, skin cancer screening rates have remained relatively low.

METHODS

The Health Information National Trends Survey (HINTS) is a cross-sectional nationally representative survey of the adult population 18 years of age and older.

We used the HINTS 5 (Cycle 1) data, collected from January 25, 2017 through May 5, 2017.

THE SURVEY

Dependent variable: Whether or not the participant has ever had their skin examined by a health professional.

Independent variables: We focused on 6 primary questions:

- (1) How confident are you about your ability to take good care of your health?
- (2) How likely are you to get cancer in your lifetime?
- (3) How worried are you about getting cancer?
- (4) Agreement with the statement: "I'd rather now know my chances of getting cancer."
- (5) Agreement with the statement: "So many recommendations about preventing cancer makes it hard to know which one to follow."
- (6) Do you ever check your skin for signs of skin cancer?



RESULTS

- Approximately 46% of the sample reported having a skin examination.
- Females, college graduates, those with a history of skin cancer, people who check their skin for signs of skin cancer, and adults over the age of 45 were more likely to have a skin examination.
- Those least likely to be screened were those not wanting to know their chances of getting cancer.
- 63.8% of participants with a prior history of having cancer had their skin examined by a professional

Statements	N	OR	95% CI
I'd rather not know my chance of getting cancer (referent: strongly disagree)	2,447		
Somewhat disagree		0.61**	[0.43, 0.86]
Somewhat agree		0.55**	[0.37, 0.83]
Strongly agree		0.51*	[0.30, 0.86]
Do you ever check your skin for signs of skin cancer? (referent: no)	2,454		
Yes		8.51***	[5.46, 13.26]
How confident are you about your ability to take good care of your health? (referent: not confident at all)	2,446		
A little confident		0.54	[0.05, 6.31]
Somewhat confident		0.29	[0.08, 1.04]
Very confident		0.38	[0.11, 1.31]
Completely confident		0.54	[0.15, 1.93]
How likely are you to get cancer in your life? (referent: very unlikely)	2,425		
Unlikely		0.83	[0.36, 1.95]
Neither		1.07	[0.55, 2.08]
Likely		1.08	[0.49, 2.40]
Very likely		1.29	[0.50, 3.33]
How worried are you about cancer? (referent: not at all)	2,449		
Slightly		1.34	[0.88, 2.03]
Somewhat		1.53	[0.90, 2.59]
Moderately		1.92*	[1.03, 3.59]
Extremely		1.58	[0.53, 4.69]
There are so many recommendations about preventing cancer, it's hard to know which ones to follow? (referent: strongly agree)	2,432		
Somewhat agree		1.21	[0.68, 2.17]
Somewhat disagree		1.19	[0.72, 1.97]
Strongly disagree		0.90	[0.51, 1.60]

CI: Confidence Interval; OR: Odds Ratio
* Adjusted for age, race, income, education, health insurance, and sex, place of birth, cancer survivor, family cancer history.

DISCUSSION

This study revealed overall inadequate levels of adults having routine skin examinations by healthcare providers to detect skin cancer.

1

Similar to other studies analyzing colorectal, breast, and cervical cancer screening behaviors, the people least likely to be examined for signs of skin cancer by a healthcare provider were those not wanting to know their chances of getting cancer.

2

People who checked their skin for signs of skin cancer were eight times more likely to have a skin exam by a provider compared to those who do not check their skin.

3

The demographic predictors of skin cancer screening participation in this study were similar to other studies analyzing different cancer types, highlighting the need for improved patient education for those least likely to have a skin examination.

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