

Prevalence, Trends, and Demographic Characteristics Associated with Self-Reported Financial Stress Among Head and Neck Cancer Patients in the United States of America

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INTRODUCTION

The COVID-19 pandemic has disrupted care delivery for HNC patients nationwide.² As delays in screening and treatment continue, patients could be diagnosed with later stage disease which is associated with poorer prognosis.^{2,3}

Advanced HNC diagnoses are even more concerning when considering socioeconomic factors. It has previously been shown that financial insecurity can negatively impact health outcomes by increasing patients stress, potentially delaying care, and increasing the difficulty of adherence to medication regimens.⁴ As financially insecure patients continue to present with HNC diagnoses, it is vital for practicing otolaryngologists to understand the link between healthcare, financial insecurity, and demographic risk factors, in order to devise and implement appropriate interventions.

Therefore, the present study employed a nationally representative population survey to 1) quantify the prevalence of self-reported financial insecurity among HNC patients, 2) identify patient subgroups most affected by self-reported financial insecurity, and 3) identify the demographic and socioeconomic patient characteristics associated with self-reported financial insecurity.

MATERIALS & METHODS

Data was obtained from the National Health Interview Survey (NHIS), a cross sectional survey conducted annually by the National Center for Health Statistics.

Demographic characteristics including age, race, sex, sexual orientation, citizenship status, educational attainment, poverty status, and insurance status

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Outcome measures included self-reported difficulty paying medical bills over the past 12 months, and self-reported financial stress related to housing payments, children’s college savings, and personal retirement savings.

Only patients with a head and neck cancer diagnosis – specifically cancer of the larynx-windpipe, mouth/tongue/lip, throat-pharynx or the thyroid were selected for analysis. NHIS respondents between the years 2013 and 2018 answering at least one of the above questions were included in the analysis.

RESULTS

710 of 744, 387 respondents to the NHIS reported a history of head and neck cancer between 2013 and 2018

- 21.39% (95% CI, 17.69% – 25.09%) had difficulty paying medical bills in the previous 12 months
- 20.1% (95% CI, 16.73%-23.48%) reported financial stress related to housing payments
- 48.44% (95% CI, 40.97% - 55.97%) reported stress related to children’s college savings
- 47.81% (95% CI, 43.40% - 52.22%) reported stress related to personal retirement savings

Rates of self-reported difficulty paying medical bills were highest among patients identifying as black [43.11% (95% CI, 29.22% - 56.99%)], below 200% of the federal poverty level [38.42% (95%CI, 31.44% - 45.41%)], or uninsured [38.12%, (95% CI, 19.81% - 56.43%)].

Multivariable logistic regression revealed insurance status [aOR 2.17 (95% CI, 1.15 – 4.07), $p < 0.001$] and poverty status [aOR 2.55 (95% CI, 1.48 – 4.37), $p = 0.017$] to be significant predictors for difficulty paying medical bills.

No significant trends in the annual prevalence of financial stress were observed between 2013 and 2018.



CONCLUSIONS

These findings suggest that a significant proportion of HNC patients may experience financial stress related not only to out-of-pocket health care costs, but also exogenous financial challenges. Such barriers may impede patients’ ability to access and adhere to treatment or force detrimental tradeoffs between health care and other essential needs.

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