

Exposure to Risk Factors for Pancreatic Cancer Among Young Populations: A Study of Individuals Aged 18-35 from 1998 to 2022

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Background

The rising incidence of pancreatic cancer (PC) among individuals aged 18-35 in the US is concerning. Additionally, an unexpected sex gap in the incidence of PC and gastrointestinal cancers has been observed, particularly in those younger than 35 years old. Accurately assessing exposure to PC risk factors is crucial for recognizing high-risk populations.

Methods and Results

This study collected exposure data from the Behavioural Risk Factor Surveillance System's annual surveys from 1998 to 2022, involving 9,421,536 people. We focused on exposure to single or combination risk factors for PC, such as cigarette smoking, long-standing diabetes (DIABs3), obesity, and heavy drinking. Joinpoint trend analyses were employed to assess sex- and age-specific trends in risk factor exposure. Odds ratios were calculated to identify sex associations between these risk factors and non-skin cancer diagnosis in young individuals.

Our statistical analyses indicated that adolescents and young populations are increasingly exposed to risk factors for cancer. The age of exposure to risk factors is anticipated, particularly when subpopulations within the 18-26 and 27-34 age groups are considered. Results also refined the estimation of cancer risk associations by sex among young individuals.

Conclusions and Significance

The findings presented here offer a comprehensive assessment of the time trend of pancreatic cancer risk factor exposure over the last two decades and cancer susceptibility across sex groups in the young population.

Identifying at-risk populations for early screenings and early detection of pancreatic cancer are urgent strategies to mitigate its overall lethality.

Keywords

Pancreatic cancer; Risk factor exposure; Young population; Age-sex differences; Long-standing diabetes; Cigarette smoking; Obesity; Heavy drinking.

References

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