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Differences in the Knowledge of Cardiovascular Risk Reduction Behaviors in Young and Older Populations: Using 2018 Hints Survey Data

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Purpose: The aim of this study is to assess the difference in knowledge of behavior that reduces cardiovascular risks between young and older populations, as behavioral modification can reduce the burden of cardiovascular disease.
Methods: Using Cycle 3 of the 5th edition of the Health Information National Trends Survey (HINTS Cycle 5), descriptive analysis was used to evaluate the differences in knowledge of lifestyle behaviors that can reduce cardiovascular risks.
Results: Of the 5438 participants, 18.4% (n = 999) were in the younger population group between 19 to 39 years while 47.6% (n = 2587) were in the older population group who were 60 years of age and older. In contrast to the older population, the younger population tend to be less knowledgeable about the risks of smoking (89% vs 93.9%, p -value = .010), the number of calories needed to maintain their current weight (41.2% vs 59.7%, p -value < .001), and also have the tendency to ignore the caloric information on food menus (40.0% vs 52.8%, p -value <.001). However, they were more knowledgeable about exercise recommendations (65.4% vs 58.3%, *p*-value = .023).
Conclusions: Our analysis shows that although both populations are quite knowledgeable, there was a relative deficit in knowledge of the younger population. An increase in the awareness and education of this population on behaviors that can reduce the risk of cardiovascular diseases is necessary if we are to reduce the growing burden. Further studies should evaluate other aspects of knowledge about cardiovascular risks reduction.

Joint Effects of Ethnic Enclave Residence and Air Pollution Exposure on Risk of Gestational Diabetes Mellitus Among Asian/Pacific Islander Women in the United States

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Purpose: U.S. Asian/Pacific Islander (API) communities often reside in metropolitan areas with distinct socioenvironmental attributes. Residence in ethnic enclaves, socially distinct areas, is associated with lower gestational diabetes (GDM) risk, yet exposure to air pollution is associated with increased GDM risk. We examined joint effects of ethnic enclaves and air pollution to better understand GDM risk among API women, the group with the highest GDM prevalence.
Methods: We examined 9,069 API births in the Consortium on Safe Labor (2002-2008). Ethnic enclaves were defined as areas ≥66th percentile for percent API residents, dissimilarity (distribution of API and White residents), and isolation (degree that API individuals interact with API individuals). High levels of 14 volatile organic compounds (VOC) were defined as ≥75th percentile. Four categories were created for each VOC: LowVOC/Enclave (reference), LowVOC/NoEnclave, HighVOC/Enclave, HighVOC/NoEnclave. GDM was reported in medical records. Hierarchical logistic regression estimated odds ratios(OR) and 95% confidence intervals(95%CI) between joint exposures and GDM, adjusted for maternal factors and area-level poverty. Risk was estimated for 3-months preconception and first-trimester exposures.
Results: Enclave residence was associated with lower GDM risk regardless of VOC exposure. Preconception benzene exposure was associated with increased risk among those outside enclaves [HighVOC/NoEnclave (OR: 3.45, 95% CI: 1.77, 6.72)], and risk was mitigated within enclaves, [HighVOC/Enclave (OR: 2.07, 95%:1.09, 3.94)]. Risks were similar for 12/14 VOCs during preconception and 10/14 during the first trimester.
Conclusions: API residence in non-enclave areas is associated with higher GDM risk, regardless of VOC level. Enclave residence may mitigate effects of VOC exposure due to lower stress levels.

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COVID-19, Racial Discrimination, and Psychological Distress

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Purpose: We aim to assess the prevalence of racial discrimination against Chinese immigrants, examine the likelihood of experiencing discrimination across social groups, and investigate the relationship between racial discrimination and psychological distress in the context of COVID-19.
Methods: We used data from a cross-sectional non-random online survey in April 2020 in Canada, with Chinese immigrants aged 16 or older recruited through social media and internet. Respondents with complete information, including sociodemographic, discrimination, and psychological distress variables, were included in the analysis (n = 467). We reported the overall rate of self-reported discrimination and used logistic regression analysis to examine the likelihood of experience with discrimination across social groups (age, gender, language, education, income, occupation, years living in Canada). We used ordinal logistic regression analysis to explore the relationship between discrimination and psychological distress, as indexed by self-reported anxiety, depression, distress, unease, fear, indecisiveness, and confusion.
Results: Overall, 11.6% of the respondents experienced racial discrimination. Nevertheless, there were no statistically significant differences in the likelihood of experiencing discrimination across social groups. After controlling for sociodemographic variables, those who experienced discrimination were more likely to report higher level of self-perceived anxiety (OR = 2.26; 95%-CI = 1.30-3.91), depression (OR = 1.90; 95%-CI = 1.09-3.30), distress (OR = 2.89, 95%-CI = 1.63-5.15), unease (OR = 2.25; 95%-CI = 1.27-3.97), fear (OR = 2.24; 95%-CI = 1.35-4.03), indecisiveness (OR = 2.16; 95%-CI = 1.25-3.73), and confusion (OR = 2.66; 95%-CI = 1.52-4.65).
Conclusions: Our study documents the highly visible discrimination experienced by Chinese immigrants irrespective of social background, and the resulting discrimination-associated psychological distress in a time of crisis.
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Gestational Weight Gain, Diet Quality and Dairy Consumption: NHANES 2003-2012

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Purpose: Consumption of a balanced and nutrient-dense diet during pregnancy may be an important factor in favorable gestational health outcomes, including appropriate weight gain. Many pregnant women in the US have suboptimal diets and dairy foods are a concentrated source of many under-consumed nutrients. This work examined the associations between gestational weight gain (GWG) and both diet quality and total dairy consumption.
Methods: Study participants included pregnant, non-lactating women (20-44 years) in the combined NHANES 2003-2012 (n=624). GWG was defined using guidelines from the Institute of Medicine. Associations between inadequate or excessive GWG compared to healthy GWG and each woman's total dairy