linear regression, adjusting for age and race/ethnicity and accounting for multistage sampling, was used to determine the association between ACEs and cognition. The minimally important differences (MIDs) were calculated.

Results: Compared to respondents who reported no ACEs, respondents who reported neglect and three ACEs scored two points lower (β: -1.96; 95% CI: -3.87, -0.04) and three points lower (β: -3.32; 95%CI: -6.55, -0.08) in cognition, respectively. This pattern was seen among men who reported neglect (β: -2.60; 95% CI: -5.18, -0.02). MIDs were 1.75 overall and 1.68 for men.

Conclusion: The MIDs suggested clinical significance for the relationship between neglect, its syndemic effect with abuse, and cognition. Future research should assess how sex vulnerabilities may arise to develop gender- and ACE-specific programs for families.

Relationship between substance use disorders with encounters and the criminal justice system among persons diagnosed with schizophrenia or schizoaffective disorders

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Purpose: To examine the relationship between substance use disorder (SUD) and criminal justice system (CJS) encounters among individuals receiving care for schizophrenia or schizoaffective disorders at a community care facility.

Methods: A retrospective cohort study was conducted using clinical data from a community-based mental health service provider and CJS encounter data from a county jail in Ohio from January 31, 2011 to July 18, 2018. Time-to-event analyses were performed to compare the incidence of CJS encounters between individuals with and without SUD.

Results: Of the 972 individuals with a mean (standard deviation) age of 42.1 (13.4) years, 596 (61.5%) were male, 520 (53.5 %) were white, and 376 (38.7%) had a SUD diagnosis. Individuals with a SUD diagnosis were 2.64 times as likely (Hazard Ratio (HR): 2.64; 95% Confidence Interval (95% CI): 1.58 - 4.40) to have an encounter with the CJS than individuals without SUD after adjusting for gender, race, age, other comorbidities, and a history of prior arrest. Individuals who had alcohol dependency alone were 2.47 times (HR: 2.47; 95% CI: 1.69 - 3.60) and individuals with multiple substance use disorder diagnosis were 2.16 times (HR: 2.16; 95% CI: 1.57 - 2.98) as likely to have a CJS encounter than those without any SUD diagnosis.

Conclusions: The findings of SUD elevating the risk of CJS encounters among individuals with schizophrenia or schizoaffective spectrum disorders points to the need for treatment of substance use disorder among these individuals to decrease the individual and societal cost of a CJS encounter.

Examining the effects of Hurricane Sandy among World Trade Center Health Registry (WTCHR) enrollees using a mixed methods approach

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Purpose: Hurricane Sandy (Sandy) struck the east coast of the United States on October 29, 2012. Previous studies have shown an elevated risk of Sandy-related post-traumatic stress disorder (PTSD) among those with high levels of Sandy exposures and a prior history of 9/11-related PTSD. The purpose of this study is to further explore the psychological sequelae of persons who were exposed to both Sandy and the 9/11 terrorist attacks.

Methods: In 2013, WTCHR enrollees completed a survey about their experiences during and after Sandy. Sandy-specific PTSD was measured using an event-specific PTSD checklist. The free-response section of the survey was analyzed qualitatively using a thematic analysis. Multivariable logistic regression was used to examine the association between Sandy-related PTSD and feelings of optimism about the future.

Results: Among the 4,558 participants (51.4%) who completed the Sandy survey, 8.1% (n=335) had Sandy-related PTSD and 15.9% (n=690) felt 'not very/not at all optimistic' about their future. Those who reported feeling 'not very/not at all optimistic' were 6.6 times more likely to have Sandy-related PTSD compared to those who felt very/somewhat optimistic (95% CI: 5.2-8.3). Seven themes were identified in the qualitative analysis: patriotism/gratitude, helping others/self, disruption of household function, financial stress, negative emotional response, lack of information, and being unaffected.

Conclusion: The findings from this mixed method analysis indicate a need to combine financial and mental health services and to better understand factors influencing positive outcomes post-disaster.

Nutrition

Exploring multidimensional attributes of high-quality dietary patterns and their association with mortality to inform the Dietary Guidelines for Americans

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Purpose: The Dietary Guidelines for Americans (DGAs) outline different ways to consume a healthy diet. While high-quality diet characterized by the Healthy Eating Index (HEI) is associated with lower mortality, what is not known are specific characteristics of high-quality dietary patterns and whether these vary among those with a high HEI-2015.

Methods: Diet data from the 1995-1996 NIH-AARP Diet and Health Study men were categorized into HEI-2015 quintiles (q) and a random sample drawn from q1 and q5. A cluster analysis was conducted in HEI-2015-q1 (n=48,243), solutions from 3 to 12 considered, and the 4-cluster solution selected. Mortality was ascertained through 2011 and multivariate-adjusted hazard ratios (HR) from Cox proportional hazards models estimated for clusters relative to HEI-2015-q1 (n=48,242).

Results: Clusters varied by degree of alignment with guidelines. Clusters 1, 2 and 4 exceeded fruit and vegetables recommendations and exhibited lower than recommended intake of added sugars and saturated fats but Cluster 2 only exceeded total and whole fruits. Additional cluster characteristics included: Cluster 1 - higher whole grains; Cluster 2 higher dairy; Cluster 3 exceeded all protein goals; Cluster 4 exceeded fruit and vegetable goals. Significant associations were observed for clusters 1-4 with all-cause mortality (HR ranges 0.77-0.84, all p-values <0.05), cancer mortality (HR 0.74-0.82, p-values < 0.05) and clusters 1-3 with CVD mortality (HR ranges 0.74-0.90, p-values <0.05).

Conclusions: These findings highlight qualitative and quantitative differences in high-quality diet and associations with decreased mortality. Replication in other populations will be most informative for the development of future DGAs.

Evaluation of total fat and fatty acids intakes in the Korean population: using data from the 2016–2017 Korea National Health and Nutrition Examination Surveys

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Purpose: This study evaluated dietary intakes of total fat and fatty acids among the Korean population.

Methods: This cross-sectional study used the 2016–2017 Korea National Health and Nutrition Examination Survey data. A total of 13,803 subjects who were aged ≥1y and had dietary data were selected. Data on energy and nutrient intakes were obtained by a 24-h recall method. Total fat and fatty acids intakes were evaluated based on the Acceptable Macronutrient Distribution Ranges (AMDR) of 2015 Dietary Reference Intakes for Koreans by sex and age groups. All statistical analyses accounted for the complex sampling design effect and appropriate sampling weights.

Results: Mean intakes of energy and total fat were 1921 ± 11.4 kcal and 46.8 ± 0.4 g, respectively, and about 22% of energy was obtained from fat