

and 94 hospital-onset), while 44 (9%) were community-associated. 279 (55%) patients had a urinary catheter within the two days prior to the CRE culture. The analysis of patients who progress to an invasive CRE infection, including the results of the univariable and multivariable analyses assessing risk factors for progression is in progress and will be reported in the future. **DISCUSSION/SIGNIFICANCE OF IMPACT:** In metropolitan Atlanta, the annual incidence of CRE first isolated in urine was estimated to be 1.1 cases per 100,000 population between 2011 and 2017, with the majority of the cases being *K. pneumoniae*. Most patients had prior healthcare exposure and more than 50% of the patients had a urinary catheter. Our anticipated results will identify risk factors associated with progression from CRE bacteriuria to an invasive infection with a specific focus on having a urinary catheter, as this is a potentially modifiable characteristic that could be a target of future interventions.

3465

EXAMINING THE EFFECTS OF CHILDHOOD TRAUMA ON ADULT ALCOHOL CONSUMPTION: DOES RACE AND/OR SEX MATTER?

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OBJECTIVES/SPECIFIC AIMS: There has been substantial research showing that there are race and sex differences on alcohol use. Similarly, race and sex disparities are also seen in a variety of different factors that impact drinking behaviors and other health outcomes. One of these factors of interest is Adverse Childhood Experiences (ACEs) which is associated with an increased risk for excessive alcohol use and the harmful effects of drinking. Several studies have shown that racial minorities and females have a greater risk of ACEs, which may be partly related to various structural factors (i.e. poverty) and social norms. Although there has been a substantial amount of research done on ACEs, very few studies have looked at how their interaction with race and sex can influence alcohol-related behaviors. **METHODS/STUDY POPULATION:** 1,509 participants who self-identified as either Black or White were recruited through a screening protocol at the NIAAA where they completed a series of questionnaires. We categorized the participants into two groups based on the Structured Clinical Interview for DSM-IV disorders: Alcohol Dependent individuals (N=921) with either a past and/or current diagnosis and Non-dependent individuals (N=588). ACEs exposure was assessed using the Childhood Trauma Questionnaire (CTQ). We looked at both total score and the 5 subscales: emotional abuse, physical abuse, sexual abuse, physical neglect, and emotional neglect. Drinking behaviors were assessed using a 90-day Timeline Followback interview and the Alcohol Use Disorder Identification Test (AUDIT). The non-dependent sample was 63% White and 55% male while the alcohol dependent sample was 47% White and 70% male. We tested the interaction effects using ANOVA. **RESULTS/ANTICIPATED RESULTS:** In the ND sample, there were significant race*sex*ACEs effects for average drinks per day with CTQ total score (P = 0.007), physical abuse (P = 0.005), and physical neglect (P = 0.003). There was also a 3-way interaction with physical neglect on heavy drinking days (P = 0.039) and a 2-way race*ACEs interaction on AUDIT total with physical abuse (P = 0.048). In the AD sample, there were significant 2-way race*ACEs interactions for three drinking outcomes: heavy drinking days with physical neglect (P = 0.009), AUDIT-Harmful Use subscore with CTQ total

score (P = 0.028) and physical neglect (P = 0.001), AUDIT-Total score with CTQ total score (P = 0.007), physical abuse (P = 0.042), sexual abuse (P = 0.024), and physical neglect (P = 0.003). There were also 3-way interactions for AUDIT-Harmful use (P = 0.013) and AUDIT-Total scores (P = 0.011) with emotional abuse. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Our results indicate that there are both 2-way (race*ACEs) and 3-way (race*sex*ACEs) interaction effects on alcohol consumption and the related negative effects for both non-dependent and dependent samples. There were no sex*ACEs interaction effects in either sample implying that race may play a bigger role in differentiating drinking outcomes by ACEs across males and females. However, contrary to our expectations, race seemed to be protective factor for Black participants against both alcohol consumption and the negative effects despite having higher rates of ACEs exposure. Future analyses will explore personality measures as potential mediators of the relationship between ACEs and alcohol use. Also, analyses will look to see if there are any behavioral factors that may contribute to resiliency among minority populations.

3361

Feasibility, Acceptability, and Appropriateness of an Insertable Vaginal Cup to Manage Urinary Incontinence Among Women with Obstetric Fistula in Ghana: A Mixed Methods Study

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OBJECTIVES/SPECIFIC AIMS: 1. To assess feasibility (efficacy, safety, acceptability) of the menstrual cup for managing urinary incontinence among women with obstetric fistula 2. To examine pre-implementation facilitators and barriers (including appropriateness) among additional stakeholders **METHODS/STUDY POPULATION:** Sequential explanatory mixed methods study whereby repeated measures clinical trial results are explained by subsequent interviews with additional women with OF on coping and stigma and other stakeholders on perceptions of fistula self-management. **RESULTS/ANTICIPATED RESULTS:** Of the 32 patients screened, 11 were eligible (100% consent rate). At baseline, mean (\pm SD) leakage in ml was 63.2 (\pm 49.2) (95% CI: 30.2-96.3) over two hours, while the mean leakage over two hours of use of the cup was 16.8 (\pm 16.5) (95% CI: 5.7-27.9). The mean difference of 46.4 (\pm 52.1) ml with use of the cup (95% CI: 11.4-81.4) was statistically significant (p = 0.02). With the cup, women experienced an average 61.0% (\pm 37.4) (95% CI: 35.9-86.2) leakage reduction, a difference 10/11 users (91.0%) perceived in reduced leakage. One participant, reporting four previous surgical attempts, experienced a 78.7% leakage reduction. Acceptability was high—women could easily insert (8/11), remove (8/11), and comfortably wear (11/11) the cup and most (10/11) would recommend it. No adverse effects attributable to the intervention were observed on exam, although some women perceived difficulties with insertion and removal. Data collection tools were appropriate with slight modification advised. Interviews highlighted that women were already using various active coping and resistance strategies but lacked access to tools to support coping. Additional stakeholders reported the innovation was a simple, low-cost device that is an appropriate fit with ongoing fistula programming. Pre-implementation facilitators include the clear relative advantage to existing self-management strategies, the potential to build upon existing partnerships to implement, and a tension for change to