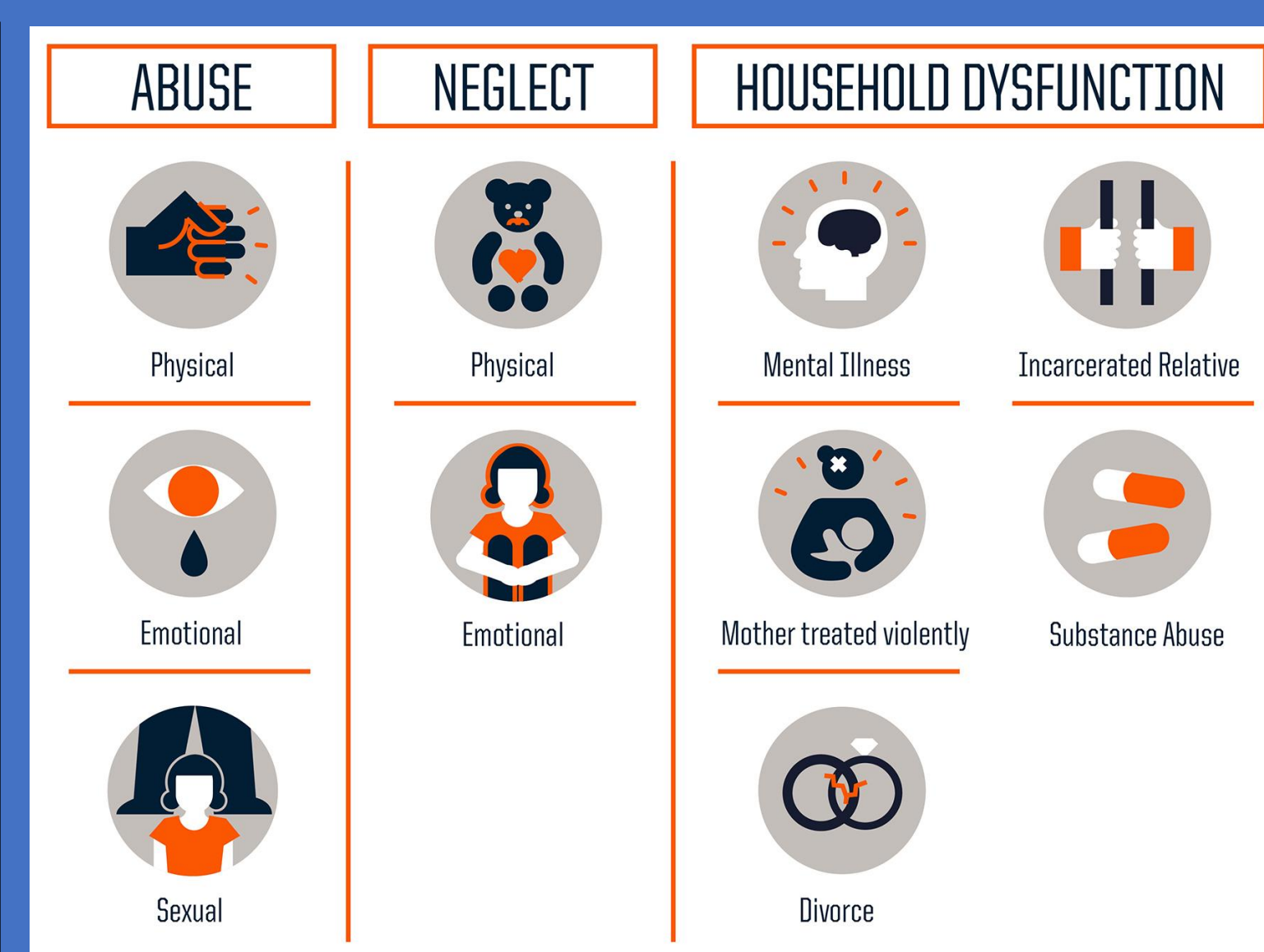
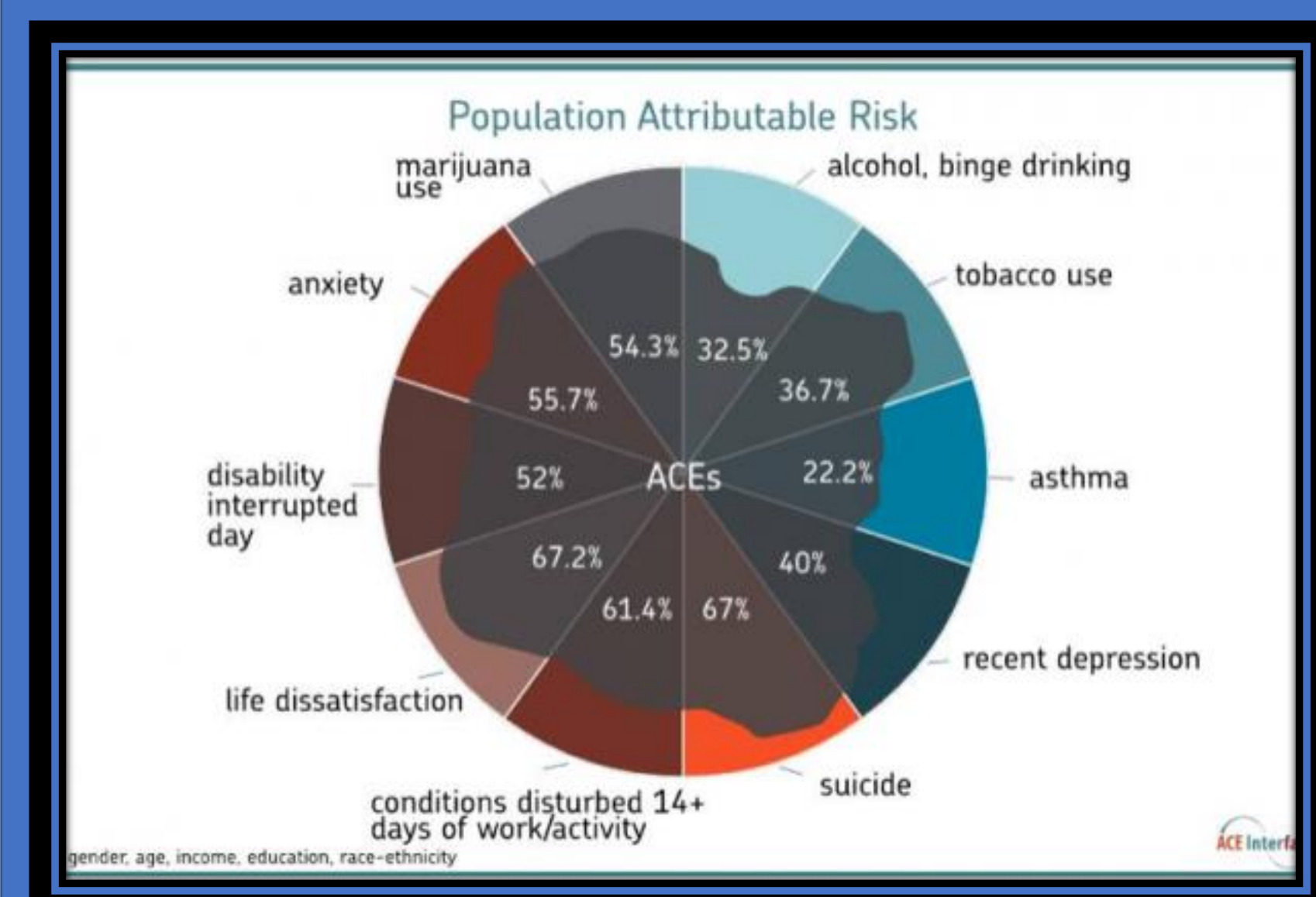


Background

- Many studies have found that adult health risk behaviors (e.g., smoking and excessive alcohol use) and poor adult health outcomes (e.g., obesity, heart disease, premature death) are related to adverse childhood experiences (ACEs), including psychological/emotional abuse and physical/psychological neglect of a child's basic needs. ACEs are strongly related to adverse behavioral, health and social outcomes in society.



- Perceived discrimination and community violence produce significantly heightened stress responses, is related to unhealthy behaviors, and can have adverse effects on individual long-term health and their children's health.
- Clinical evidence suggests that individuals might report ACEs, including discrimination, differently depending on paper versus oral questionnaire administration.

Research Questions & Participants

We aimed to answer the following:

- Do caregivers' responses in written and oral versions of an ACE questionnaire differ?
- Do caregivers report additional details during the oral interview beyond the descriptions on a written ACE questionnaire, particularly those related to discrimination and community violence?

Thirty parents and caregivers of children (mean age = 8.7 years) recruited from two pediatric clinics in the greater Baltimore area (one urban; one suburban) completed the Center for Youth Wellness Adverse Childhood Experiences questionnaire (Purewal et al, 2016) and participated in an interview at the start of their child's medical visit.

Methods

- To investigate our research questions, we invited parents of pediatric patients to complete a written ACE questionnaire and participate in an interview of the same questions, with follow-up questions regarding discrimination and community violence.
- The research team extracted demographic data and medical history from medical records.
- Using SPSS, we used quantitative methods (descriptive statistics and *t*-tests) to analyze differences between written and oral responses.
- Using NVIVO, we then used qualitative methods (adapted grounded theory) to gain a deeper understanding of themes within responses.

Quantitative Results

Part 1 of our questionnaire is the Center for Youth Wellness ACE questionnaire (Bucci et al, 2015), which includes questions on mental health, incarceration, drug abuse, and exposure to death. Part 2 of our questionnaire is comprised of additional questions on discrimination based on previous studies (Patcher et al, 2017; LaFont, 2010; Kumar et al, 2017), in the hope of identifying further differences between written and oral response.

- t*-test comparing ACEs Part 1 (oral vs. written)
 - Result: There was no statistically significant difference ($p = .078$)
- t*-test comparing ACEs Part 2 (oral vs. written)
 - Result: There was a **statistically significant** difference ($p < .05$)
- t*-test comparing ACEs Total Score (oral vs. written)
 - Result: There was a **statistically significant** difference ($p < .05$)

Qualitative Results

We uploaded verified transcripts into NVivo 11. We reviewed the interviews three times for emerging themes and updated the codebook accordingly. We then inspected codes to seek relationships and categorize codes into subcategories. We analyzed field notes in order to enhance our ability to develop themes as well as concluded each interview with a summary of key points for possible further elaboration by participants.

We identified three themes:

- Disconnect**
- Awareness**
- Loneliness**

Discussion

Our study showed a statistical significance in the increase of the number of positive ACE responses with an oral component added to the questionnaire. This suggests that giving parents and patients options for reporting ACEs can be beneficial, particularly for questions that relate to external stressors such as discrimination.

Loneliness. Although loneliness can be a fleeting emotion, there is evidence that it can lead to individuals having decreased social competence and higher degrees of passive behavior. Loneliness is found associated with ACEs and can mediate pathways to depressive symptoms (Gerbig et al, 2023). Thus, ensuring that providers are asking questions related to loneliness is critical.

Sometimes I feel like people don't care...

-Pediatric Patient

Awareness. A large barrier between extensive discussions on ACEs can be families' comfort levels in discussing past experiences, especially painful ones. Health professionals need better knowledge and awareness of ACEs in order to carry out better assessment for mitigating risks among children and their families (Turner, 2021)

I'm a [city] school teacher, so I appreciate the questions that are being asked.

-Parent of Pediatric Patient

Disconnect. We identified a disconnect between parents and their children on how they identified and reported ACEs. Studies have shown that personal and neighborhood social disconnectedness can mediate the development of mental health illness among victims of adverse childhood experiences (Marsh et al, 2022).

[My child has] a reason [the child is] doing something and I'm disagreeing with [the child], but I'm not understanding why [the child is] doing what [the child is] doing.

-Parent of Pediatric Patient

References

- Gerbig, Paula, et al. "Loneliness is associated with retrospective self-reports of adverse childhood experiences—A replication study in Ethiopia." (2023).
 LaFont, S R et al. "The Development and Initial Validation of the Child Perceived Discrimination Questionnaire." International journal of culture and mental health vol. 11,2 (2018): 208-219. doi:10.1080/17542863.2017.1356337
 Marsh, Jonathan J., et al. "Violence exposure, psychotic experiences, and social disconnection in an urban community sample." Psychosis 14.1 (2022): 57-69.
 Patcher, Lee M., et al. "Perceived racism and discrimination in children and youths: An exploratory study." Health & social work 35.1 (2010): 61-69.
 Population Attributable Risk [Online Image]. 2019. ACE Interface. <https://www.ndcollaborative.com/working-at-the-roots/>
 Purewal, Sukhdip K., et al. "Assessing the integration of the Center for Youth Wellness Adverse Childhood Experiences Questionnaire (CYW ACE-Q) in a pediatric primary care setting." Journal of Adolescent Health 58.2 (2016): S47.
 Tiwari, Shraddhesh Kumar, Ashok Kumar Patel, and Dhananjay Kumar. "Development of perceived discrimination questionnaire: A measure for different social categories students." Journal of Psychosocial Research 12.1 (2017): 81.
 Three Types of ACEs [Online Image]. 2015. Centers for Disease Control and Prevention. <https://www.npr.org/sections/health-shots/2015/03/02/387007941/take-the-ace-quiz-and-learn-what-it-does-and-doesnt-mean>
 Turner, Daniel, et al. "The association between adverse childhood experiences and mental health problems in young offenders." European child & adolescent psychiatry 30 (2021): 1195-1207.