

Risk Reduction Strategies for Alcohol Use Disorder in Charter Oak Health Center

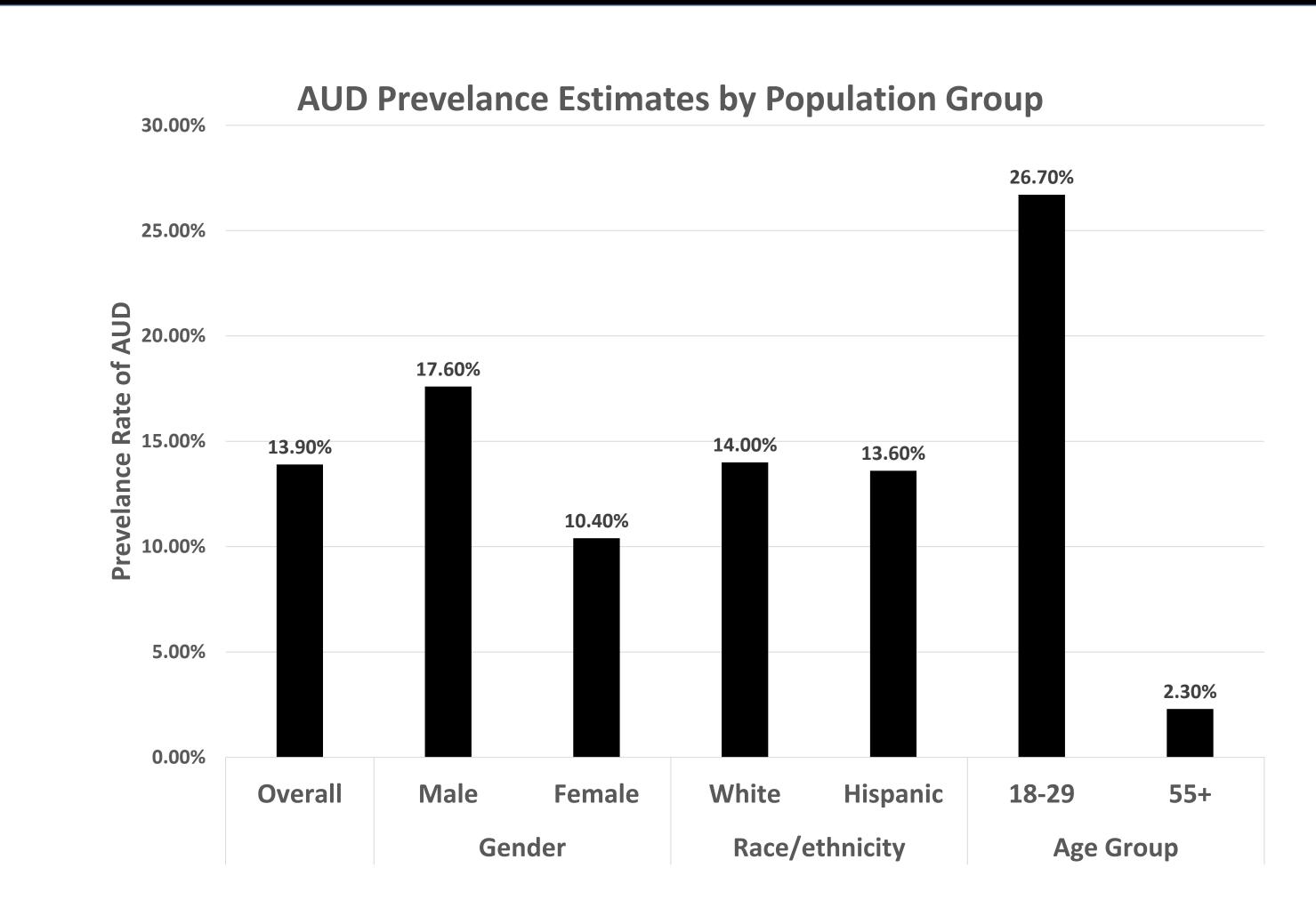
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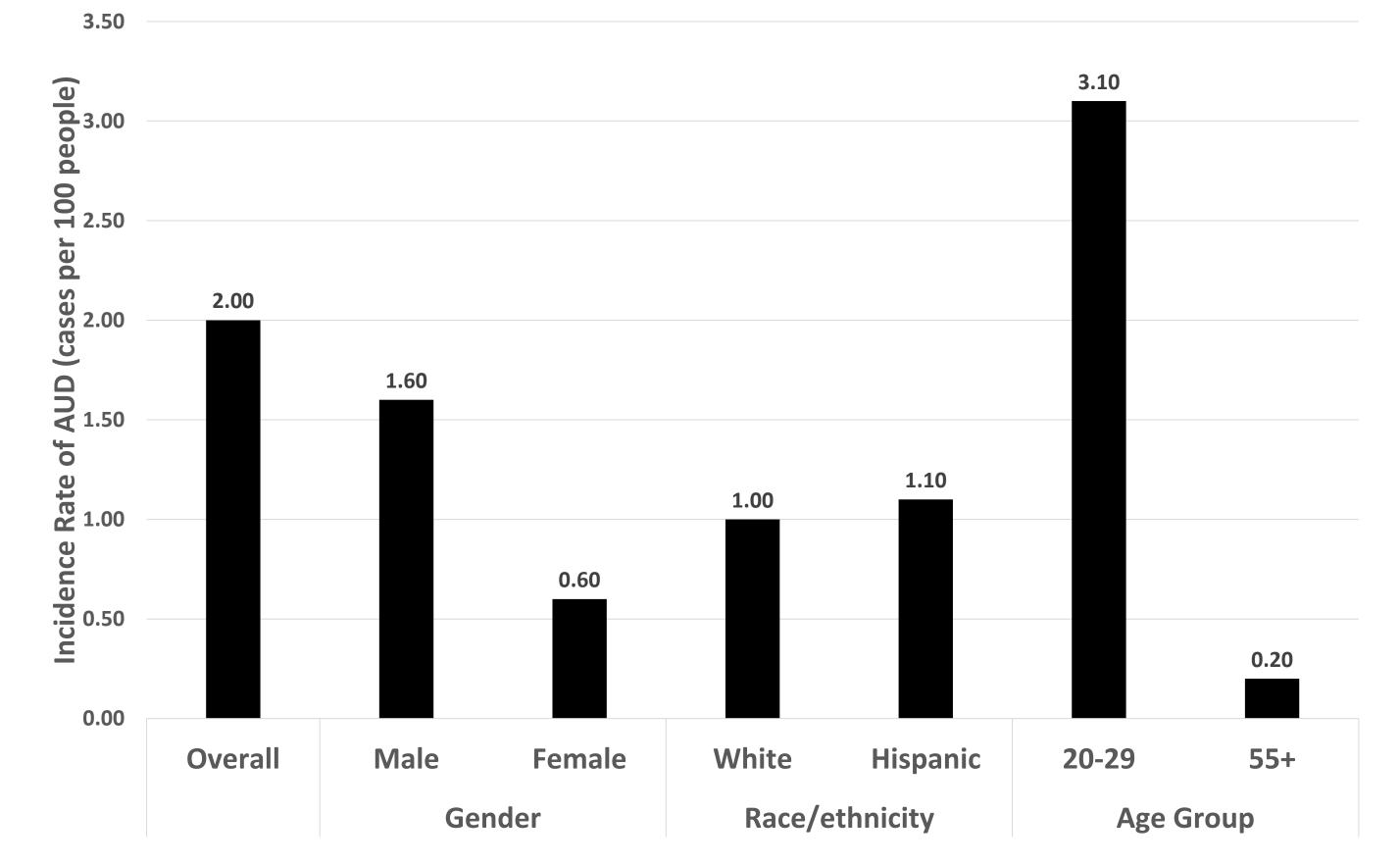
BACKGROUND

- Alcohol use disorder (AUD) has widespread impact, with a prevalence rate of 13.9%.
- National prevalence rates are growing primarily due to a narrowing gender gap between males and females with AUD.
- AUD is associated with several physical and mental health issues:
 - Hypertension, asthma, hyperlipidemia, hepatitis, cardiomyopathy, various cancers
 - Major depression, bipolar personality disorder, anxiety disorders, antisocial personality disorders
- AUD is associated with increased risk of injury, through motor vehicle collisions, falls, and interpersonal violence.
- 88,000 deaths per year in the United States are attributed to AUD.
- In 2017, Connecticut had the highest national rate of alcohol-impaired driving fatalities compared to total driving fatalities (43%).
- Alcohol demonstrates adverse reactions with other substances. In 2019, alcohol was a contributing cause of death in 29% of all fatal overdoses in CT.
- There are numerous social, cultural, and epidemiological factors that influence the efficacy of interventions in populations with AUD.¹

BURDEN SUMMARY







EVIDENCE BASED INTERVENTIONS

- Most effective interventions target factors at the individual, family, and community levels. Many interventions also target a younger population due to the evidence that substance use earlier in life is associated with higher rates of abuse and other negative health, social, and behavioral outcomes later in life.
- The Registry of Evidence-Based Programs and Practices (NREPP) has rated substance abuse prevention programs based on many criteria including training resources, quality assurance procedures, and readiness to disseminate.²
- School based intervention:
 - One school-based program that has been studied thoroughly to examine its effectiveness is Life Skills Training (LST), which received a perfect (4/4) readiness score by the NREPP.
 - LST has been found to be effective in the short and long term. A randomized controlled trial found that LST students had lower rates of tobacco, alcohol, and binge drinking one year after the program, while a separate cohort study found that students who received LST had a significant decrease in cigarette, alcohol, and marijuana use six years after the program compared to a control group.
- Family based intervention:
 - The Family Matters program educates parents and teaches skills to keep children away from drugs through
 - Instructional booklets provided to parents to implement at home with 4 technical assistance follow up calls with health educators.
 - Designed to set rules and strengthen communication within the family.
 - Reduced substance use at 3 and 12 months with strong NREPP score (3.3) out of 4).

RECOMMENDED ACTION

- Our team recommends the Life Skills Training program, a school-based intervention that trains teachers/counselors to teach substance use prevention.
- Easy to implement with flexible training (online or on-site).
- The benefits of Life Skills Training include:
 - Universal design benefits all students, not only high-risk groups.
 - Programs available for all levels (K-12).
 - Students learn from their own teachers who they already have relationships with. These teachers can lead the program year after year
 - The program is engaging, with facilitated discussion, structured small group activities, and role-playing scenarios.

IMPLEMENTATION

- The program can be implemented in schools through integration of psychosocial learning strategies (management, social, and resistance skills) into curricula.3
- Barriers:
 - There are many resources (personnel, funding, and time) required.
 - Solution: A program via mobile/online platforms can efficiently reach a large proportion of the targeted population at low cost.
 - Children in schools may not be willing to participate in this program.
 - Solution: An interactive user-friendly mobile/online platform and engaging small groups will achieve active participation.
- Opportunities:
 - Early coping strategies can target K-12 schoolchildren before peak incidence of AUD (age 20-29) in this population.
 - Mobile delivery combined with teacher facilitation can accommodate individual learning styles and hybrid schedules.

ENGAGING KEY STAKEHOLDERS Make program fun, interactive, and engaging Reward students for program engagemen Emphasize role of LST Provide education about the harms of substance in academic success Students Highlight educational burden of substance use Allow opt-out from part or all of the program School Parents Administration School Offer role in LST Offer paid training Teachers Counselors Provide LST lesson program development Offer continuing plans and materials in advance to minimize education credits burden of extra work

OPPORTUNITY FOR LARGER IMPACT

- Beyond the Charter Oak Health Center community schools, the Life Skills Training program can be regularly used in any K-12 schools to provide psychosocial skills and prevent development of AUD.
- Schools who implement the program can train staff from other districts.
- Ultimately, requirements for teachers/staff in K-12 schools may evolve to include this training before hiring, as a part of standard training in the field.
- Web-based and text messaging components of the program have been proven to be effective and can continue to be tailored based on feedback, with easy accessibility given the electronic format.
- School funding should continue to consider access to tablets, computers, and phones for students so they may take part in the electronic aspect.

Overview of Life Skills Training program **Preparation**

- Identify areas of the existing curriculum where psychosocial learning strategies can be added.
- Train teachers/staff at the school how to effectively implement the program in their classrooms.
- Establish an accessible mobile/online-based component with automated, user-friendly features to regularly enhance the in-person aspects of the program.

In-person delivery

- Facilitated discussions led by trained teachers/staff.
- Structured small group activities.
- Role-playing scenarios.

Mobile delivery

- Personalized, automated text messages sent weekly, based on a baseline assessment.
- Interactive activities, such as picture/message contests based on prompts.
- Incorporation of audio and video media.

REFERENCES

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3. Haug S, Paz Castro R, Meyer C, Filler A, Kowatsch T, Schaub MP. A Mobile Phone-Based Life Skills Training Program for Substance Use Prevention Among Adolescents: Pre-Post Study on the Acceptance and Potential Effectiveness of the Program, Ready4life. JMIR Mhealth Uhealth. 2017 Oct 4;5(10):e143.