

Screening for Suicide Risk in Youth with Autism Spectrum Disorder and other Neurodevelopmental Disorders

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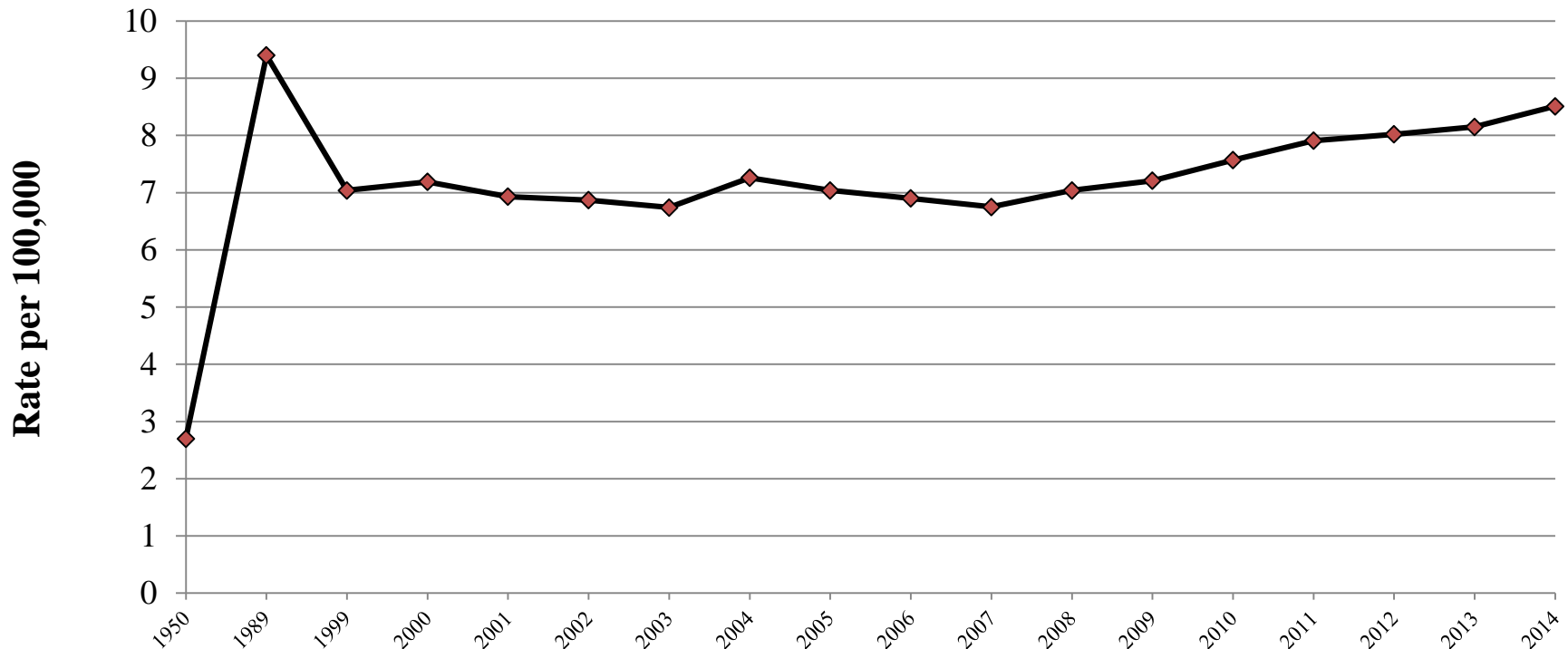
Overall Objectives

- ❖ Brief epidemiology of youth suicide
- ❖ Unique challenges in screening the ASD population
 - ❖ And related populations, like ID
- ❖ Suicide risk screening tool instrument development overview
- ❖ Clinicians require **population**-specific and **site**-specific **validated** screening instruments

Youth Suicide in the U.S.

- **2nd leading cause of death** for youth aged 10-24y
- 5,904 suicide deaths in 2015

Suicide Deaths among U.S. Youth Ages 10-24y



Suicidal Behavior and Ideation

Suicidal Behavior

- **~2 million adolescents** attempt suicide annually
 - 9% of high school students attempted suicide one or more times in the past year

Suicidal Thoughts

- 18% of high school students reported “seriously considered attempting suicide” in the last year

Younger Children and Suicidality

- Children under 12 yrs plan, attempt and die by suicide
 - 2nd leading cause of death for 10-14 year olds
 - 10th leading cause of death for children ages 5-11 years

Suicide in ASD populations

Medical & Psychiatric Conditions Among Adults with ASD



Image courtesy Lisa Croen, Kaiser Permanente Division of Research

High Risk Factors

- **Previous attempt**
- **Medical illness**
- Mental illness
- Symptoms of depression, anxiety, agitation, impulsivity
- Exposure to suicide of a relative, friend or peer
- Physical/sexual abuse history
- Drug or alcohol abuse
- Lack of mental health treatment
- Suicide ideation
- Over age 60 and male
- Between the ages of 15 and 24
- **Isolation**
- Hopelessness



High Risk Factors for ASD population

- Higher IQ
 - IQ scores higher in suicidal youth than non-suicidal youth
 - Young people with ASD without comorbid ID at higher risk
 - Findings inconclusive
- Comorbid Axis I disorders
 - Psychiatric disorders correlated with elevated suicidal ideation and behavior.
 - 67% of adolescents with ID and/or ASD who expressed suicidal ideation met criteria for mood disorder
- Recent psychosocial stressors for those with suicidal ideation
 - 37% experienced loss in family
 - Less family and social support
 - Greater rejection, stress, and isolation
 - Difficulties with perspective taking

Can we save lives by screening for suicide risk?

Experience from the medical setting



Underdetection

- Majority of those who die by suicide have contact with a medical professional within 3 months of killing themselves
 - 80% of adolescents contact within 3 months
 - Frequently present with somatic complaints

- **ASD population:** suicidal behavior may be overlooked due to diagnostic overshadowing and communication difficulties

What are **valid** questions that nurses/physicians can use to screen pediatric patients for suicide risk?



Screening vs. Assessment: What's the difference?

- **Suicide Screening**

- Identify individuals at risk for suicide
- Oral, paper/pencil, computer

- **Suicide Assessment**

- Comprehensive evaluation
- Confirms risk
- Estimates imminent risk of danger to patient
- Guides next steps



Ask Suicide-Screening Questions (ASQ)

- 3 pediatric EDs
 - Children's National Medical Center, Washington, DC
 - Children's Hospital Boston, Boston, MA
 - Nationwide Children's Hospital, Columbus, OH
- September 2008 to January 2011
- 524 pediatric ED patients
 - 344 medical/surgical, 180 psychiatric
 - 57% female, 50% white, 53% privately insured
 - 10 to 21 years (mean=15.2 years; SD = 2.6y)



ASQ Study (con't)

- Administered 17 candidate items:
 - “Have you ever felt hopeless, like things would never get better?”
 - “Do you feel like you might as well give up because you can't make things better for yourself?”
- Administered gold standard: Suicidal Ideation Questionnaire (SIQ; Reynolds, 1987)
- Examined the least number of items with sound psychometrics
- Positive responses received psychiatric consultation



Suicide Risk Screening Tool

Ask Suicide

Ask the p

1. In the p

2. In the p

would b

3. In the p

about ki

4. Have yo

If yes, h

When?

If the patie

5. Are you

Next

• If p

No

• If p

pot

Provid

• 24/7 Na

• 24/7 Cr

Ask the patient:

1. In the past few weeks, have you wished you were dead? Yes No

2. In the past few weeks, have you felt that you or your family would be better off if you were dead? Yes No

3. In the past week, have you been having thoughts about killing yourself? Yes No

4. Have you ever tried to kill yourself? Yes No

If yes, how? _____

When? _____

If the patient answers **Yes** to any of the above, ask the following acuity question:

5. Are you having thoughts of killing yourself right now? Yes No

9.4)

0.5)

Results

- 98/524 (18.7%) screened positive for suicide risk
 - 14/344 (4%) medical/surgical chief complaints
 - 84/180 (47%) psychiatric chief complaints
- Feasible
 - 20 seconds
 - Non-disruptive to workflow
- Acceptable
 - Parents/guardians gave permission for screening
 - Over 95% of patients were in favor of screening
- ASQ is now available in the public domain
 - Translated into 8 languages

“What about screening kids with ASD?”

-Dr. Rachel Greenbaum



Literature Search Conclusion

- Patients presenting with suicidal thoughts present a high anxiety situation for clinicians
 - ASD patients present different challenges for clinicians
- Youth with ID and ASD have been excluded from research studies
- **There are currently no standardized tools developed to screen for suicide risk in youth with ASD**

Suicide Risk in People with ID

Review Article

Suicide Risk in Youth with Intellectual Disabilities: The Challenges of Screening

Erica Ludi, BS,* Elizabeth D. Ballard, MA,† Rachel Greenbaum, PhD,‡ Maryland Pao, MD,* Jeffrey Bridge, PhD,§ William Reynolds, PhD,|| Lisa Horowitz, PhD, MPH*

ABSTRACT: Children and adolescents with intellectual disabilities (IDs), often diagnosed with comorbid psychiatric disorders, are a vulnerable population who may be at risk for developing suicidal thoughts and behaviors. Previous research has demonstrated that direct suicide screening can rapidly and effectively detect suicide risk and facilitate further clinical evaluation and management. Currently, there are no measures that screen for suicide risk designed specifically for individuals with ID. A review of the literature was conducted to (1) estimate the prevalence of suicidal thoughts, behaviors, and deaths by suicide in children and adolescents with ID; (2) describe associations between youth with ID and suicide risk; and (3) identify the limitations of commonly used suicide screening measures developed for non-ID youth. The literature review confirms that suicide risk exists in this population; youth with ID think about, attempt, and die by suicide. Standardized suicide risk screening is challenged by the lack of measures developed for this population. A summary of the findings is followed by a discussion of the practical clinical considerations surrounding the assessment of suicide risk in youth with ID.

(*J Dev Behav Pediatr* 33:431–440, 2012) **Index terms:** youth suicide, intellectual disability, developmental delay, suicide screening, assessment.

Estimating Thoughts of Suicide in Youth with ASD

J Autism Dev Disord
DOI 10.1007/s10803-017-3180-7



S.I. : AUTISM INPATIENT COLLECTION - STUDYING THE SEVERELY AFFECTED

Talking About Death or Suicide: Prevalence and Clinical Correlates in Youth with Autism Spectrum Disorder in the Psychiatric Inpatient Setting

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Abstract Little is known about suicidal ideation in youth with autism spectrum disorder (ASD), making it difficult to identify those at heightened risk. This study describes the prevalence of thoughts about death and suicide in 107 verbal youth with ASD with non-verbal IQ >55, assessed during inpatient psychiatric admission. Per parent report, 22% of youth with ASD had several day periods when they talked about death or suicide “often,” or “very often.” Clinical correlates included the presence of a comorbid mood (OR 2.71, 95% CI 1.12–6.55) or anxiety disorder (OR 2.32, 95% CI 1.10–4.93). The results suggest a need for developmentally appropriate suicide risk screening measures in ASD. Reliable detection of suicidal thoughts in this high-risk population will inform suicide prevention strategies.

Keywords Autism spectrum disorder · Suicide · Inpatient · Suicidal ideation · Psychiatric patients · Screening · Autism Inpatient Collection (AIC)

Introduction

Suicide is an international public health crisis and the second leading cause of death for youth aged 10–24 years (Centers for Disease Control and Prevention 2015; World Health Organization 2014). While individuals with a variety of psychiatric diagnoses are at heightened risk for suicide, recent studies suggest that youth with autism spectrum disorder (ASD) are at elevated risk (Bennett 2016;

Summary of Findings

- Frequency with which their child has had periods lasting several days where he or she “talks about death or suicide” (Child & Adolescent Symptom Inventory, item #86)
- N=107, 10 yrs +, mean of 13, NVIQ ≥ 55 , ADOS-2 + ASD
- Per parent report, 23% of youth talked about death or suicide “often” or “very often”
- Comorbid diagnoses:
 - **Mood disorder** – nearly 3 times more likely (Odds ratio: 2.71, CI: 1.12-6.55)
 - **Anxiety disorder** – over 2 times more likely (Odds ratio: 2.30, CI: 1.08-4.91)
 - **ADHD** – less likely (Odds ratio: 0.45, CCI: 0.21-0.96)

Answering a Need

- **Previously validated scales may not be applicable**
- **We do not know how the ASQ functions in people with ASD**
- **We need to validate the instrument in the ASD population**

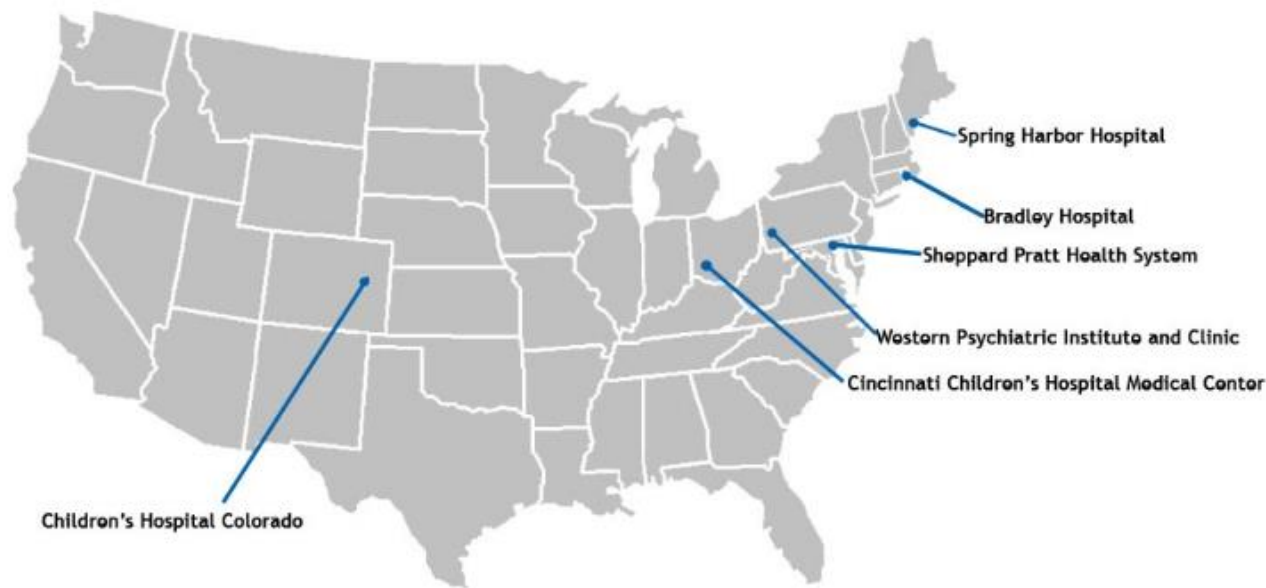
ASQ-ASD Multisite Instrument Development Study

Aim

- To test and adapt the ASQ for youth and adults with ASD

Instrument Development Study

- Collaboration with the Autism Developmental Disorders Inpatient Research Collaborative (ADDIRC)



- Sample: clients enrolled in the ADDIRC
 - Ages 12+
 - Diagnosed with ASD
 - Inpatient psychiatric treatment

Pilot Data

- Surrey Place Centre (Toronto, Ontario)



Summary

- Universal suicide risk screening for all youth in medical settings
- Clinicians require **population**-specific and **site**-specific **validated** screening instruments
- Youth with ASD at risk for suicide may go undetected, as there are no tools specifically created for ASD population
- We are currently testing the ASQ for implementation in the ASD population
- Screening studies can lead to evidence-based guidelines for screening and managing youth with ASD at risk for suicide

Thank you

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