Psychiatric Aspects of Youth Violence

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Youth Violence

Mass media tends to focus on dramatic, very rare events of youth violence such as mass murder school shootings

In fact, most adolescent homicides are committed in inner cities and outside of school. They most frequently involve an interpersonal dispute and a single victim.

On average seven youths are murdered in this country each day. Most of these are inner-city minority youths.

From the National Youth Violence Resource Center:

Youth as Victims of Violence

1 in 5 victims of serious violent crime are between the ages of 12 and 17.

Youth aged 12-17
are three times as likely as adults to be victims of simple assault and twice as likely to be victims of serious violent crimes

About 1 in 20 high- school seniors say they have been injured with a weapon in the past year,

and almost 1 in 7 say someone has injured them on purpose without a weapon.

More than 1 in 3 high-school students say they have been in a physical fight in the past year, and about 1 in 9 of those students required medical attention for their injuries.

More than 1 in 6 sixth to tenth graders say they are bullied sometimes, and more than 1 in 12 say they are bullied once a week or more.

Youth Perpetrators of Violence

About 1 in 9 murders are committed by youth under 18. On average, about 5 youths are arrested for murder in this country each day

Youth under 18 account for about 1 in 6 violent crime arrests

For every teen arrested, at least 10 were engaged in violence that could have seriously injured or killed another person.

A review of surveys found that between 30-40% of male teens and 16-32% of female teens say they have committed a serious violent offense by the age of 17.

Almost 1 in 20 high-school students say they have carried a gun in the past month.

Almost 1 in 4 teens report having easy access to guns at home.

School Violence

Almost 1 in 14 students (and more than 1 in 10 male students) said they had carried a weapon to school in the past month

More than 1 in 13 students said they had been threatened or injured with a weapon such as a gun, knife, or club on school property in the past year

However, less than 1% of all violent deaths of school-aged children and teens occur in or around school grounds or on the way to and from school

Youth ages 12-18 were twice as likely to become victims of serious violent crimes when they were away from school

Between 20 and 45% of boys who commit serious violent crimes by the age of 16 or 17 were violent as children

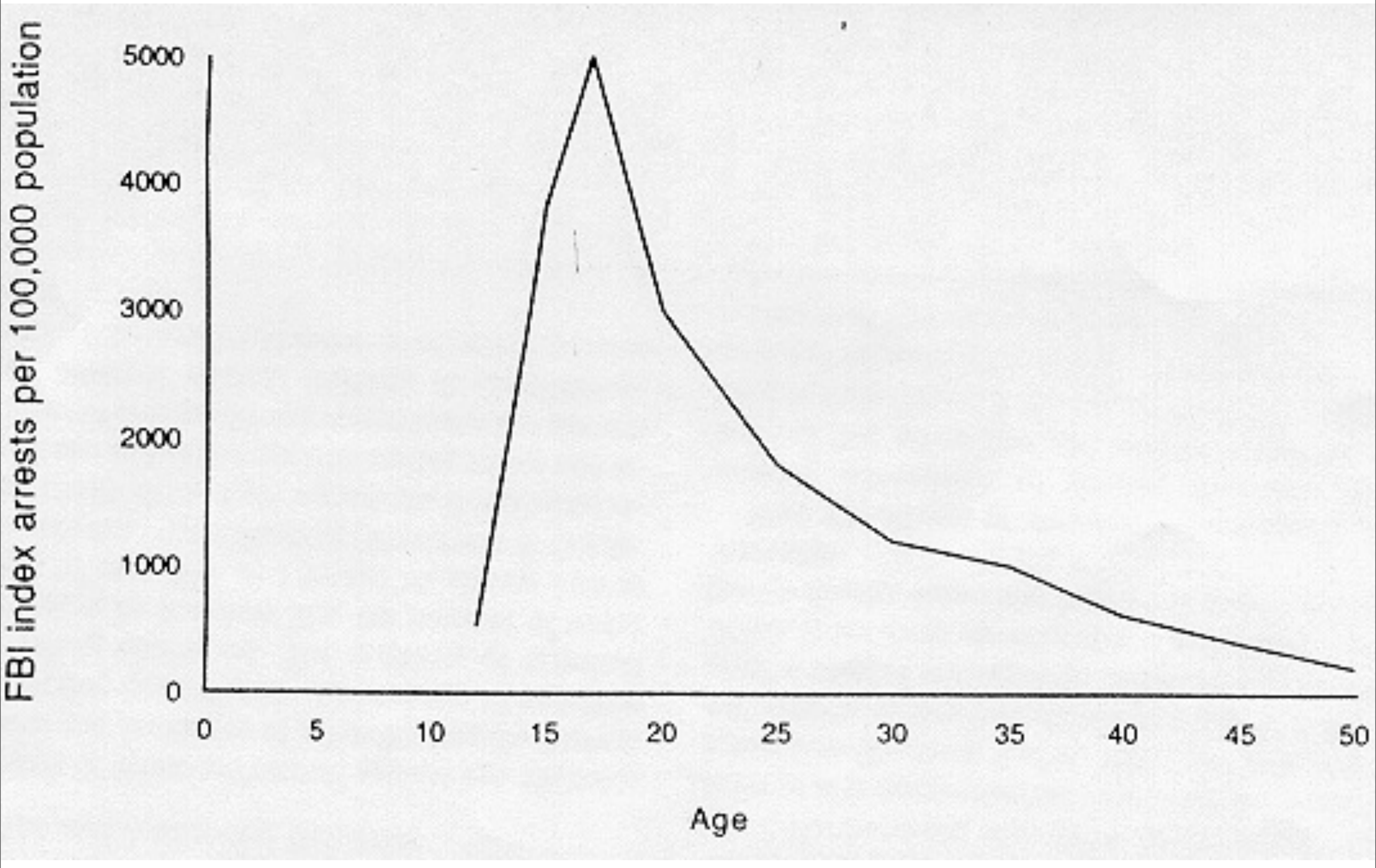
45 to 69% of violent girls were violent in childhood

Teens who were engaged in serious violence before the age of 13 generally commit more crimes, and more serious crimes, than those teens who start later

They are
also more likely to
continue to engage
in violence into adulthood

The earlier the age of onset of antisocial behaviors, the more severe they tend to be and the more likely that they will persist into adulthood

Only about 20% of all seriously violent teens continue to commit violent acts as adults


FBI index arrests per 100,000 population
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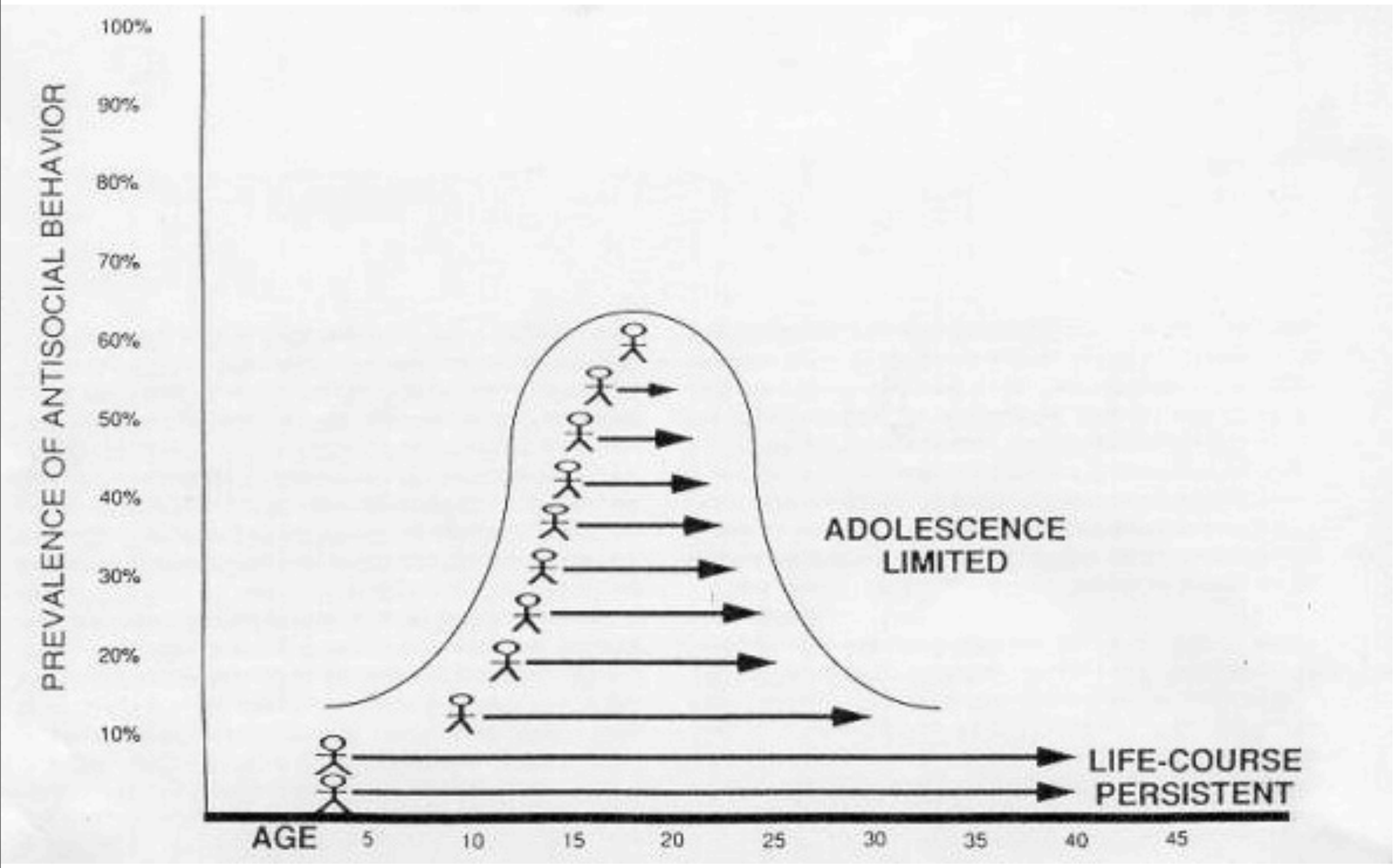
PREVALENCE OF ANTISOCIAL BEHAVIOR
100%
90%
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ADOLESCENCE LIMITED
LIFE-COURSE PERSISTENT
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Risk Factors for Youth Under Age 13

Early involvement in serious criminal behavior, early substance use, being male, a history of physical aggression toward others, low parent education levels or poverty, and parent involvement in illegal activities

Risk Factors for Youth Over Age 13:

Friendships with antisocial or delinquent peers, membership in a gang, and involvement in other criminal activity

So, multiple factors contribute to and shape antisocial behavior over the course of development

Many of these are within the social environment. Peers, family, school, community and neighborhood contexts shape, enable and maintain antisocial behavior, aggression and related behavior problems.

Risk Factors for Violence in Parents

-Previous violence
-Young age at first violence
-Relationship instability
-Employment problems
-Substance use problems

-Psychopathy
-Early maladjustment
-Personality disorder
-Prior supervision failure at work

-Lack of insight
-Negative attitudes
-Active symptoms of major mental illness
-Impulsivity
-Unresponsive to treatment

So, risk factors in the home environment:

-Weak bonding

-Ineffective parenting (poor monitoring, inconsistent discipline, inadequate supervision)

-Exposure to violence in the home

-An environment that supports aggression and violence

Risk factors in the child or adolescent:

-Early conduct problems

-Attention-Deficit Hyperactivity Disorder and associated impulsivity and poor judgment

-Depression

-Anxiety disorders

-Lower cognitive and verbal abilities

External risk factors:

-Peer rejection

-Competition for status and attention

-Association with antisocial peers who are experiencing academic failure

-Peers who engage in violent activities

Life course persistent behaviors are correlated with neurological deficits, language deficits, cognitive deficits and are exacerbated by stressful home situations

Youth with conduct problems plus a mental health disorder such as ADHD, Depression or Anxiety Disorders are more likely to engage in aggression than youth who only have conduct problems.

Research indicates that placing violent youth together in programs (e.g., Setting IV sites for Emotionally Disturbed delinquent students) increases the risk of violent behavior

Although students with the characteristics outlined above tend to be at a higher risk of violence, there are also those who are not conduct disordered, but who suffer from mental health problems.

Some of these students have been victims of significant bullying. Their fragile mental health status and severe mental health symptoms may “push them over the edge” into committing violent acts

Highly adaptive parenting, good verbal ability and success in school are protective factors against antisocial behavior

Predicting Violence

“Prediction is very difficult-
especially about the future.”

Niels Bohr

Danish Physicist
Nobel Laureate

The best predictor of future violence is past violence

The vast majority of people who are violent do not have psychiatric disorders.

The vast majority of people who have psychiatric disorders are not violent.

Issues that raise the risk of violence in an individual who has a mental health disorder:

-Substance use disorder

-A history of violence, juvenile detention or physical abuse

-Recent stressors such as being a crime victim, getting a divorce or losing one's job

In general, mental health disorders do not raise the risk of aggression. Exceptions include individuals who have paranoid delusions and those who have agitated Bipolar Mood Disorder. Highly impulsive conduct disordered youth who have ADHD are at increased risk, as are youth who are abusing chemicals such as alcohol and PCP.

Predicting Violence
False Positives and False Negatives

If, at any one time, in a large metropolitan area, there was one person in a million who was planning a mass murder, and you had a predictive test that was 99% accurate...

You would have to detain 10,000 individuals in order to identify the one who is planning the violence.

Screening tests are not nearly that accurate.

Clinical judgment has been shown to be worse than flipping a coin for predicting dangerousness beyond imminent danger.

Research-based screening tools have better predictive value, but are not infallible.

Is a youth's violent behavior caused by "clinical" or by "behavioral" factors?

The issue is not "either/or"

The Clinical Behavioral Spectrum

Jan Ostrom and
Will Dikel

Functional Behavioral Analysis

Seeking attention
Gaining tangibles
Avoidance
Intrinsic Factors

What are “intrinsic factors”?

How do they relate to psychiatric disorders?

One end of the spectrum is “Clinical” factors

The other end of the spectrum is “behavioral”

Visualize a scale,
With “purely behavioral” on one end
and “purely clinical” on the other end

Behavioral-------- Clinical

“Clinical” e.g. severe psychosis with hallucinations, delusions, etc. Behavioral interventions are unlikely to be effective

John, a 16 year old student who has childhood schizophrenia, with no history of antisocial behavior prior to the onset of his illness three years ago.

All of John's behavioral difficulties directly stem from command hallucinations or from delusions. When medication is adjusted, the behavioral problems resolve completely.

There are no antecedents to John's behaviors, and the behaviors have no "function". They would be akin to the irritable behavior of a diabetic whose blood sugar is low.

Behavioral interventions for John would be ineffective in addressing the underlying cause of his difficulties. A behavioral model of intervention would be inappropriate. John needs a clinical model of intervention.

Treatment is needed. If treatment is effective, the behavioral problems will resolve.

Behavioral:
This individual needs behavioral interventions. No medication will be of help. What is indicated is a behavioral plan with “a narrow path with high walls”.

Alan is a 17 year old student who has a long history of delinquent behaviors dating back to age 9. He has no evidence of any psychiatric illness, and all of his behaviors are planned and volitional.

Alan grew up in a home where he was exposed to antisocial behaviors of both parents and two older siblings. He was finally placed in foster care at the age of 16, and has been receiving structure, nurturance, consistency and stability since then.

There is no medication that would effectively address Alan's behavior problems, and medication interventions, if tried, would only result in the potential problem of unnecessary side effects.

Also, Alan would not benefit from insight oriented psychotherapeutic approaches. Alan needs clear behavioral consequences, and a behavior plan that will hopefully extinguish his antisocial behaviors, and replace them with pro-social behaviors.

Very few children and adolescents are at either extreme of the Spectrum

Behavioral / Predominately / Mixed /Predominately/ Clinical

Behavioral

Clinical

What is “Predominately Behavioral”?

Jared is a 9 year old boy who has been stealing, lying, cruel to animals, setting fires, skipping school and aggressively bullying other children. He also has ADHD, and was recently diagnosed with this disorder.

His antisocial behaviors are planned and volitional, and are not related to the impulsivity of ADHD. Medication for ADHD is likely to “help him plan his crimes better”.

Although Jared has a mental health disorder, the predominate intervention for addressing his behavior problems will need to be behavioral.

This is a child or adolescent who happens to have a mental health disorder, but whose behavior problems are due to volitional planning, and not significantly related to the mental health disorder.

This individual needs behavioral interventions. Medication treatment can be helpful, but won't significantly impact the behavioral problem without behavioral interventions.

What is “Predominately Clinical”?

This is a child or adolescent whose problems are predominately due to a psychiatric disorder. There may be some tendencies towards power struggles or other behavioral problems, but these are minor compared to the psychiatric disorder.

Susan is a 16 year old student who has a history of oppositional and defiant behaviors since early childhood. She grew up in a home where she received inconsistent parenting, and subsequently tested limits in all settings, including school.

She has a family history of Bipolar Mood Disorder, and began to develop symptoms of this disorder at age 15. Within the last six months, she has been agitated, hyperactive, irritable, engaging in risky behaviors, and demonstrating severe mood swings.

She has also developed significant behavioral problems including verbal and, at times, physical aggression towards others. These behaviors are directly related to the nature of her mood at the time.

Her baseline of mild to moderate oppositional behaviors remain, but are overshadowed by her new behavioral difficulties.

Susan will require behavioral interventions, but, since her severe behaviors directly stem from her psychiatric disorder, the predominate intervention needs to be clinical. Otherwise, she is unlikely to improve.

Behavioral interventions are unlikely to be successful without treatment of the underlying disorder

Behavioral interventions need to address the underlying disorder in order to be effective

What is “Mixed”?

Karen is a 16 year old who has spent most of her life in a home with catastrophic stresses. She has fetal alcohol and drug spectrum disorder, ADHD, Post Traumatic Stress Disorder secondary to being molested at age 10, and clinical depression.

Karen also has a long history of antisocial behaviors, dating back to kindergarten. She has assaulted teachers and other students, shoplifted from stores and vandalized the neighborhood. She is noted to be able to charm others, and to be able to be in control of her behaviors to suit her desires.

Karen is a very high risk individual, at risk of involvement in the Corrections and Social Service systems, and of dropping out of school. She has a mixture of severe mental illness and of severe antisocial behaviors.

Some of her behavior problems stem from her psychiatric disorders, whereas others have clear environmental antecedents. Effective interventions will require equally intensive therapeutic and behavioral approaches.

The Clinical-Behavioral Index bridges the conceptual gap between behavioral and clinical models.

Identifying where a child or adolescent is on the continuum can be of help in identifying the most effective interventions.

If there are significant differences of opinion regarding where the child/ adolescent is on the spectrum (e.g, a classroom teacher and a school social worker, or a probation officer and a therapist).....

This can be diagnostic of systemic problems with interventions, and can be a starting point for reaching common ground

This can be a good starting point for discussion

Treating Violent Youth

Aggression is a non-specific, serious symptom most associated with ADHD, Conduct Disorder, Oppositional Defiant Disorder. It is also associated with Autism Spectrum Disorder, mood disorders, PTSD and psychotic disorders.

When aggression is chronic in these conditions, treatment tends to be longer, more intensive and to have poorer outcomes.

Successful treatment depends on understanding the underlying contributors to the violence

When clinical factors are at the root of the problem, e.g., irritability and agitation stemming from bipolar mood disorder

Then clinical interventions that may include medication management are the treatment of choice

Medication ideally is specifically focused on the nature of the mental health disorder.

E.g., is the aggression due to impulsivity of ADHD? Due to mood swings? Due to auditory hallucinations?

Thus, typically, medication management would utilize stimulants, antidepressants, mood stabilizers, anti-anxiety medications and/or antipsychotics in the treatment of underlying pathology

Note: Some clinical disorders (e.g., autism spectrum disorders, phobias, etc. are also treated with behavioral interventions.

Behavioral interventions are generally more effective with violence stemming from behavioral factors

And, for youth in the "predominately" or "mixed" categories, interventions that blend clinical and behavioral approaches work best

Much of the research on medication treatment of aggressive youth focuses on aggression as an associated factor to other disorders such as ADHD, mood disorders, etc.

Research studies are limited, and more research is necessary to clarify types of aggression and the treatments that work best for each type.

Research indicates that, in order of highest to lowest effect size for anti-aggression outcomes:

Highest effect size:

Stimulants for treating ADHD with associated aggression

Atypical antipsychotic medication (e.g., Risperidone) for persistent behavioral disturbance in youth with conduct disorder and sub-average I.Q.

Moderate effect size is found with mood stabilizers (e.g., Lithium, anti-seizure medications) and alpha-2 agonists (e.g., clonidine)

No major effect size for antidepressants, beta blockers (e.g., nadolol) and typical antipsychotics.

Aggression and violence are multi-factorial, and difficult to study as single variables.

There is evidence that “hot” aggression (e.g., highly impulsive) responds to medication treatment much better than “cold” aggression (volitional, planned, calm, etc.)

This suggests that “hot” aggression may be more on the clinical, biological end of the spectrum, and “cold” aggression on the behavioral end.

There are significant ethical implications to the use of medication for behavior control (e.g., the use of highly sedating antipsychotic medication for conduct disordered youth).

This is considered by many to be a form of “chemical restraint”.

Medications can have significant adverse side effects and the risks vs. the benefits need to be considered. If they are used, they should be part of a larger treatment plan.

Many aggressive youth have simply not yet learned the skills of self-management and self control, and have not learned pro-social alternatives to aggressive behavior.

They can benefit from skills training, including learning mindfulness techniques such as those taught in curriculums such as the “MindUP” program.

Lithium in the water supply?

Biological Trace Element Research

Biol Trace Elem Res. 1990 May; 25(2):105-13.

Lithium in drinking water and the incidences of crimes, suicides, and arrests related to drug addictions.

Schrauzer GN1, Shrestha KP.

Results suggest that lithium at low dosage levels has a generally beneficial effect on human behavior, which may be associated with the functions of lithium as a nutritionally-essential trace element.

Increasing the human lithium intakes by supplementation, or the lithiation of drinking water is suggested as a possible means of crime, suicide, and drug-dependency reduction at the individual and community level.

Addressing School Violence

In general, school districts' most aggressive students are in self-contained Setting IV E.D. programs.

A review of records of one such program in a 5000 student district revealed that 85% of these students had already been diagnosed with a mental health disorder, but that only 5% were receiving treatment.

Co-locating mental health services from a community mental health clinic on-site in the district resulted in treatment of these students' disorders, transition to less restrictive placements, significant reduction of aggression and savings of $800,000.00/year.

The services were voluntary, and were not IEP related services.

Special education “EBD” students, especially those in Setting 3 and Setting 4 placements, tend to have multiple mental health disorders, and many of them have issues of aggression. Many are in the Mixed category of the Clinical-Behavioral Spectrum.

Recommendations re: violence perpetrated by students who have mental health disorders

Prevent violence through mental health procedures and guidelines that:

-Clarify the role of school professionals

-Increase access to mental health services through on-site, co-located clinics

-Maintain clear firewalls between the district and mental health providers

-Increase education for teachers regarding student mental health

-Coordinate with parents and community programs
-Provide skills training for students who have minimal coping skills
-Ensure safety in programs that have very high-risk students (e.g., metal detectors)

Conclusion:

-Violence in school and community settings is a real risk

-There are major problems with accurately predicting violent behavior

-Mental health disorders are generally not predictors of violence, but when they occur in the context of other behavior problems and significant stressors, they can lead to violent behaviors

-Proactively addressing youth's mental health problems through collaborative efforts can improve behaviors, reduce the risk of violence and cut costs