Lessons Learned from 50 Years of Violence Prevention Activities in the African American Community

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Abstract: Purpose: This article covers violence prevention (homicide and suicide) activities in the African American community for nearly 50 years.

Method: Drawing on lived experience the works of early and recent efforts by African American physicians, the author illustrates we know a great deal about violence prevention in the African American community.

Results: There remains challenges of implementation and political will. Further, most physicians, like the public, are confused about the realities of homicide and suicide because of the two different presentations both are given in the media and scientific literature.

Conclusions: Responses to homicide and suicides should be based on science not distorted media reports. There are violence prevention principles that, if widely implemented, could stem the tide of violence.

Keywords: Homicide ■ Suicide ■ Prevention ■ Historical perspectives

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INTRODUCTION

Physicians are confused about the realities of homicide and suicide in the African American community. On one side, there is the media touting the extreme rates of homicide in the African American community with such truisms that homicide has been the leading cause of death in African American males 15-44. On the other side is the scientific fact that African American rates of homicide have always run much less than 100/100,000 per year or less than 0.1% of the population making it a very rare event. Overall suicide rates have always been higher than overall homicide rates. They have always run below 15/100,000 making suicides less than 0.015% of the general population, and African American suicides have always been half that of European American suicides making suicides rare events. However, the media appropriately highlights suicide as the second leading cause of death in 15-34 year old people. Thus, physicians are presented with two opposite perspectives – one that these causes of death are epidemic and the other that these events are rare occurrences. This article seeks to clarify these perspectives and provide a thoughtful approach to preventing the problems of homicide and suicide in the African American community.

After nearly half a century of treating Black psychiatric patients for a variety of disorders, one single fact has repeatedly proven to be true – "risk factors are not predictive factors because of protective factors." The protective factors operating in people's lives work to mitigate negative outcomes such as an adolescent's participation in violent behavior, drug use, dropping out of school, early sexual debut, and other risky behaviors. The Community Mental Health Council, Inc. first learned this lesson in 1982 when the research team at the Community Mental Health Council, Inc. began to call the nation's attention to the inordinate number of Black children at risk for negative outcomes such as perpetration of violence, because of exposure to violence. However, the protective factors in these children's lives nullified the risk of other problematic behaviors.

After years of research, the Aban Aya project ran in Chicago Public Schools between 1994 and 1998,[1,2] and protective factors were placed into the lives of "at risk" middle school students. These protective factors were: 1) rebuilding students' "village" which cultivates the student's social and emotional support and builds an adult protective shield for youth; 2) providing opportunities to increase connectedness and self esteem (a sense of power, uniqueness, models, and connectedness[3]), and 3) teaching youth social and emotional skills such as affect regulation. The outcomes revealed there was reduced growth in violent behavior, school delinquency, drug use, and recent sexual intercourse by at least one-third.[1,2] Findings from the research suggest risk is not just the presence of a bad, toxic influence, but also the absence of a good, protective influence. Due to the complexity of the Aban Aya research model (Triadic Theory of Influence[2]), Seven Field Principles were developed to make implementation easier to cultivate resiliency, generate hope, and provide protective

factors that could prevent negative outcomes among youth. These principles were used to guide violence prevention activities in Chicago Public Schools with some success.[4,5] This paper proposes that the issue of violence prevention has already been partly solved through years of research and, in some cases, implementation. This paper also proposes that the same principles that help prevent violence also help to prevent other risky behaviors such as risky sexual behaviors resulting in HIV infections,[6] child abuse,[7] and teen pregnancy.[8] Risky behaviors and protective factors are multi-determined and dependent on biological, psychological, sociological, and cultural forces that weave a complex tapestry of etiology. The Seven Field Principles – cover these complex etiologic factors and will be discussed with examples of their historic operations to strengthen or weaken outcomes such as violence toward others (at its extreme – homicide) and violence toward self (at its extreme – suicide) in the African American community.

HISTORICAL CONTEXT

Homicide

The Black Psychiatrists of America was spearheaded by Dr. Chester M. Pierce, M.D. from Harvard University in 1969. Of the organization Dr. Pierce said, "It was born to be action oriented."[9] He also noted "… we the Blacks had no choice, given the conditions of our people, but to opt for action programs far beyond the walls of the consulting room and the clinic."[9] From these efforts Dr. James Ralph, M.D. was appointed the Chief of the Center for Minority Group Mental Health Programs in 1970. In his role, Dr. Ralph began going to work on the behavioral issues affecting public health issues for African Americans, and, as homicide rates were disproportionately higher in African Americans than in European Americans, the problem of homicide in African Americans became a major priority. Dr. Ralph was instrumental in funding Ruth Dennis at Meharry Medical College to study black homicide and in 1977; Dr. Dennis noted homicide had become the leading cause of death for black males 20-34.[10] Dr. Ralph also successfully funded Dr. Dennis[11] and Dr. Rose,[12] to do research on the issue of African American homicide and they both published results in 1981 noting most of the circumstances in Black homicide involving Black males were interpersonal altercations between family and friends. Furthermore, both studies advised at the beginning of the altercation the victim and the perpetrator could not be identified until after the homicide. As a result of this new information, the National Association of Social Workers and the National Institute of Mental Health (Office of Prevention and the Center for the Study of Minority Group Mental Health) held a conference in 1984 to ferret out the causes for this problematic behavior occurring between two people who knew one another as family, friends, or acquaintances. To date all the drivers of homicidal behaviors were characterized as: 1) cultural (e.g. it was said African Americans had a culture of violence[13]); 2) sociological (as exemplified by Dr. Dennis'[11] and Dr. Rose's research[12]); 3) psychological (exemplified by the psychodynamic contributions by a founding member of the Black Psychiatrists of America Dr. Alvin Poussaint[14]); or 4) biological (Lewis et al,[15] Bell[16–19] as a result of head injury). Part of the problem prior to the mid 1980s was the lack of statistical sophistication to extricate the effect size of the factors involved in generating behavior. However, with a greater appreciation for the complex nature of behavior (behavior is multi determined) and more sophisticated statistics it became possible to consider the contribution of the various factors generating the risk for homicide.

Suicide

The history of research on African American suicide rates has been less robust owing to the reality that, although overall suicide rates have always been higher than overall homicide rates, the suicide rates in the African American have always been lower than the White rates of suicide.[20,21] In fact, African American male and female rates of suicide have tended to run half that of the rates of White suicides (slightly below 10/100,000 and 2/100,000, respectively), with African American women having the lowest rates of suicide in the US.[20,21] Like homicide, suicidal behavior is very complex making it a difficult area of investigation, resulting in many of the publications on African American suicide being clinical and anecdotal in nature.[22–26] In 1999, Dr. Satcher released his The Surgeon General's Call to Action to Prevent Suicide,[27] and this document raised the issue of risk and protective factors, but the protective factors were focused on mental health interventions to prevent suicide. However, in the Institute of Medicine's landmark report on Reducing Suicide,[21] the critical question of what non-mental health interventions were protecting African Americans from higher suicide rates, compared with European and Native Americans, was proposed. This spurred scientific research on this question, which will be reviewed below.

One other issue regarding African American suicides deserves mention – "suicide by cop." Since the Rodney King beating video in 1991, videos have been increasingly used to document the allegedly illegal victimization of African-Americans by the police. Videos of the police using lethal force have raised the question regarding whether or not African Americans are using the police to

kill them in what has been dubbed "Suicide by Cop." Although not a random sample, one study outlined the frequency and characteristics of "suicide by cop" in 707 officer-involved shootings.[28] In this nonrandom sample, the authors report that 36% of the officer-involved shootings were "suicide by cop." Another study investigated death from the use of lethal force by law enforcement from the National Violent Death Reporting System from 17 US states from 2009 to 2012.[29] In this study, there were 812 deaths and although the majority of victims were White (52%), African-Americans had a disproportionate rate of 32%.[29] The authors four case subtypes (one of which was "suicide by cop" suspected at 18%) could not classify more than half of the cases.[29] Twenty-two percent of these incidents were thought to be mental health related.[29] One other study examined the racial/ethnic disparities in the use of lethal force by US police from 2010 to 2014.[30] This study found the mortality rates among non-Hispanic Black and Hispanic individuals was 2.8 and 1.7 times higher, respectively than among Whites.[30] Accordingly, the concept of "suicide by cop" is fraught with difficulties as the category of "suicide by cop" could be used to blame the victim for illegitimate use of excessive police force. How do you tell whether the death of an African-American victim is a result of lethal use of police force as a result of racial stereotypic assumptions by the officer involved in the shooting or if was a legitimate use of force which was due to the victim wanting to be killed and used the police as their instrument. Fortunately, the National Medical Association prepared a thoughtful position on "Police Use of Force",[31] which called for more data to fully understand the extent of the police's use of force.

TRENDS IN HOMICIDE RATES AND SUICIDE RATES

Homicide rates

The homicide rates of African Americans has been 6-12 times higher than Whites since the FBI began collecting homicide statistics in 1929.[32] An examination of the homicide rates show they bounce up and down randomly, but there are various notable trends. For example, the national homicide rate prevailing in 1965 was 6.2 per 100,000, but by 1975 it had climbed to 10.2 per 100,000.[33] The black homicide rate in 1965 was 30.1/100,000, but by 1973 it had risen to 44/100,000.[33] Accordingly, it is clear that the increased risk of homicide victimization for African Americans, already serious problem, was getting worse, and by 1972, it had become the single leading cause of death among black males ages 20-34.[10] By 1983 the homicide rates were the leading cause of death in black males 15-34 and by 1986 the black male homicide rates had risen to 55.9/100,000 with the female rates at 11.8/100,000.[20] As the ages of homicide victims and perpetrators has decreased over the years, greater attention was paid to youth homicide and we observed that homicide rates for non-Hispanic Blacks ages 10-24 dropped from 62.6/100,000 in 1991 down to 32.8/100,000 in 2005,[34] a decrease of nearly 50%. By 2010, the rates for non-Hispanic Blacks ages 15-19 were 52/100,000, and for older non-Hispanic Black, youth ages 20-24, the rates were 28.8/100,000.[35]

Suicide rates

The trends in African American suicide rates are equally as interesting. Since 2000, African American rates run half of European American rates (averaging 11-13/100,000) averaging 6.14-6.53 per 100,000.[21] In addition, there is a striking contrast in age distribution of African American and European American suicides – African American peak rates are in the 25-34 year age group and the peak for European Americans is in the 65 years and older category (60/100,000).[20] Unlike homicide rates, the overall suicide rates have been relatively stable, however in 1999 when the rates were less than 11/100,000, the rates went up to 13/100,000 in 2014.[36] However, there was a small increase in African American youth suicides in the 15-24 ages from 1993 to 1994, but which quickly disappeared.[37]

Thus, we see that both the homicide and suicide rates have, despite some fluctuations, been fairly consistent. This finding is not puzzling because there really is not any statistical difference in the rates. The reality is that homicide rates that range between 62/100,000 and 11.8/100,000 is not statistically significant. The same holds true for suicide rates that range between 60/100,000 and 2/100,000.[21] The denominator of these rates is so large (100,000) the numerator could be 100, and we would be talking about a percentage of 0.1 percent of the population, and comparing that low rate to a rate of 2/100,000, or a percentage of 0.002 percent of the population makes such comparisons spurious. These low rate behaviors make it even more difficult to ferret out prevention strategies to combat these serious public health problems.

PREVENTION EFFORTS FOR HOMICIDE AND SUICIDE

Homicide and violence

As mentioned above, early efforts to prevent homicide tended to follow the "magic bullet" approaches to public health problems. For example 'If we could only find the main cause of the problem it would be solved' – gun control, alcohol restriction, exposure to violence creating a violent nature, mental illness, etc. Unfortunately, behavior

is multi-determined and there is no "magic bullet," and such thinking is generally indicative of an unsophisticated approach to behavior change. Rather, there are biological, psychological, social, and cultural factors that contribute to a finalized behavior such as homicide, however, some of these factors carry more weight than the others do. Of all of them, the biological may be the most malleable if it is acquired biology instead of genetic biology. An example of acquired biology is a flu shot. Sure to avoid getting the flu, washing your hands and keeping them out of your nose and eyes would prevent the flu, but it is easier to get a flu shot.

In trying to unravel the issue of homicide, it first became clear there were many different types of violence that generated homicide. These were:

1) Group or mob violence;
2) individual violence;
3) systemic violence, such as war, racism or sexism;
4) Institutional violence such as preventing correctional inmates from getting the benefit of prophylactic medications to prevent hepatitis, or social determinants of health that harm people, such as the plethora of liquor stores in some communities;
5) Hate crime violence, such as terrorism;
6) Multicide such as mass murder, murder sprees, and serial killing (which used to be defined as 3 people being killed, but which has been increased to 4 people killed);
7) Psychopathic violence;
8) Predatory violence also know as instrumental or secondary violence;
9) Interpersonal altercation violence, also known as expressive or primary violence (e.g. domestic violence, child abuse, elder abuse, and peer violence;
10) Drug related violence, such as systemic drug related violence (where drug dealers kill to sell drugs), pharmacological drug related violence (where an individual perpetrates violence because of drug intoxication), economic compulsive drug related violence (where a drug addict uses violence to obtain drugs), and negligent drug related violence (such as a drunk driver who kills a pedestrian);
11) Gang related violence;
12) Violence by mentally ill individuals;
13) Lethal violence directed toward self (suicide);
14) Lethal violence directed toward others (homicide);
15) Violence by organically brain damaged individuals;
16) Legitimate/Illegitimate violence (e.g. true self defense verses a policeman shooting an unarmed teenager);
17) And nonlethal violence.[38–40]

It was clear that different types of homicide required different prevention, intervention, and postvention strategies.[40] However, regarding prevention efforts, as the majority of homicides in the African American community were interpersonal altercation homicides, the dictates of public health demanded this type of homicide get the most attention.

In 1985, US Surgeon General Koop declared violence as public health problem.[41] This re-conceptualization of violence was intended to shift the public's perception that violence was primarily a problem of predatory aggression. In a corollary public health strategy, the women's movement had shifted the public perception that rape was mostly a stranger rape issue when it was really in large part a family, friend, acquaintance problem. Accordingly, there was a shift in women's perception of the danger of being raped. Unfortunately, the same shift has not happened with homicide as the fear of being killed is still dominated by a 'stranger danger' fear when it is largely a family, friend acquaintance problem similar to rape. The goal was properly to characterize most homicides as interpersonal altercation aggression, because the approach to predatory aggression was law enforcement, i.e. after the fact (postvention) while a new approach to interpersonal altercation aggression might result in universal homicide prevention, i.e. preventing violence before it escalates into homicide thus preventing homicides before they occur. Also, in the mid 1980s, the research team at the Community Mental Health Council, Inc. (CMHC) in Chicago began exploring children's exposure to violence as a cause for the future perpetration of violence.[42] The National Medical Association got involved with the public health approach to violence,[43] Dr. Prothrow-Stith, and internist at Harvard, had developed a violence prevention curriculum for adolescents.[44] It was also during this time CMHC started a "Stop Black on Black Murder" campaign with a catchy logo on T-Shirts and Posters to publicize the problem (Figure 1), an effort that got national media attention for several years.

It was also in the mid 1980s that Congressman Louis Stokes held the Congressional Black Caucus "Mini-Health Braintrust", in Washington, D.C., May 12-16, 1986. It was at that meeting that plans began to form for the Family and Community Violence Prevention (FCVP) Program, an initiative established in 1994. The program was funded by the Federal Government (thanks to Congressman Stokes' behind the scenes work) and used the infrastructure provided by the Historically Black Colleges and Universities (HBCUs) to do family and community violence prevention.[45] The 4th National Conference Family and Community Violence Prevention in Houston, TX October 17-19, 1997, highlighted the "Seven Basic Principles of Violence Prevention" and provided a blueprint for the

Figure 1. Stop Black on Black Murder.

Family Life Centers at 19 Historically Black Colleges and Universities and Minority Institutions to work within predominately African American communities doing violence prevention.[46]

However, it was not until the late 1980s and early 1990s that modern statistics allowed researchers to examine the complex interactions between various biological, psychological, sociological, and cultural factors that generated behavior. That development held out the promise that public health might finally engage in health behavior change.[4] Rather than study one factor that seemed to generate behavior, researchers were finally beginning to research multiple factors that had a role in generating behavior.

During President Clinton's term in office, he directed his entire White House Cabinet to work on the issue of violence against women,[35] this along with previous efforts to provide battered women's shelters resulting in a decrease in intimate partner homicide rates from 16.5/100,000 in 1976 down to 3.5/100,000 in 1996.[47] In 2001, Dr. David Satcher, the US 16th Surgeon General, released his landmark Youth Violence report.[48] This report, plausibly the most comprehensive written to date, on the topic of youth violence, does an admirable job of explaining there are risk and protective factors that determine behavioral outcomes such as youth violence. The report destroys several common myths about youth violence, e.g. urban youth homicide rates are increasing dramatically and youth violence cannot be prevented. Myths that persist despite Centers for Disease Control and Prevention's (CDC) evidence that youth homicide has decreased steadily from 1994 (when it peaked at 15.2/100,000) until Dr. Satcher's report was published in 2001, and continued until as late as 2010 when it was 7.5/100,000,[49] a decrease of 50%. Myths that endure despite evidence programs aimed at decreasing youth violence have been shown to be effective for more than 100 years.[35,50]

In this report, Dr. Satcher also debunked the impact risk factors had on putting youth at risk for juvenile violence.[48] Specifically, his report noted for juveniles 12-14 years of age, risk factors such as: a) Psychological condition; b) Restlessness; c) Difficulty concentrating; d) Poor parent child relations; e) Harsh, lax discipline; f) poor monitoring, and supervision; g) Low parental involvement; h) Aggression; i) Being male; j) Poor attitude toward and performance in school; k) Academic failure; l) Physical violence; m) Neighborhood crime and drugs; n) Neighborhood disorganization; o) Antisocial parents; p) Antisocial attitudes and beliefs; q) Crimes against persons; r) Problem (antisocial) behavior; s) Low IQ; t) Broken home; u) Low family socioeconomic status/poverty; v) Abusive parents; w) Other family conditions; x) Family conflict; and y) Substance use all had individual small effect sizes of less than 0.2.[48] So, all of the things we stereotypically associate with the causes of youth violence are not accurate according to scientific study. Furthermore, for youth in that same age range, weak social ties, antisocial, delinquent peers, and gang membership had a large effect size of greater than 0.30.[48] This groundbreaking report also outlined the protective factors that buffered against youth violence. In the individual domain, Dr. Satcher's report proposed protective factors were: intolerant attitudes toward deviance; high IQ; being female; warm, supportive relationships with parents or other adults (known as connectedness in the seven field principle model[4–6]); and having a positive social orientation.[48] In the family domain, the report suggested protective factors were parents' positive evaluation of peers; and parental monitoring[48] (conceived in the seven field principles as the adult protective shield[4–6]). In the school domain, the projected protective factors were commitment to school; and recognition for involvement in conventional activities.[48] And, finally, in the peer group domain the protective factor was friends who engage in conventional behavior.[48]

Evidence for the principle of rebuilding the village and providing an adult protective shield. Dr. Satcher's Youth Violence Report's protective factors overlapped nicely with the protective factors mentioned earlier in the various research projects the author has been personally involved with doing,[1,2,4–8] and there is historical evidence that each of these various protective factors have been instrumental in helping diverse communities overcome public health challenges. Regarding the protective factor of "rebuilding the village" (what Dr. Satcher's youth violence report refers to as "warm, supportive relationships with parents or other adults"), consider Nobel Prize winning Jane Addam's work over 100 years ago. Right after the Chicago fire, Irish, German, and Italian immigrants moved to Chicago and it was 75% immigrant. It was a challenging time as parents were working all the time and youth were essentially unsupervised and without a village to raise them so "warm, supportive relationships with parents or other adults" were few and far between. As a result, Chicago had a juvenile delinquency problem[51] and there was a fair amount of European immigrant's domestic violence in Chicago from 1875 to 1920.[52] None of the families were protected by social fabric that comes from "rebuilding the village." Addams and her colleagues established Hull House in Chicago and in 1889, they went on to establish the first Juvenile Court[50] that differentiated between criminality and delinquency. Finally, 10 years later these visionary women established what is now called the Institute of Juvenile Research (IJR) – an organization whose purpose was to find the causes of delinquency. By 1942, IJR researchers asserted delinquency was less due to biological, ethnic or cultural risk factors but was more due to social disruption or a lack of social fabric so there was limited formal and informal control in neighborhoods they referred to as delinquency areas.[53] Of course, the statistical methodology more than 60 years ago was far less sophisticated than today. However, using more refined technology Sampson et al's research[54] observed that of the 49 equally poor African American neighborhoods in Chicago, six had the highest rates of violence and were responsible for the lion's share of violence in Chicago and the difference was generated by the lack of "social fabric".[54] James Comer, another founding member of the Black Psychiatrists of America delineated the issue of "rebuilding the village," in his work in New Haven, CT. Dr. Comer spent years going around from neighbor to neighbor re establishing village and as a result he was able to document significant changes both in educational achievements and violence related behaviors.[55–58] The Aban Aya project took a lesson from Dr. Comer's "play book" when we sought to reduce violence in Chicago public schools.[1,2,4–6]

Such efforts also provide an adult protective shield for youth until they "learn how to act". Scientists are now clear that children do not fully mature until around 26 years of age.[59] To put it succinctly, adolescents are "all gasoline, no brakes, and no steering wheel.",[60] and, accordingly, they need adults to protect them from themselves. By "rebuilding the village" using various strategies that fit the community and the interventionists, it becomes possible for all of the adults in the community to raise each other's youth and also increase the "connectedness" within that community so that risky behaviors such as violence are frowned upon.

Evidence for the access to modern and ancient technology. Being a physician, the author is clear that biology has a strong influence on behavior, however, this field principle, until recently, has been elusive. Initially, when the field principles were being developed from the Theory of Triadic influence,[4] the truncated principle "access to the modern technology" covered access to health care as it seemed clear that youth with neuropsychiatric issues, e.g. ADHD, were predisposed to being diagnosed as having conduct disorders. Further, there was evidence that these disorders were associated with violence from work in Chicago Public Schools.[61] Initially, we thought it might be exposure to violence and trauma that caused African Americans to engage in risk taking behaviors such as violence, unsafe sex, dropping out from school, substance abuse, etc. Further, we hypothesized treatment for these problems that delivered trauma informed care would be helpful. However, although feasible, we had seen too many African American children that were exposed to violence and trauma who seemed resilient.[50,62–64] Since that did not pan out, we next thought it might be head injury as there was clinical evidence head injury might generate violent behavior,[19] but that did not seem as prevalent. Subsequently, prematurity seemed a viable biological risk factor for unsafe behaviors that people took, and there were potential protective factors that could buffer against that risk factor, e.g. prenatal care, but things still did not add up.

Finally, the author stumbled upon prenatal alcohol exposure that lied at the root of the high prematurity rates in African American youth, and the more we investigated this phenomena and talked to patients with prenatal exposure to alcohol, the more it became clear this was a risk factor for perpetration of violence.[65–67] What is happening is many African-American women do not realize they are pregnant until the 1st or 2nd month, and, during the time they do not know they are pregnant, they may engage in social drinking. Although, it is important to again note that behavior is multi-determined and just

because a patient has been exposed to alcohol as a fetus does not automatically mean they are prone to violence because protective factors can neutralize this risk. Yet, consider the most common cause of homicide, interpersonal altercation – it begs the question – "Who has such poor affect regulation that they would harm someone they presumably loved or who was their friend?" Prior to the drop in homicide among intimates,[47] homicides were an extraordinarily easy crime to solve, the murders were usually spur of the moment, impulsive events that were not being planned, so police had an easy time of identifying likely suspects. However, since intimate altercation homicides have decreased and gang related homicides have had a relative increase,[35] the crime of homicide, especially youth homicide, is more difficult to solve.[35]

Ancient technology is included in this field principle because it has also become increasingly clear that much of what modern public health practitioners are observing and doing in the 21st century was being done in ancient times. For example, the emphasis on social and emotional skills (a technology) has been emphasized in many ancient spiritual texts, such as the Bible or the observation about the dangers of prenatal alcohol is also found in the Bible (Judges – 13). So, much of public health interventions is "old wine in new bottles." Exploring the histories of low income African American patients with prenatal exposure to alcohol reveals clinically histories replete with violent behaviors in their lives and sometimes such violence has been as extreme as homicide. It is now clear that the problem of fetal alcohol exposure with its attendant poor impulse control and frustration tolerance is at the root of many risky behaviors within African American communities, one of them being violence toward others (at its extreme – homicide). Fetal alcohol spectrum disorder, now proposed being called Neurobehavioral Disorder associated with Prenatal Alcohol Exposure (ND PAE) by the American Psychiatric Association in DSM 5,[68] is partly caused by alcohol denaturing choline in pregnant women when they unwittingly drink socially. Accordingly, a protective factors for this biological, etiological factor for violence might be increasing choline intake in pregnant women. This effect has been shown in animal studies,[69] but it has yet to be shown conclusively effective in humans although there are promising studies that illustrate how choline helps with prenatal alcohol exposure pre- and post-natally in humans.[70–74] Unfortunately, prenatal vitamins do not contain the necessary daily required dose of choline (450 mg/day).[75] Only two of the top 25 prenatal vitamins have 50 mg of choline, six have less than 30 mg of choline, and the rest have no choline.[75] Even if this hypothesis turns out to be true, it will be years before society sees the protective virtues of increasing the access to choline in the diets of women. It turns out such long term prevention strategies are difficult to implement as many are looking for simple, short term fixes to the problem of violence prevention. Accordingly, it is difficult to generate a critical mass of political will to implement such a long range prevention. Although, there are cultures that recommend pregnant women eat two egg yokes a day (a great source of choline), to have healthy children born to them.

Connectedness. Another field principle to prevent risky behaviors of violence is the principle of trying to increase connectedness in at risk communities. Although, all of the seven field principles are interdependent (to some extent by "rebuilding the village," and providing youth and adults with the 'access to the technology' of mentoring, increases connectedness), this field principle needs explication to ensure it is highlighted as a guiding protective factor principle. Early on the principle of connectedness was emphasized.[4] Parental warmth and affection was shown to protect boys living in disadvantaged environments from criminal behavior.[76] Improving closeness, positive statements, communication clarity, and emotional cohesion in families reduces the risk for grave antisocial behavior and violence.[77] There have been several large empirical studies that reveal family variables of children being connected to their parents and schools are associated with reduced risk taking.[78] This principle has been shown to be protective in subsequent studies as well,[1,2,5–7] and has been hypothesized to be a major factor in protecting people from exposure to trauma.[79]

Self esteem. As mentioned earlier self esteem was operationalized as a sense of power, uniqueness, models, and connectedness.[3] It is clear that youth violence is sometimes driven by low self esteem.[80] There are multiple ways of helping children and adults develop self esteem. Willis et al[81] tested a model of how ethnic pride and self control were related to risk and protective factors. The result of this study highlighted good parenting was related to self control and self esteem, and racial socialization was related to ethnic pride. Certainly, this was a major component of the Aban Aya prevention intervention[1–3] and the other successful prevention interventions that used the seven field principle model.[5–7]

Social and emotional skills. Teaching youth social and emotional skills such as affect regulation, conflict resolution, refusal skills, – were placed into the lives of "at risk" middle school students.[1,2] This aspect of the model was supplied by the work of Weissberg's team.[82–85] Of course, in the jargon of ancient technology in the African American community this was known as "home training," or in Black urban Chicago it was also referred to as "finesse." There are multiple ways to work with youth to teach them

social and emotional skills, but one of the better ways is to provide them with adult supervised sports.[63,86,87]

Minimize the effect of trauma. Having done a fair amount of research on the issue of children exposed to violence and trauma,[40,88–94] we understood how trauma was potentially a major cause of youth engaging in risky behaviors such as violence. Accordingly, when we were designing the Aban Aya research intervention, we spent a considerable amount of time trying to figure out how to help youth minimize the effects of trauma in their lives.[64] The impressive interventions of Pynoos and Nader,[95] and the principle based guidance by Apfel and Simon[96] have been particularly helpful in this regard. Unfortunately, efforts to make Pynoos and Nader's Psychological First Aid technology ubiquitous were not completely successful. Accordingly, the US imported Mental Health First Aid, which was informed by the Psychological First Aid model, and it is now widely available as training can be obtained on line (https://www.mentalhealthfirstaid.org/cs/).

Independent evaluation of the model being proposed for violence prevention

The Aban Aya research project,[1,2,4] was independently reviewed along with 53 universal school based violence prevention projects that met their inclusion criteria.[97] The median sample size of the studies was 5563 (sample sizes in the studies ranges from 21 to 39,168 students). Violence or aggression was assessed by direct measures in 75% of the studies, and the others used proxies for violence and aggression. The median follow up time to measure violence prevention was six months (the range was between immediately after the intervention up to six years after the intervention). Aban Aya was one of the studies classified as having the greatest design suitability as it was an experimental design with intervention and control subjects with the data being collected prospectively, and it was one of seven with the greatest design suitability and good execution. Aban Aya was identified as desirable because the experimental condition showed a decrease in violent behavior compared with the control condition and it was classified as effective as it was tested in diverse settings, populations, and circumstances.[97] Suffice it to say, the seven field principles,[94] have been used in various prevention interventions and has been shown to reduce violence.

Suicide

The issue of suicide prevention in the African American community is even more complex than the issue of homicide prevention. Other than the reality that historically, very little research is done on African American issues,[98] the suicide rates in African Americans have generally run half that of European Americans making African American suicide rates even rarer and more difficult to study. Accordingly, most of the early articles on African American suicides have been anecdotal or have small sample sizes, however, since the Institute of Medicine's "Reducing Suicide" report was released in 2001,[21] there has been more work in this area. It was during the Committee on Psychopathology and Prevention of Adolescent and Adult Suicide's deliberations that several interesting paradoxes were pointed out. The first being the extraordinarily low rates of completed suicide in African American women – 2/100,000,[21] quite an interesting phenomena considering all the difficulties African American females experience in the US. Secondly, the facts revealed the prevalence of depression was about 20% or 20,000/100,000/year in the population, and suicide attempts in youth were about 7000 per 100,000 in the population (7%) per year, yet the actual youth suicide rates were at the time 11/100,000 people/year.[21] Accordingly, it was pointed out that something must be protecting people from committing suicide, and since the decades of taking a deficit approach to suicide prevention, it might be more fruitful to take a protective factor approach to the problem of suicide. The 18th US Surgeon General, Dr. Regina Benjamin, in the 2012 National Strategy for Suicide Prevention,[99] continued this approach as protective factors were also emphasized in this report. This report found "More than 8 million adults report having serious thoughts of suicide in the past year, 2.5 million report making a suicide plan in the past year, and 1.1 million report a suicide attempt in the past year."[99,p. 10] Yet, the total number of suicides per year in the US hover around 30,000, which begs the question "How does one identify that 30,000 per year in the 2.5 million making plans and 1.1 million people that actually attempt suicide?" Again, indicating it may be more productive to take a protective factor approach to the problem of suicide. Another perspective on the lower rates of suicide in African Americans comes from a national study of jail suicides (suicide is a leading cause of death in jails) where 67% of suicide victims were White and 15% were African American.[100]

Dr. Satcher's National Strategy for Suicide Prevention[26] and the Institute of Medicine's seminal report[21] spurred more research on African Americans by the researchers at the University of Michigan's Program for Research on Black Americans and Emory University that explored increasing protective factors as a prevention strategy in suicide. For example, using a sample of 3263 African Americans in the National Survey of American Life (NSAL), Nguyen et al[101] determined "Subjective closeness to family and the frequency of contacts with friends

were negatively associated with suicide ideation and attempts." Another study by the Michigan team using a sample of 5191 Black Americans from the NSAL explored the prevalence of suicidal ideation and attempts among Black Americans in later life and found the estimated lifetime prevalence of suicidal ideation and attempts was 6.1% and 2.1% respectively.[102] Kaslow's team at Emory also began exploring the use of culturally informed interventions on suicidal African Americans.[103] This research group has also been exploring protective factors and have discovered motherhood as a reason for living which and which protects African American women who have attempted suicide.[104] Both studies containing elements of the Seven Field Principles. The Seven Field Principle model also has relevance for the field of suicide prevention and was used to culturally inform prevention interventions for African American women.[103] and to develop interventions for depressed African American teens.[105–107] The model was also used to inform a primary care internet based intervention to prevent depression in emerging adults.[108–117]

Several studies have upheld the field principles of "rebuilding the village," "connectedness," and "re-establishing the adult protective shield".[118–120] For example, one study showed increased family and peer support were associated with decreased suicidality, and peer support and community connectedness moderated the relationship between depressive symptoms and suicidality; with over 1/3 of the variability in reasons for living was predicted by family support, peer support, and community connectedness.[118] Additionally, the University of Michigan team used cross-sectional epidemiologic data from the NSAL and multivariate logistic regression analyses to examine the association between perceived emotional support, negative interaction, and suicide behaviors among 3570 African Americans and 1621 Caribbean blacks age 18 and older.[119] They found negative interaction was a risk factor for suicide ideation and emotional support was a protective factor for attempts and ideation.[119] These associations were observed even after controlling for any mental disorder. In an HIV prevention study in Baltimore, 819 African Americans were examined to see if social network density was associated with suicidal ideation and plan after three years. Controlling for sociodemographic characteristics and depression symptoms, revealed individuals with lower levels of social density were three times more likely to report suicidal ideation and plans.[120] Unfortunately, there are other studies that conflict with this support of the Seven Field Principles to cultivate resiliency to prevent suicide. The Michigan University team found frequency of interaction with church members was positively associated with suicide attempts, while subjective closeness to church members was negatively associated with suicide ideation.[121] In addition, West et al[122] found emotional support, service attendance, and negative interaction with church members were unrelated to both suicide ideation and attempts.

Other studies support the notion of giving African Americans a sense of models (an aspect of the promoting self esteem field principle) as a way to reduce suicidal ideation among African Americans in the US.[123] There is also assistance for the field principle of "Minimize the effect of trauma." One study examined the relationship between hope and suicide in African Americans. Hope was hypothesized to negatively predict the interpersonal suicide risk factors of burdensomeness, thwarted belongingness, and suicidal ideation.[124]

As pointed out by the Institute of Medicine's "Reducing Suicide," suicide prevention research is especially difficult owing to the rarity of the behavior.[21] Specifically because the suicide rates are so low, in order to develop a scientifically valid suicide prevention study, the study would need approximately 100,000 participants to achieve statistical significance.[21,p. 410]

So, there is more research to be done on preventing African American suicide. In addition, with the recent discovery of the high rates of fetal alcohol exposure in low income African American communities,[66] this is more fertile ground for research in suicide prevention in African Americans. It turns out from birth, the life expectancy of subjects with fetal alcohol syndrome is 34 years old, and one the leading cause of death in this population is suicide at a rate of 15%.[125]

CONCLUSIONS

Unfortunately, despite the media's alarmist headlines, the low rates of homicide and suicide do not easily lend themselves to scientific study using the gold standard of randomized, double blind, placebo controlled trials. Fortunately, this is not the only evidence scientists measure to determine if an intervention works at reducing violence against others or self. When the Institute of Medicine released its 2nd prevention report in 2009,[126] it was pointed out – "Although their internal validity makes them valuable science, randomized control trials do not always have good external validity.[126, p. 331]" The report also points out academic research is rarely applied in the day to day world. However, science can often benefit from the experience of everyday clinical observations, e.g. clinical observations in a community mental health setting found large numbers of youth being exposed to violence. Furthermore, a plethora of scientific research projects confirmed this observation, encouraging several large scale strategies designed to address this problem.[91,127–129]

The exploration of these issues for the last 50 years, suggests that we have a relatively firm science base from which to launch preventive interventions for homicide and suicide. In addition, there are various systems that have the infrastructure to deliver the prevention interventions, e.g. schools, child protective services, juvenile detention facilities, sports venues, mentoring programs, etc. Although various communities often implement programs because of some perceived need and often in response to unflattering media about their community and not on sound public health epidemiology and scientific understanding, there is still a lot of good work being done in various places. However, like politicians, such programs come and go depending on the strength of the political will of the people and in this day and age, political will is very capricious. Findings from the research suggest that risk is not just the presence of a bad, toxic influence, but also the absence of a good, protective influence. Accordingly, as we design programs, hopefully based on the Seven Field Principles as theoretical guidance, we will keep this in mind and take a protective factor approach rather than using a deficit model. To withhold violence prevention programs that have been shown to be effective from communities that need them is unethical.[130]

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