Appalachian STATE UNIVERSITY BOONE, NORTH CAROLINA

The Journal Of The Blue Cross NC Institute For Health & Human Services, Volume 2: Adverse Childhood Experiences

Blue Cross NC Institute for Health and Human Services: Beaver College of Health Sciences, Appalachian State University

Abstract

Adverse childhood experiences (ACEs) are traumatic experiences that occur during childhood—0 to 17 years of age. In this issue, our authors lay out the basic framework for what constitutes an adverse childhood experience; and they report current knowledge regarding the impacts of ACEs on individuals, families, and communities. The effects are far-reaching, and research documenting all of the negative outcomes associated with ACEs has been accumulating. Not only can ACEs affect an individual's health and well-being for decades and increase a variety of risks to health and life, they can degrade the health and wellness of entire communities. Longitudinal research is necessary to truly understand these implications, and we are still in the early stages of learning. One thing we do know is that resilience is critical for living a healthy, fulfilled life in the wake of ACEs; and resilience can, and should be, built at a community level. Communities must become trauma-informed in order to understand this and to begin the process of creating support systems that will work across organizations that grapple with the various impacts of ACEs on their community members.

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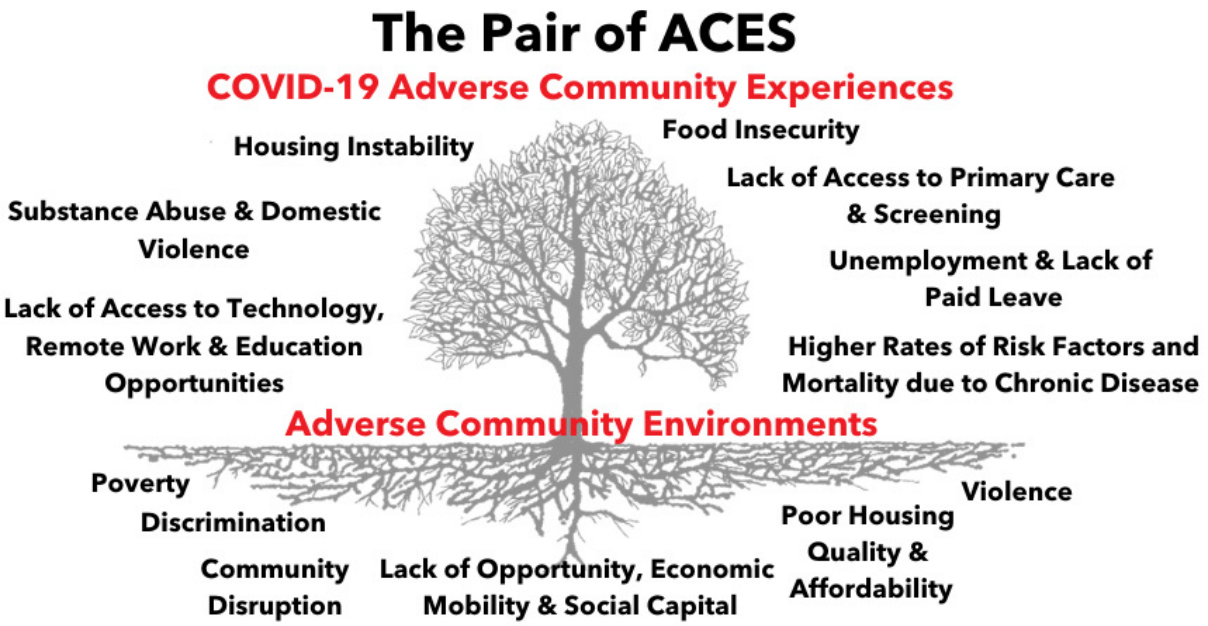
Journal of the Blue Cross NC Institute for Health & Human Services
JIHHS

MAY 2022
Vol. 2
Appalachian State University

Adverse Childhood Experiences



Cover Photo Courtesy Of:
Center for Community Resilience and Academic Pediatrics
Ellis, W., Dietz, W. (2017). A New Framework for Addressing Adverse Childhood and Community Experiences: The Building Community Resilience (BCR) Model. Academic Pediatrics 17. S86-93.

ACES: Adverse Childhood Experiences

Volume 2 of The Journal of the Blue Cross NC Institute for Health & Human Services,
Beaver College of Health Sciences & Appalachian State University

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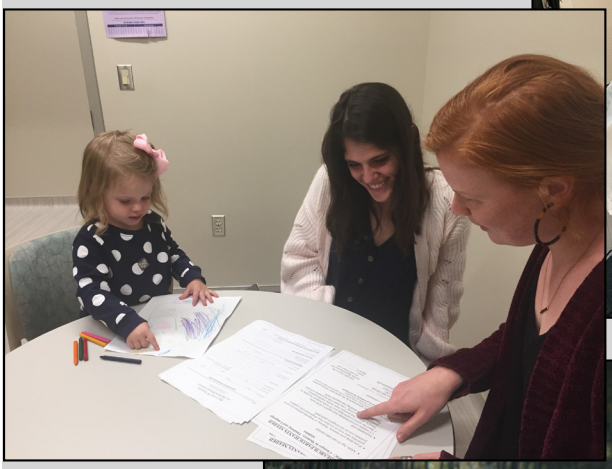

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JIHHS is published annually by Appalachian State University's Blue Cross NC Institute for Health & Human Services. Address correspondences regarding journal content to Gary H. McCullough, Editor, mcculloughgh@appstate.edu and communications regarding financing and distribution to Heidi Tait, taithr@appstate.edu. Opinions expressed in JIHHS represent the opinions of the authors and do not necessarily reflect the official policy or views of the Blue Cross NC Institute for Health & Human Services or Appalachian State University.

Elevating

Introduction to the Issue

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In the first part of this issue, we provide three articles let by our faculty examining ACEs through the COVID-19 pandemic, the impact of ACEs on suicidal behavior, and repercussions of ACEs and immigrant-related trauma on LatinX communities in Western North Carolina. In the second part, we highlight two approaches that are currently being taken to address ACEs in our communities. The first is a county-wide grassroots initiative that has grown into an ongoing collaboration across numerous individuals and organizations. The second is an approach that has grown from a funding opportunity to bolster not-for-profits that address ACEs in Western North Carolina in order to create a collaborative infrastructure across organizations to build capacity regionally that can improve health and wellness outcomes in the wake of ACEs.

We hope you will find these articles informative and inspiring, as ACEs are a global issue that we are addressing regionally; and success ultimately comes from all people across all communities becoming trauma-informed and resilient.

Gary McCullough, Ph.D.
Editor & Executive Director, IHHS

ACEs in Appalachia - What We Know and What We Are Learning Through the COVID-19 Pandemic

"The single most important thing we need today is the courage to look this problem in the face and say: This is real. This is all of us." ~ Dr. Nadine Burke Harris, Center for Youth Wellness

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Abstract

Adverse childhood experiences (ACEs) are a significant and complex public health and social challenge. Over the past three decades much research has been documented detailing the long-term health implications. In recent years, more evidence has emerged showing the negative impacts of community environments and social determinants of health on ACEs. There is also early and ongoing evidence to show that COVID-19 is continuing to exacerbate many of these risk factors and impacts. In this article, we highlight these challenges in the High Country and what the current evidence tells us. Along the way, three Public Health Honors students provide insight into their ongoing thesis projects focused on interpersonal violence (IPV), maternal and child health outcomes, and food insecurity and ACEs among the Latinx population. We conclude with a call to action emphasizing community-level approaches focused on policy and structural changes.

Introduction

Over the last few decades, adverse childhood experiences (ACEs) have emerged as critical public health and societal challenges.[1-3] ACEs can come in many forms, but according to the Centers for Disease Control and Prevention (CDC),[2] there are three main types of traumatic experiences: abuse (emotional, physical, sexual), household challenges (violence, mental illness, divorce), and neglect (emotional or physical). Each of these experiences during childhood can have both acute (school/academic success, behavior, development) and chronic ramifications across the lifespan. Research has found that the more ACEs one experiences, the worse the outcomes across the lifespan. In fact, a recent meta-analysis found that those adults who had experienced four or more ACEs had significantly higher odds of poorer physical health (obesity, diabetes, cancer, heart disease), health behaviors (physical inactivity, smoking, alcohol use, sexual risk-taking), and mental health and interpersonal

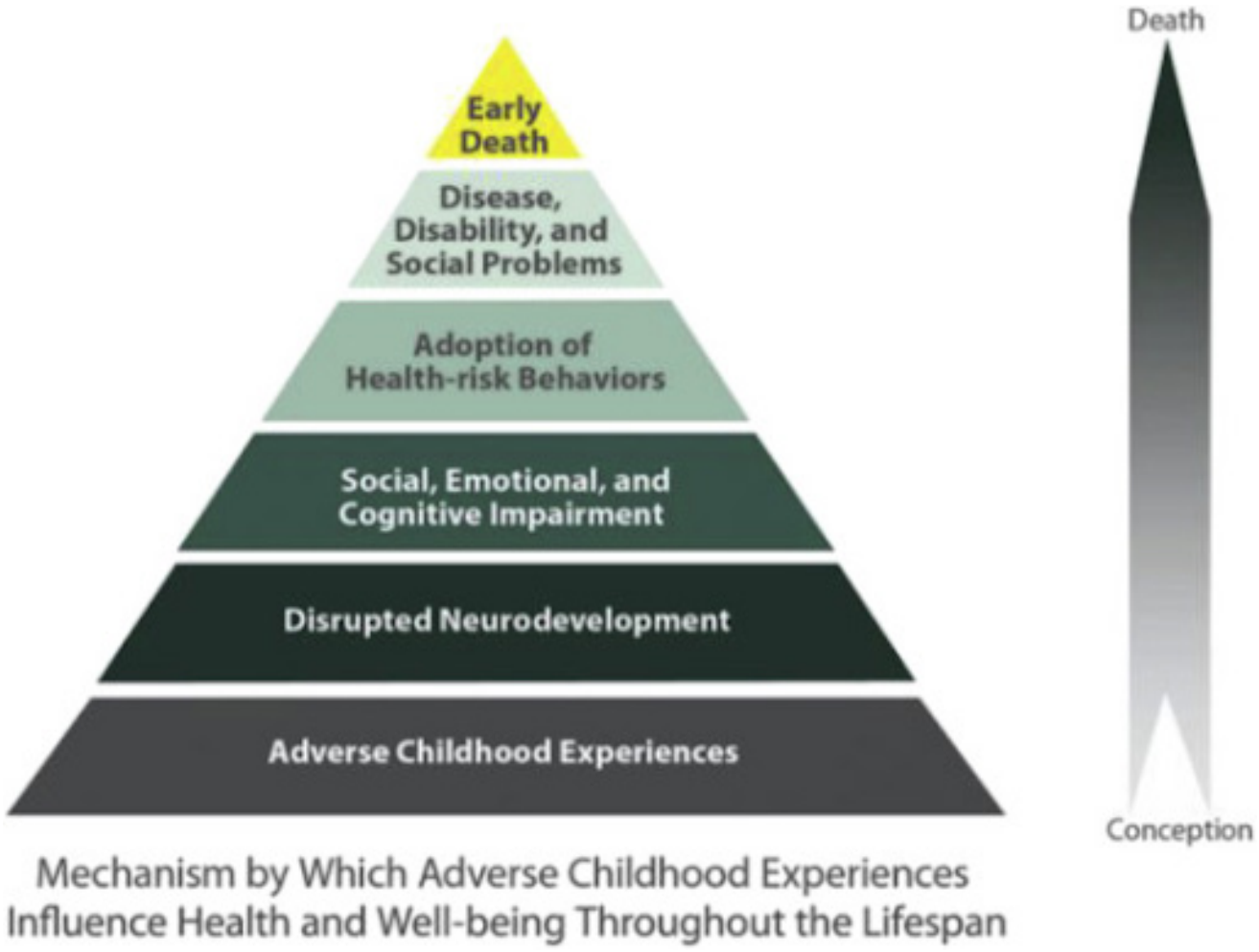

Fig. 1. The ACE pyramid model. Retrieved from: Boullier & Blair[1]

violence (IPV) experiences.[4]

Another analysis concluded that across Europe and North America, nearly $600 billion and $750 billion, respectively, are spent each year to specifically address health conditions attributable to ACEs.[5] Recent research has begun to explore the intergeneration impacts and how parents that have experienced ACEs as a child are likely to have children that have similar experiences; therefore, there is an urgent need for multigeneration approaches to intervention.[6-8]

From a public health framework, it is vital to understand the causal mechanisms and risk factors for ACEs. With many top public health challenges and health disparities, the physical, social and community environments serve as the root causes of health, often referred to as the social determinants of health.[9] When it comes to ACEs, The Building Community Resilience Collaborative[10] at George Washington University's Milken Institute School of Public Health, a renowned research group, refers to this as 'The Pair of ACEs': Adverse Childhood Experiences and Adverse Community Environments [Fig. 1]. As such often the direct causes of ACEs and chronic stress and trauma are the result of such community dynamics as poverty, community disruption, discrimination, limited economic opportunity (education & employment) and social capital, poor housing, and violence. Kapp and colleagues[11] also found that these factors are associated with maternal health and maternal-infant relationships and can influence child development pre-birth and during infancy. Further research has examined the epigenetic mechanisms of ACEs, but the research is still very inconclusive.[12] It is also recognized that these contextual factors can play out differently across communities based on demographics and geographic location (urban/rural, etc.).[13-14]

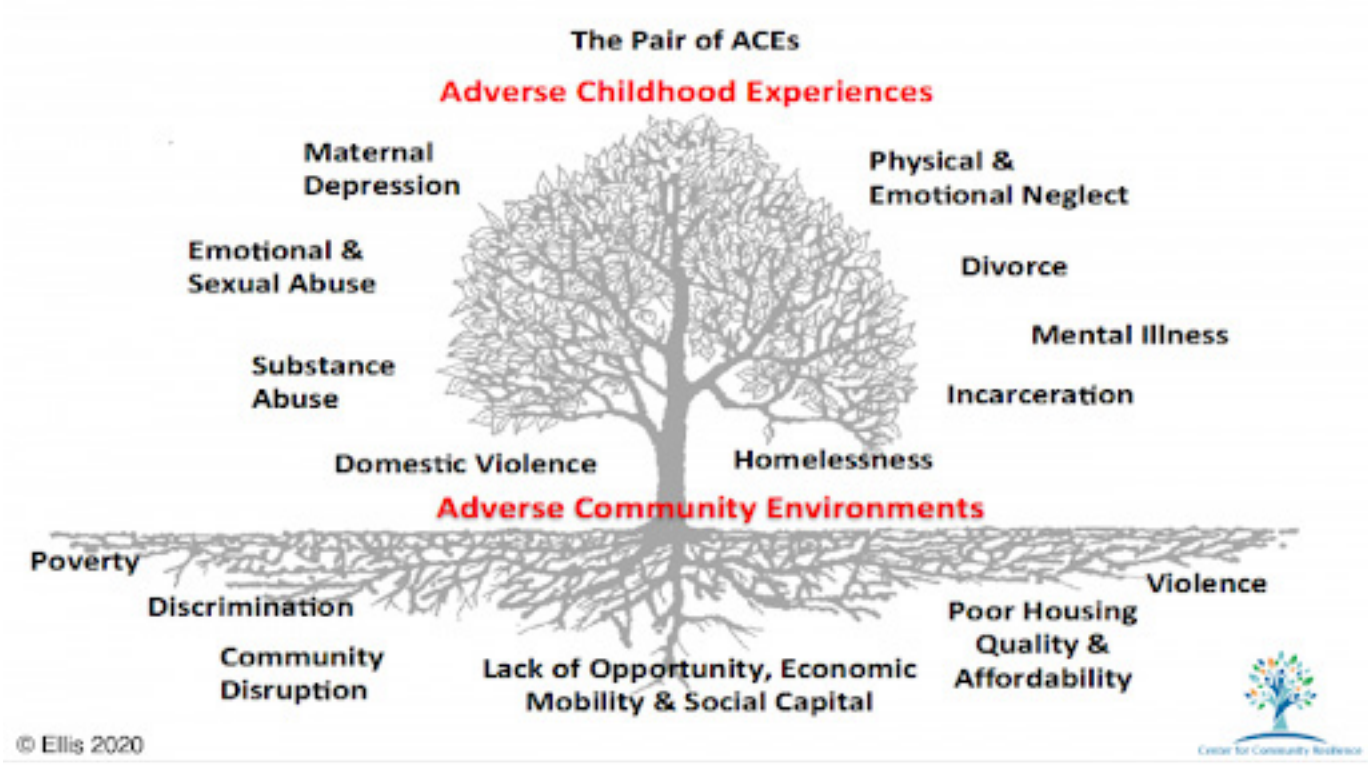

Fig. 2. Retrieved from: *https://publichealth.gwu.edu/departments/redstone-center/resilient-communities*

One area of the U.S. that is known for having adverse community environments is the Appalachian region. Specifically, Woolf and colleagues[15] reported that social determinants of health are a significant cause of the decline in life expectancy across the U.S. and particularly in Appalachia. It is likely that ACEs are an underlying factor, however, limited research has investigated the role of ACEs. Using the CDC's Behavioral Risk Factor Surveillance System data, North Carolina researchers have found that there were no significant differences between Appalachian counties and non-Appalachian counties in the state in terms of the prevalence of ACEs[16]; however, food insecurity is more prevalent in the Appalachian counties and additional research concluded that ACEs were statistically associated with increased odds of food insecurity in the Appalachian counties.[17] In Tennessee, researchers collected data among incoming freshmen at a public university to further understand what adversities students are bringing with them to their new environment and to inform strategies for building resilience.[18] More recently, researchers in West Virginia reported on the importance of community health needs assessments to investigate the factors associated with ACEs and the role that they could play in community health enhancement and development, which could be a very useful strategy moving forward.[19]

Previous research has found that natural and manmade disasters can exacerbate ACEs, and there is no doubt that the COVID-19 pandemic will have lasting impacts on society and its populace. It is likely that vulnerable populations such as those found widely across Appalachia will be even more significantly affected and preliminary research has highlighted it. A University of Kentucky research team detailed the impacts on social determinants of health and food insecurity and the importance of multi-layered public policy approaches that could be used moving forward.[20] Another research team from Kentucky reported that frontline and essential workers experienced increased stress and mental illness complications during the impact.[21] In addition, McFayden and colleagues [22] reported that COVID-19 had negative impacts on youth development as schools transitioned to remote learning; further, it has had implications for families and particularly those that are low-income and lack the

needed resources to adapt.

This paper seeks to provide an overview of ACEs and the various risk factors and causal mechanisms associated specifically with Appalachia and the High Country of North Carolina, what we are learning from the COVID-19 pandemic, and opportunities moving forward. In addition, we share preliminary findings from ongoing research being conducted by three current Public Health Honors students from Appalachian State University. The hope is that the information presented in this paper as well as the findings from these research studies can help to inform the multi-level community and policy-oriented solutions needed, specific to the High Country region of North Carolina.

County	Abuse/ Neglect Cases[a]	Substance Abuse[b]	Mental Illness[b]	Children in single-parent households[b]	Intimate Partner Violence/Child Sexual Abuse[c]
Alleghany	148	17%	17%	24%	**59**
Ashe	**397**	19%	15%	**27%**	31
Avery	200	19%	15%	20%	10
Mitchell	189	19%	16%	25%	**83**
Watauga	245	19%	15%	20%	47
Wilkes	**893**	17%	17%	23%	41
Yancey	242	18%	16%	23%	11

Table 1. Child Abuse and Neglect Cases in the High Country counties (July 2019-June 2020); Substance Abuse and Mental Illness (2021 - Frequent Mental Illness, Excessive Drinking); Single-parent households (2021); and Intimate Partner Violence/Child Sexual Abuse Cases (2020-2021). Retrieved from: Prevent Child Abuse North Carolina[a]; County Health Rankings[b]; North Carolina Department of Administration - Domestic Violence and Sexual Assault[c].

What We Know

Defining ACEs - Is COVID-19 an ACE?

The research literature on ACEs emerged in the 1990s and has experienced much progression of understanding over the past three decades.[23] During this time, there has been much debate as to how to effectively measure ACEs and their impacts as well as what should be included in measures. Specifically, early on studies centered on ten forms of child maltreatment across three types (abuse, neglect, household dysfunction) to include: emotional, physical, and sexual abuse; physical and emotional neglect; divorce/ separation of parents; substance abuse and mental illness in the household; incarceration in the household; and the mother being treated violently. However, the CDC's Behavioral Risk Factor Surveillance System has gone on to exclude physical and emotional neglect, whereas, on an international scale, such measures as peer violence, war, early marriage, and parental death have been included to reflect the different experiences children can encounter. Across all of the measures, however, the emphasis is that these traumatic experiences can have significant negative impacts on the lives of children and the trajectory of their life and health. Table 1 gives a breakdown of common ACE measures in the High Country.

The majority of research has emphasized ACEs from an individual framework and the importance of health promotion efforts aimed at resiliency. While vitally needed, in recent years, social epidemiologists have contended that more attention needs to be directed at those factors outside of the home and occurring in the community that are driving and/or moderating/ mediating the outcomes - in effect, as Kelly-Irving and Delpierre[24] argue, research and action need to go more upstream and examine the issues of the socioeconomic environment context. This would allow for more macro-level research approaches, improved measurement, and more emphasis on structural change interventions. For example, much research over the past several months has explored COVID-19's impact on ACEs and it could very well be that we ask - is COVID-19 an ACE that we need to measure moving forward?

Social determinants of health - adverse community environments

It is plausible and likely that adverse community environments, or social determinants of health, are the upstream causal mechanisms of ACEs, just like with many other critical public health issues. In their assessments, McEwen and Gregerson,[25] Ellis and Dietz,[26] and Ford[27] fervently plead for more community-level systems understanding and multidisciplinary approaches to solving the adverse community environments. Addressing social determinants of health is going to require expertise from an array of professional disciplines and engagement with policymakers on critical social policies. In looking at Table 2 below, many of the surrounding High Country communities are faced with adverse environments, which translates

County	Food insecurity	Uninsured (total) / Uninsured (children)	Children in poverty	High School Completion	Median household income	Children eligible for free or reduced lunch	Severe housing problems
Alleghany	**18%**	**18% / 9%**	**26%**	**77%**	**$41,400**	61%	12%
Ashe	14%	15% / 6%	23%	85%	**$41,500**	57%	10%
Avery	15%	**18% / 8%**	24%	84%	$45,800	56%	13%
Mitchell	15%	15% / 6%	22%	85%	$47,400	53%	12%
Watauga	14%	13% / 5%	14%	91%	$51,600	33%	**23%**
Wilkes	16%	15% / 6%	21%	80%	$45,300	**81%**	14%
Yancey	15%	15% / 7%	22%	85%	$47,700	50%	13%

Table 2. Common indicators of adverse community environments in the High Country communities (2021). Retrieved from: County Health Rankings.

to increased susceptibility to adverse childhood experiences. It is evident that the communities are facing some similarities and some unique contextual challenges specific to the community.

"It is plausible and likely that adverse community environments, or social determinants of health, are the upstream causal mechanisms of ACEs, just like with many other critical public health issues."

Risk factors - intergenerational impacts

In recent years, more research has started to look at the role of parents' trauma from adverse childhood experiences on their own children and the intergenerational "transmission". In their thorough review, Narayan and colleagues[6] detailed how one of the key steps in preventing ACEs is through understanding parental experiences and the ongoing trauma that is still present; at the same time, positive experiences as a child can lead to positive outcomes in their own children. It can be thought of much as we think about poverty and how difficult it can be to break a family cycle. As we also know, those that grow up in adverse community environments are often likely to live in the same type of environment as an adult. Therefore, it is vital to take a family-centered approach to address ACEs. In addition, early research has shown that COVID-19 could be exacerbating the negative parental practices as the increased distress adds to the already high level of trauma.[28] As we look at in the next section, this is particularly relevant in our local region.

What We Are Learning Through COVID-19 Pandemic

Covid-19 impacts on Appalachia

Prior to the COVID-19 pandemic many Appalachian communities, including those in the High Country, were facing health and social challenges linked with ACEs and were more susceptible to the challenges of responses required of the pandemic. Due to limited resources and capacity, many communities had severe limitations in the tools needed to adapt, and therefore, many of their citizens' social and economic situations have been further exacerbated. As such, it is going to be important for community leaders to be aware of both the short and longer-term implications. Due to their interest in topics related to ACEs (domestic violence/intimate partner violence; maternal health disparities; and food insecurity in the Latinx population), three Public Health Honors students embarked on research related to COVID-19's impact and are in the process of writing up their final results. In the following few paragraphs, we share some preliminary findings from their studies.

Research on the ground: Grace Galphin's work on the impacts of COVID-19 on domestic violence/IPV

The COVID-19 pandemic has exacerbated risk factors for intimate partner violence (IPV) and child maltreatment, two significant public health issues. The pandemic has also created further challenges for survivors and organizations working to respond to and prevent these issues. Stay-at-home orders have forced victims to be at home more often with their abusers. This can increase the frequency and severity of the abuse, as well as limit the victim's access to services.[29] Self-isolation guidelines have lowered their ability to escape a violent situation, and have allowed abuse to go unnoticed.[30] Higher rates of unemployment and economic downturn, in addition to the stress from the uncertainty of the pandemic, have created higher risks for individuals to experience IPV.[31] Finally, abusers

have been able to use the fear of COVID transmission as a way to further control their victims.[29]

School closures, economic instability, and lack of school breakfast/lunches are just some of the consequences of the pandemic that have impacted child maltreatment. Parents were forced to juggle teaching their children along with their other caregiving roles. This added stress can increase the risk of abuse in the household and decrease the level of care a parent is able to give to their child.[31] Like IPV, the stay-at-home orders have also allowed instances of child maltreatment to go unnoticed. Since children have not had as many interactions with people other than their families, reports of neglect/abuse have decreased.[31] Finally, the stress from the uncertainty of the pandemic, in combination with higher risks of maltreatment and exposure to violence, may increase children's risk of suffering from adverse childhood experiences.[31]

These impacts have been seen throughout the High Country communities. Agencies and organizations working in the prevention of and response to IPV and child maltreatment have highlighted specific challenges they and the clients they serve have faced during the pandemic. Organizations providing emergency shelter have had to lower the number of available beds in order to remain in compliance with COVID precautions. Agencies have continuously worked to be able to provide the same services to their clients, as well as a shift to virtual methods or socially distanced meetings. Professionals working to respond to intimate partner violence in the High Country discuss that, while there has not been a drastic rise in the number of individuals seeking help, there has been an increase in the severity of existing abuse experiences. These professionals have also noticed more challenges that their clients and families have faced during the pandemic, including further isolation, losing their jobs, increased food insecurity, and mental health issues.

Research on the ground: Grace Ruffin's work on maternal health race-based disparities and the role of COVID-19

Similar to its effects on other areas of healthcare, COVID-19 has had a substantial impact on maternal and child health (MCH) outcomes in the United States. Due to COVID-19 protocols and safety concerns, pregnancy-related care and birth have looked drastically different during the pandemic. Those who gave birth during the pandemic reported higher rates of preterm birth, instrumental delivery, stress, postpartum depression, and dissatisfaction with their birthing experience.[32] Even before the beginning of the pandemic, the United States had the worst MCH outcomes of any other industrialized nation, with Black women being three to four times more likely to die from pregnancy-related complications when compared to their white counterparts. Additionally, the COVID-19 pandemic seemed to ravish the same Black communities that have already been disproportionately affected by poor MCH outcomes. Compared to predominantly white counties, Black counties had COVID-19 infection rates that were three times higher and death rates that were almost six times higher.[33] Being at such high risk for contracting and becoming ill from COVID-19 while routinely having poor maternal health outcomes leaves Black mothers stuck in the crossfire of a global pandemic and safely navigating the childbearing process.

These statistics are alarming, and the combination of poor maternal outcomes and high rates of COVID-19 is a great cause for concern. This relationship is what Ruffin, author 2, seeks to understand through her Honors thesis, "What do race-based disparities in MCH look like, and how did COVID-19 exacerbate them?" She is approaching this question through a social-ecological lens, a common model used in the field of public health. Using the social-ecological model as an outline for defining race-based maternal health disparities, Ruffin will identify what factors are causing disparities at the individual, relationship, community, and societal levels. Each level of the social-ecological model includes various maternal services and influences that may affect Black women's outcomes.

These influences include one's health literacy, the level of familial and partner support, the location and context of one's community, and the larger structural systems at play that may have deep historical roots, like the United States' history of slavery and systemic racism. Race plays a major role in women's experiences at each level of the social-ecological model, and COVID-19 only complicates this intricate network. As

she continues her research, she anticipates more data citing COVID-19 as having a significant effect on rates of racial disparities in maternal and child health and a factor that further complicates each level of the social-ecological model and thereby impacting ACEs as well.

Research on the ground: Osonia Rojas Clavel's work on the impacts of COVID-19 on food insecurity and ACE's among the Latinx community

Food is the heart of identity in Latin-American cultures. Its importance in the life of Latin Americans is undermined by the fact that Latinx families experience nearly twice the rate of food insecurity compared to their non-Hispanic white counterparts.[34] Due to the private and apprehensive nature of undocumented immigrants, the risk factors associated with the high rate experienced by Latinx people are restricted. Even so, unique factors that have been shown to impact the food security of Hispanic/Latinx populations include legal status, language barriers, and racial prejudices.[34]

A 2017 study conducted by Dr. Amelie Ramirez at Salud America titled The State of Latino Early Childhood Development: A Research Review found that 78% of Latinx children suffer at least one ACE, and 28% suffer four or more.[35] Challenges faced by Latinx children in the United States are poverty, domestic violence, neglect, limited access to education, limited access to nutritious foods, and emotional and physical abuse. Due to the differences in their experiences, there can be significant misunderstandings between immigrants and their children and a subsequent inability to relate to one another. This can lead to mistrust between child and caretaker and can impact the relationships between these two extremely different generations in a way that continually follows the children into adulthood.

The multifarious causes and subsequent effects that impact the severity of ACEs and food insecurity among the Hispanic and Latinx communities work together in different ways to hinder the community's growth. The purpose of Clavel's thesis is to analyze those causes and effects and to share the first-hand accounts of migrants and first-generation students in their journey to find and use resources. In doing so, she has conducted interviews with 10 women of Mexican origin regarding their immigration experiences, the trauma that has been encountered and continues today, food insecurity and coping strategies, and difficulties with getting access to needed resources. Each of these has been even more difficult while living through the COVID-19 pandemic.

Discussion

This commentary article provides an overview of ACEs research and the complex health and social risk factors and outcomes involved. ACEs can have profound health and quality of life implications across the lifespan and are often greatly influenced by surrounding community environments. Moreover, research has shown a linear relationship between the number of ACEs and the severity of the health outcomes and that ACEs can transmit from parent to child much like other public health challenges. As a result, many of our significant public health challenges have direct and indirect relationships with ACEs. Policy analysts have shown that this can result in dramatic healthcare costs to our nation and are an urgent challenge for us to address collectively.

Lastly, there are also vast health disparities stemming from ACEs, and those often vulnerable and marginalized in society (non-white, lower SES, rural, etc.) also face the brunt of the outcomes and ability to effectively respond.

When examining the Appalachian region of the United States, where Appalachian State University and the High Country are located, much attention over the past several years has rightly been focused on the "disease and deaths of despair" and adverse social determinants of health. In particular, the opioid crisis has been highlighted and diseases/deaths related to alcohol abuse/misuse and prescription drug and illegal drug overdose; suicide; and alcohol liver disease/cirrhosis of the liver.[36, 37] Tragically, in examining the data even closer, researchers found that certain portions of the Appalachian region, including the southcentral subregion where the High Country is located, has seeing the largest increases in despair mortality.[38] With this, there are significant mental illness challenges, which is found within households across Appalachia, and resulting poor coping behaviors such as self-harm, criminal activity, and substance abuse[39]; these are all

intricately connected with social determinants of health and adverse community conditions. It is likely that ACEs are an important factor and play a negative role in the intergenerational impacts.

As academic researchers and community leaders have learned more and more about the risk factors and impacts of ACEs, there is serious call for action and intervention strategies. On a large scale, this will require policy measures and funding investments from the federal, state, and local levels of government. At the community level, Ellis and Dietz[26] have developed the Building Community Resilience Model that is being tested and adapted in communities across the U.S. As depicted in the model, it requires a community engaging in much education and awareness across multiple the community to build a shared understanding and using the shared understanding to shape the culture of a community. Culture change, rooted in empathy and a common vision, leads to changes at the policy and systems level. In order to have long-term change, there will need to be cross-sector partnerships developed to effectively manage resources and diverse community members must be engaged in the process. Much evidence has highlighted the importance of community-led and grassroots efforts.

Ford's model of community and public well-being builds upon Ellis and Dietz model and shows the intersection of individual, families, and community. Specific upstream and downstream factors to focus on include the education system as a whole (quality and accessibility from pre-k to secondary education), good housing opportunities (affordability, accessibility, quality/safety), and good jobs and economic opportunities (livable wages, support systems, cost of living). Communities should focus on addressing equity and social justice issues related to the public health systems and the physical environment as well as the accessibility, affordability, and availability of healthcare services and resources. Further, Ford contends that the way we train university students must adapt and change to meet these pressing needs moving forward. As we've examined, addressing ACEs will need a wide range of expertise and skill sets for a more comprehensive approach and sustainable results.

While interventions are indeed critical and needed, there is also significant need for research and

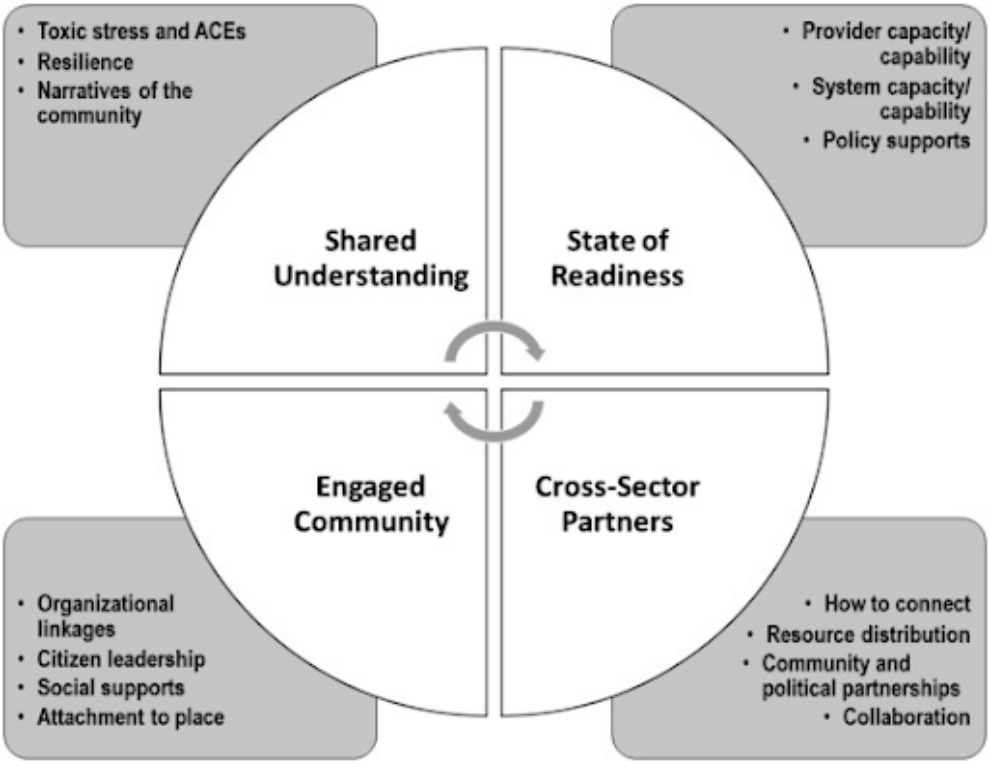

Fig. 3. Building Community Resilence Model: Retrieved from: Ellis & Dietz[26]

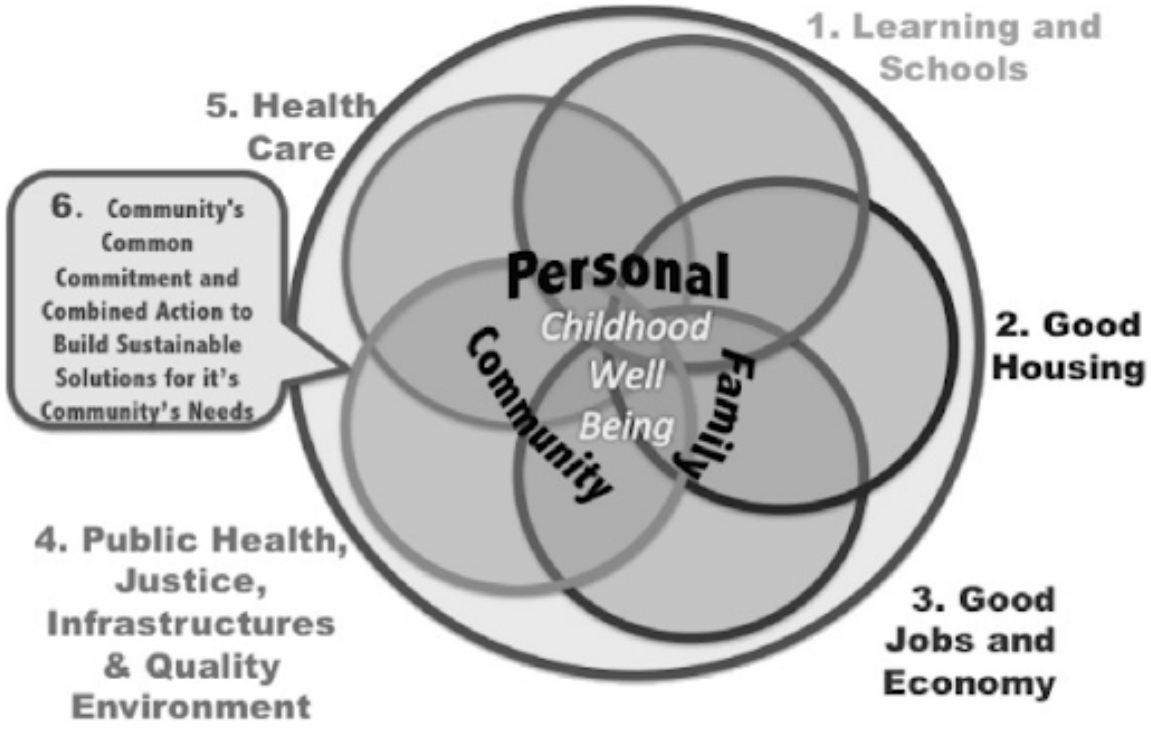

Fig. 4. A model for whole community and public well-being. Retrieved from: Ford[27]

evaluation and longitudinal studies. As interventions are being implemented, academic-based researchers should be involved in using their skillsets to evaluate to see what works and under what conditions. In addition, it is vital that research examines the long-term implications of the interventions and that researchers analyze social policies involved. Here in the High Country, we have a diverse set of academic expertise at Appalachian State to be involved in this research and evaluation, and it should involve a dedicated collaboration with community leaders and citizens for sustainable progress. In addition, it is a great opportunity to train students and engage them in local community initiatives, whereby the students can graduate and stay here and work or they can go to another community and take their training there. Nonetheless, it is imperative that we all work together collaboratively to understand and address the complex challenge of ACEs - as it is often said, "It takes a village."

Conclusion

ACES are complex public health challenge that requires an "all hands on deck" approach. In this edition of the Journal of the Blue Cross Institute of Health and Human Services, Appalachian State University faculty and community partners will provide articles that provide further insight into ACEs and their impacts and approaches vital to addressing them in the High Country. In particular, articles will delve into the impacts on adolescent health and suicide and the impacts on the LatinX community. Webb Farley and colleagues examine the need for supporting local nonprofits in their efforts and Presnell and Ashcraft provide an overview of the local Watauga Compassionate Community Initiative. The hope is that each of these articles will enhance knowledge of the issues involved and inform community intervention efforts aimed at addressing ACEs and the adverse community environments.

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Adverse Childhood Experiences and their Impact on Suicidal Behaviors

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ABSTRACT

Suicide is a significant public health problem. Over 47,000 people in the U.S. died by suicide and approximately 3.5 million people in the U.S. made a nonfatal suicide attempt in 2019 alone. Research on adverse childhood experiences has proliferated in the last couple of decades, and one of the documented consequences of ACEs is suicidal behavior. This article provides a brief summary of the history of ACEs research, the role of ACEs in increasing the risk for suicidal behavior, and the importance of examining ACEs from both a cumulative and trauma-specific lens. We also summarize some of our own research using national, state, and local-level data. We conclude this article by discussing methodological challenges in studying ACEs and suggestions for future work directions.

History of ACEs Research

According to the Centers for Disease Control and Prevention, "adverse childhood experiences, or ACEs, are potentially traumatic events that occur in childhood (0-17 years)."[1] Research on adverse childhood experiences (ACEs) has proliferated over the last couple of decades. A search of peer-reviewed articles in PsycINFO using the search terms "ACEs" or "adverse childhood experiences" or "adverse child experiences," revealed that between 1980 to 1997, there were 261 articles. This number has increased exponentially; in 1998-2010, there were 1,397 articles and between 2011 and 2021 there were 5,482.

The concept of ACEs gained momentum following the CDC-Kaiser Permanente Adverse Childhood Experiences Study published in 1998.[2] This study entailed surveying over 9,000 adults who participated in a health maintenance organization in California. Respondents were asked questions about seven categories of adverse childhood experiences, including psychological, physical, or sexual abuse; violence against the mother; and living with household members who were substance abusers, mentally ill or suicidal, or ever imprisoned. The researchers found that after adjusting for demographic variables, the higher the number of ACEs, the greater the likelihood of various health risk behaviors and diseases in adulthood. These negative health outcomes included alcoholism, drug abuse, depression, suicide attempts, smoking, poor self-rated health, sexually transmitted diseases, physical inactivity, and obesity.

It is important to note that before the term "ACEs" was widely used, there was research, mainly in the field of psychology, on the role of cumulative trauma in negative sequelae among adolescents and adults. Early use of this term can be found in psychological studies on the effects of the Holocaust on survivors and their children[3,4] as well as Vietnam veterans.[5] In a study claiming to be the first to empirically test

how cumulative adversity impacted psychological distress, results indicated significantly higher rates of a psychiatric disorder as the number of experienced traumas increased[6].

"...the higher the number of ACEs, the greater the likelihood of various health risk behaviors and diseases in adulthood."

Cumulative v specific types of trauma

Central to the ACEs framework is the premise that the accumulation of adverse events, and not simply any single one type of adversity, is associated with a greater likelihood of poor outcomes. Yet taking only a cumulative perspective can mask which types of ACEs are most impactful, for whom, and under what circumstances. The examination of which ACEs are most impactful is important for prevention purposes because it enables health care providers and therapists to be cognizant of what types of trauma they should focus most on in their treatment.

ACEs and negative outcomes

Regardless of the types of adverse experiences included in the measurement of ACEs and the types of samples studied, research has consistently shown that ACEs have negative impacts on physical and psychological health outcomes. These negative outcomes include depression, substance use, future victimization, and chronic health diseases. In the CDC-Kaiser Permanente study, the researchers found that the number of ACEs showed a graded relationship to several leading causes of death[2], meaning that as the number of types of ACEs increased, so did the risk of negative outcomes. One of the negative outcomes of ACEs is suicidal behavior - namely ideation, attempts, and deaths. Suicidal behaviors are important outcomes to focus on because suicide is a leading cause of death in the U.S.. Suicide was the tenth leading cause of death in the U.S. in 2019, claiming the lives of 47,511 individuals.[7] It was the second leading cause of death among 10-14-year-olds, 15-24-year-olds, and 25-34-year-olds7. Particularly alarming is that the rate of suicide increased 35% between 1999 and 2018.[8]

Nonfatal suicide attempts are 25-60 times more prevalent than fatal ones. Among adults in the U.S., 12 million (4.8%) reported having serious thoughts of suicide, 3.5 million (1.4%) made a suicide plan, and 1.4 million (0.6%) made a nonfatal suicide attempt in 2019 alone.[9] Thus, for every death by suicide in 2019, there were 29 times more attempts and 252 times more serious suicidal ideations. These rates are concerning, not only because they indicate a high prevalence of mental distress, but also because prior suicide ideations and attempts are significant predictors of suicide completions.[10]

Not only is suicide a public health problem nationally, but it also is a significant issue in North Carolina. State-level data for North Carolina indicate that suicide claimed the lives of 1,463 people in 2018 and accounted for 68% of all violent deaths during that year[11] (North Carolina Violent Death Reporting System [NCVDRS], 2021). Not surprisingly, county-level data reveal that the rate of suicide is not distributed evenly across the state. The rate of suicide per 100,000 people was 17.6 in Watauga County, compared to the state-wide average of 18.6 deaths by suicide per 100,000. Some surrounding counties in western NC had very high suicide rates, including Alleghany County (49.3), Yancey (30.8%), Burke (27.0%), Wilkes (24.4), Iredell (24.7%), and Alexander (23.9%)[11] (NCVDRS, 2021).

Literature on associations between cumulative ACEs and suicidal behaviors.

Research from a variety of samples has indicated that ACEs increase the risk for suicidal behaviors. For example, in the CDC-Kaiser Permanente Study, for each additional ACE, the risk for making a nonfatal suicide attempt increased by 60%.[12] Data from the National Comorbidity Survey indicated that even after controlling for psychological and demographic variables, the more ACEs experienced, the greater the risk for making a suicide attempt in adulthood.[13] Data from the National Epidemiological Survey on Alcohol and Related Conditions also indicated that a higher number of ACEs was associated with an increased risk for lifetime suicide attempts after controlling for demographic variables.[14]

Literature on associations between specific types of ACEs and suicidality.

Child abuse and neglect and suicide.

Increased risk for suicidal behavior among those who experience child abuse or neglect has been widely reported in the literature. In a population sample, 78% of those who had attempted suicide had experienced childhood sexual abuse compared with 16% of those who had never attempted suicide. Approximately 75% of those who had attempted suicide had experienced childhood physical abuse compared with 30% of those who had never attempted suicide. Further, those who had attempted suicide reported twice as many experiences of childhood emotional abuse than non-attempters.[15]

Parent alcoholism and parent incarceration and suicide.

Data from National Epidemiological Survey on Alcohol and Related Conditions indicated that those with a family history of paternal or maternal alcoholism were more likely to attempt suicide than those without a history of parental alcoholism.[16] The CDC-Kaiser study also found that those who reported having a household member incarcerated were more than twice as likely to have attempted suicide than their counterparts.[12]

Parental death and suicide.

Children whose parents had died when they were less than 18 years of age were twice as likely to have died by suicide during a 25-year follow-up compared with children matched on age and sex but who had not lost a parent in childhood.[17] Further, data from a Swedish national cohort showed that parental loss during childhood was associated with an increased likelihood of hospital admission following a suicide attempt in young adulthood.[18]

Family history of suicidality and suicide.

Having a family member attempt suicide or die by suicide is a significant risk factor for suicidal behavior.[17,19] Among children of parents with mood disorders, those whose parents had a history of a suicide attempt were five times more likely to attempt suicide than a comparison group whose parents had a mood disorder, but no suicide attempt history.[20] Another study found that males who died by suicide were significantly more likely to have experienced the suicide of another family member than were their male counterparts who were still living.[21]

Gender non-conforming and suicide.

Although not an ACE per se, sexual orientation and identity are important variables to consider when studying ACEs and suicide. Significantly higher ACE exposures are nationally reported among individuals identifying as gay/lesbians and bisexual compared to those identifying as straight.[22] Lesbian, gay or bisexual students with greater exposure to ACEs have disproportionately higher levels of suicide ideation and attempts, in addition to higher cumulative exposure to ACEs.[23,24] Studies find that compared to heterosexual individuals, gender non-conforming youth with high ACE scores (2 or higher) have over 13 times higher odds of suicide ideation and attempts.[24] Research suggests a combination of sexual minority victimization, peer/school victimization, social discrimination, and stigma increase suicidal risk and exposure to ACEs.[23-26]

Author-initiated research on ACEs and suicidal behaviors

Our research on ACEs and suicidal behavior has relied on secondary data sources at the national, state, and local levels. We summarize some of this work below.

"...the more ACEs the adolescent had experienced, the greater their risk for suicide ideation and attempts in adulthood."

National data.

We used data from the National Longitudinal Study on Adolescent and Adult Health to examine the prospective impact of ACEs on suicidal behavior using data from 9,421 respondents surveyed during adolescence and re-surveyed 1, 7, and 12 years later. We first examined the prevalence of eight different types of ACEs, including physical, sexual, and emotional abuse, neglect, parental death, parental incarceration,

parental alcoholism, and family suicidality. We then created a cumulative measure of ACEs by summing these adverse events. We next tested if each ACE and the cumulative measure of ACEs predicted suicide ideation and suicide attempts in adulthood while controlling for depression, problem alcohol use, drug use, delinquency, impulsivity, gender, race, age, and urbanicity. Results from this prospective approach shed light on the causal linkages between ACEs and negative health outcomes.

The frequency of ACEs in the national sample ranged from 4.7% who had experienced parental death, 4.9% who had experienced sexual abuse by a caregiver, 7.1% neglect, 7.5% family history of suicide, 9.9% parental incarceration, 13.4% parental alcoholism, 14.5% physical abuse, and 16.2% emotional abuse. The sum of these ACEs ranged from 0-6, with 54% experiencing no ACEs, 26% experiencing one ACE, 12% experiencing two ACEs, and 8% experiencing three or more ACEs (6%- three, 2%- four or more[27].

Among the eight ACEs assessed, the ones that had the largest impact on suicide attempts were family history of suicide attempts and parental death. Adolescents who had experienced either one of these events in childhood were 3.3 times more likely than their counterparts who had not experienced these events to have attempted suicide in adulthood. The ACEs that were next most impactful on risk for suicide attempts were childhood sexual abuse, physical abuse, and parental incarceration, all of which increased suicide risk more than two-fold. Parental alcoholism and emotional abuse also significantly increased risk slightly less than two-fold. The ACEs with the largest, long-term impact on suicide ideation were sexual, emotional, and physical abuse, all of which increased the odds of seriously considering suicide in adulthood by two and a half-fold. Having a family history of suicide attempts and parental incarceration also increased the long-term likelihood of serious suicide ideation by over 50%-fold.

As shown in Table 1 below, the cumulative measure of ACEs was associated with an increased risk for suicide ideation and suicide attempts in a graded manner, such that the more ACEs the adolescent had experienced, the greater their risk for suicide ideation and attempts in adulthood. The odds of suicide ideation were 1.7 times higher among those with one ACE, 2.3 times higher among those with two ACEs, and 3.1 times higher among those with three or more ACEs when compared with those who had not experienced any ACEs. The odds of attempting suicide in adulthood increased 1.6 times among those with one ACE, 2.0 times among those with two ACEs, and 3.5 times among those with three or more ACEs when compared with those who had not experienced any ACEs.[28]

State and local level data.

The North Carolina Violent Death Reporting System (NC-VDRS) provides data on fatal suicides. NC-VDRS is a population-based surveillance system that contains detailed information on violent deaths. These data reveal important differences between

Table 1: Cumulative measure of ACEs and prevalence of suicide ideation and attempt in a national sample

# ACES	Suicide ideation prevalence	Suicide attempt prevalence
none	8%	2%
1	14%	3.5%
2	19%	4%
3 or more	26%	8%

	Strata	NC Suicides with NO history of child abuse or neglect	NC suicides with history of child abuse or child neglect	*p*
N		14092	41	
Sex (%)	Male	10756 (76.3)	24 (58.5)	.013
	Female	3336 (23.7)	17 (41.5)	
Average age (mean(SD))	Average age	47.72 (18.03)	29.44 (15.84)	<.001
Victim has current diagnosed mental health problem	Yes	6679 (47.4)	28 (68.3)	.012
Victim currently in treatment for a mental health or substance abuse at time of incident	Yes	5783 (41.0)	22 (53.7)	.139
Victim has history of every being treated for mental health or substance abuse problem	Yes	6729 (47.8)	28 (68.3)	.013
Victim disclosed to another person their thoughts/plans to commit suicide within the last month	Yes	3700 (26.3)	15 (36.6)	.186
Victim has a history of attempting suicide before fatal incident	Yes	2219 (15.7)	17 (41.5)	<.001
Victim experienced a crisis within two weeks of the incident, or a crisis was imminent w/in two weeks of incident	Yes	5212 (37.0)	25 (61.0)	.003
Problems at or related to school appear to have contributed to the death	Yes	130 (0.9)	5 (12.2)	<.001
A recent eviction or other loss of the victim's housing, or threat of it, appears to have contributed to the death	Yes	295 (2.1)	3 (7.3)	.075
Victim had a history of suicidal thoughts or plans	Yes	2952 (20.9)	20 (48.8)	<.001
Victim had relationship problems with a family member that appeared to have contributed to death	Yes	743 (5.3)	14 (34.1)	<.001

Table 2: Suicides with a history of abuse, neglect, exposure to violent environments, or inadequate supervision as a child compared to suicides without a history of abuse, neglect, exposure to violent environments, or inadequate supervision.

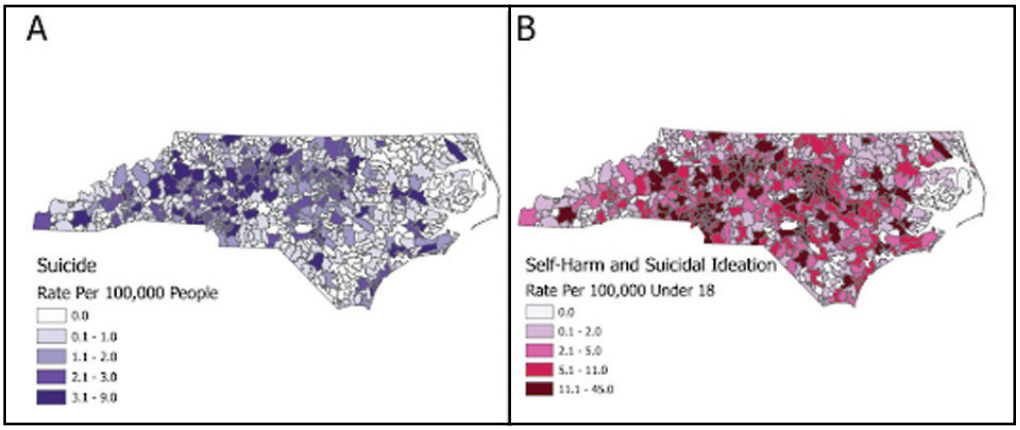

Figure 1: Map of (A) Suicide and (B) Self-Harm and Suicide Ideation (SUSI) Emergency Department Visits at the zip-code level. Suicide data are from NC-VDRS 2004 to 2018 for all ages and Emergency department data are from 2008 to 2018 and restricted to those under age 18. Suicide data was not restricted by age due to small sample sizes at the zip code level.

those who died by suicide and had a history of child abuse, neglect, or trauma and those who have died by suicide without an abuse history. Compared to those who died by suicide and did not have a documented abuse history, those with an abuse history who died by suicide were more likely to be female (41.5% vs. 23.7%), younger (mean age: 29.4 vs 47.2), and die by firearms (65.9% vs. 59%) (Table 2). In addition, suicides with a history of child abuse, neglect, or trauma were significantly more likely to have been diagnosed with a mental health problem (68.3% vs. 47.4%), have a history of being treated for mental health or substance abuse (68.3% vs. 47.8%), have a history of prior suicide attempts (41.5% vs. 15.7%) and suicidal thoughts (48.8 vs. 20.9%), have experienced a crisis within two weeks of the fatal incident (61.0 vs. 37%), have experienced problems at school (12.2% vs 0.09%), have experienced the threat of losing housing (7.3% vs. 2.1%), and have experienced problems with a family member (34.1% vs. 5.3%) (Table 2). Suicides with a history of child abuse occurred more frequently in later years of surveillance (2016 to 2018) than suicides without a history of child abuse, suggesting an increase in suicidal events related to ACE (p-value=0.027). Crude estimates of suicide show the highest rates in the western part of the state, with significantly elevated rates in the northwest and southwest parts of the state (Figure 1). In contrast, emergency department visits for self-harm and suicidal ideation (under age 18) were concentrated in eastern NC rather than western NC. The elevated suicide rate in Western NC highlights the need for more health interventions targeted at suicide, and the upstream factors like ACE that contribute to fatal outcomes.

Data on nonfatal suicidal behaviors were based on emergency department visits. Emergency department (ED) visits for North Carolina residents in 2019 were obtained from the Sheps Center [insert more language]. Suicidal behavior was coded based on certain ICD-10 codes. Proxy ACE determinants were also coded based on ICD-10 Z codes, and included problems related to education and literacy, problems related to employment and unemployment,

Table 3. Crude and adjusted relative Risk (RR) showing association between 2019 ED visits for suicidal behavior (n=63729 visits) and individual proxy ACEs for youth in NC

	NC						WNC					
	Crude RR	95%CI		Adj. RR	95%CI		Crude RR	95%CI		Adj. RR	95%CI	
Z55 Problems related to education and literacy	1.31	0.99	1.73	1.12	0.85	1.47	1.99	0.64	6.18	1.75	0.56	5.46
Z56 – Problems related to employment	2.45	0.61	9.79	1.97	0.49	7.89						
Z59 – Problems related to housing and economic circumstances	2.13	1.50	3.04	2.13	1.49	3.03	0.95	0.13	6.72	1.26	0.18	8.97
Z60 – Problems related to social environment	2.03	1.74	2.37	1.73	1.48	2.02	2.40	1.24	4.62	2.15	1.11	4.16
Z62 – Problems related to upbringing	2.94	2.68	3.22	2.57	2.34	2.81	3.51	2.63	4.70	3.57	2.66	4.77
Z63 – Other problems related to primary support group, including support	2.21	1.93	2.53	1.88	1.65	2.16	2.30	1.23	4.28	2.07	1.11	3.86
Z65 – Problems related to other psychosocial circumstances	3.91	3.40	4.50	3.63	3.15	4.17	3.16	1.64	6.09	3.27	1.68	6.36

Adjusted models include: age, race, ethnicity, and gender. NC= North Carolina, WNC=Western

occupational exposure to risk factors, problems related to housing and economic circumstances, problems related to the social environment, problems related to upbringing, problems related to primary support group including family circumstances, problems related to certain psychosocial circumstances, and problems related to other psychosocial circumstances. A Poisson regression model was applied to estimate the association between suicidal behavior and individual proxy ACEs, while controlling for age, race, ethnicity, and sex. The models were first assessed for the entire state of North Carolina and then subdivided to only include the WNC region.

Table 3 provides the results for the association between suicidal-related ED visits and individual ACEs for young people (< 18 years). In NC, the excess risk of suicidal behavior was higher among those with an ED visit associated with housing and economic problems (aRR: 2.1, 95%: 1.5, 3.3), problems with social environment (aRR: 1.7, 95%:1.5, 2.0), problems with upbringing (aRR: 2.6, 95%CI: 2.3, 2.8), problems with family circumstances (aRR: 1.9, 95%: 1.7, 2.2), and other psychosocial circumstances (aRR:3.6, 95%CI:4.2) (Table 1). ACEs risk patterns among young people reporting to the ED for suicidal behavior were similar in WNC. Youth in WNC who exhibited problems with upbringing were 3.6 times more likely to visit the ER for suicidal behavior compared to youth without a problem with upbringing. The use of Z codes as proxy ACES provides additional context on the social determinants of health surrounding psychological diagnosis in young people and adults.

Challenges in ACEs research and suggestions for future directions

Although research on ACEs has flourished over the last couple of decades, this research is not without its limitations.[29] One of these limitations is related to the measurement of ACEs. Since the CDC-Kaiser Permanente Study, efforts have been made to standardize the measurement of ACEs.[1] The most commonly assessed ACEs include physical, sexual, and emotional abuse; physical and emotional neglect; and five household challenges including living with a family member with mental illness or with substance abuse problems, being exposed to interparental violence or parental divorce, and having a family member incarcerated. Yet not all studies assess all of these ACEs and some studies have included other important yet neglected ACEs. This latter point is important because many aspects of childhood adversity result from social inequalities and poverty yet often have not been included in the measurement of ACEs. The article published in this issue by Donovan and colleagues elucidates the need to expand the focus of ACEs to include other traumatic life events such as immigration-related experiences. Also, we need more studies on ACEs in samples with greater diversity in terms of sexual orientation, gender identification, and race/ethnicity.

Another limitation of ACEs research is its deficit focus. More research is needed that examines resiliency or protective factors, such as cognitive ability, academic engagement, social competence, the ability to regulate emotions, family cohesion, and stability, and high-quality peer relationships.[30] ACEs researchers can be guided by work on resiliency in the face of cumulative early adversity[31-33] to help determine factors that may protect against negative effects of ACEs and account for variations in response to trauma. This work will be important to identify what factors help buffer the negative impact of ACEs, as these protective factors can be targets for secondary preventive interventions to reduce the negative consequences of ACEs.

ACEs research also can be enhanced by longitudinal research designs. Most research on ACEs has relied on cross-sectional data and therefore cannot establish causality with ACEs and suicidal ideation, suicide, or self-harm. Cross-sectional surveys are also limited by reporting biases introduced by retrospective self-reporting of health information. Further, the majority of research to-date has relied on single adversity or cumulative risk scores to examine the association between early adversities and later in life health outcomes. Yet, it is likely that the varied combination of ACE indicators or the co-occurrence of specific ACEs exerts a differential effect depending on the health outcome under study. Person-centric approaches, like latent class analysis, might prove useful in identifying the underlying patterns between select ACEs to better identify leverage points for more targeted place-based health interventions and policymaking. Lastly, the use

of Z codes referred to as the other social conditions that may be the focus of clinical attention in the latest edition of the International Classification of Diseases-10 may serve as a useful proxy for ACES at the population level given the expense of longitudinal survey collection of these data. Z codes may shed light on the graded association between social conditions and clinical diagnosis (e.g., mental disorder, chronic health condition) and can be used to track population health trends over time.

Because ACEs are common and associated with a multitude of public health problems, including suicide, a framework for surveillance similar to the CDC's Behavioral Risk Factor Surveillance System and the Youth Risk Behavior Surveillance System is needed nationwide to assist in understanding and translating results into public policy and prevention. The state of Washington became the first state to enact policy using findings from ACEs research to enhance community capacity and prevention strategies using evidence-based home visiting programs to improve childcare and learning opportunities in early development.[34] In NC, funding from the CDC to reduce child maltreatment has promoted the use of evidence-based programs like the Triple P Positive Parenting Program. Such programs can be leveraged statewide to reduce ACE exposures beyond the end of CDC funding.

Conclusion

In sum, a large body of research indicates that ACEs are prevalent and associated with adverse outcomes. In this article, we reviewed some of the literature on ACEs and the associations between cumulative ACEs and individual ACEs with one of the leading public health problems in the US, suicidal behaviors. Our own research using secondary data at the national, state, and local level highlights the importance of this topic and suggests ideas for future directions.

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Repercussions of ACEs and Immigration-related Trauma on Latinx Communities in Western North Carolina: Promotion of Resilience Through Culturally Relevant Services

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ABSTRACT

Trauma-focused research and literature in the 21st century have concentrated on Adverse Childhood Experiences (ACEs) following the publication of a groundbreaking study that demonstrated the significant and long-lasting effects of childhood trauma. Recent studies, however, indicate that focusing exclusively on ACEs risks failing to capture other traumatic experiences not specifically assessed by these screenings, e.g., immigration-related trauma. In new destination areas for Latinx immigrant settlement, like the rural mountain communities of Western North Carolina, the lack of culturally appropriate, trauma-informed services available to support immigration-affected families has the potential to create far-reaching consequences. This article considers the implications of the current dearth in culturally relevant support services for Latinx immigrants in Western NC and the potential health, mental health, and educational repercussions if immigration-related trauma goes untreated. The discussion concludes with recommendations for improving services by employing resources specific to the region and by promoting the strengths and resilience of the Latinx community.

Introduction

Studies demonstrating the significant and long-lasting impact of childhood trauma on physical and mental health resulted in researchers from various disciplines turning their focus to Adverse Childhood Experiences (ACEs). Recent findings of research conducted with Latinx immigrants, however, indicated that focusing exclusively on ACEs may result in other traumatic life experiences being omitted from adequate consideration.[1-3] Specifically, immigration-related trauma described by the triple-trauma paradigm explains the various ways that immigrants are exposed to potentially traumatizing situations before, during, and after the immigration process.[4,5] These trauma experiences may go undetected if conventional ACEs screening

tools are used rather than more comprehensive trauma instruments.[1] The repercussions of untreated trauma and chronic stress on the Latinx immigrant community have the potential to affect families for generations to come. Given the rapid growth in Latinx community members in many rural areas of North Carolina,[6] it is imperative for researchers and service providers to investigate and proactively respond to the needs of this community as it continues to grow. This article provides relevant background information with respect to the Latinx immigration-affected community in North Carolina, an analysis of current immigration literature, challenges capturing information on immigrant/immigration-related trauma, pertinent data from relevant organizations impacting immigrants, and suggestions for future practice and research.

Background Information

The Growing Latinx Immigrant/Immigration-Affected Community in North Carolina

According to the 2020 Census, the Latinx/Hispanic population has surpassed 62.3 million individuals nationwide, an increase of 23% since 2010.[7] Growth in this population is reflected in individual states more dramatically. As a new destination state for U.S.-born Latinx and Latinx immigrant communities, North Carolina's Latinx/Hispanic population grew by 40% from 2010 to 2020, notably faster than the national average.[8] Latinx immigrants comprise roughly 39% of North Carolina's total Latinx/Hispanic population. Although the Latinx/Hispanic population is smaller in rural North Carolina counties, several rural areas have seen faster growth than in larger counties over the past 30 years. Counties that contain urban centers such as Mecklenburg and Durham continue to have the largest numbers of Latinx residents; however, the Latinx community comprises a larger proportion of the total population in some rural counties of North Carolina.6 This distinction is significant given that less populated rural counties tend to have fewer resources, particularly culturally and linguistically appropriate services, making it more difficult for Latinx families settling in rural areas of new destination states to access needed support.[9-11] Much of the growth in the Latinx/Hispanic population in North Carolina in recent years is a result of the native birth rate rather than immigration. However, the ongoing effects of immigration on second and third generation Latinx community members should not be discounted. One study of Latinx immigrants in a new destination state in the Southern U.S. found that native-born youth experienced fear of deportation due to their parent(s) or other family members' undocumented status.[9] The constant concern and uncertainty around loved ones' security has the potential to become chronic stress, especially when there are inadequate protective factors present.

Trauma, Chronic Stress, and Health and Functional Challenges

Research indicates adverse experiences and chronic stress in childhood/adolescence can lead to health and functional challenges.[12-15] The mechanisms involved in these relationships are quite complex. Genetic and epigenetic vulnerability to chronic stress can lead to dysfunction in the body's stress response systems, immune functioning, and brain development, increasing the risk for psychological, neurological, and physical problems.[12-15] Environmental factors can either buffer or aggravate these psychobiological dysfunctions. Such factors include parenting characteristics, supportive relationships, and social determinants of health such as poverty, food insecurity, community violence, discrimination, and marginalization.[16,17]

In recent years, researchers have focused on adverse childhood experiences (ACEs) and their association with mental and physical health conditions, risk behaviors, and educational outcomes. The specific ACEs explored in much of this research have included physical, sexual, and emotional abuse, physical and emotional neglect, a caregiver with mental illness, maternal violence, divorce or separation of parents, substance use in the home, and/or incarceration of a caregiver. The seminal study on ACEs was conducted with a predominantly White adult sample.[18] Other large studies, with greater representation of non-White individuals, have supported significant correlations between ACEs and chronic disease, such as obesity, diabetes, coronary heart disease, stroke, asthma, COPD, cancer, kidney disease, depression, and anxiety. These studies also found links between ACEs and risk behaviors that affect health including alcohol/

illicit substance use, smoking, and/or high-risk sexual practices.[19-23] In a sample comprising several U.S. Latinx subgroups, Llabre et al[24] reported significant positive associations between ACEs and BMI, coronary heart disease, COPD, cancer, depression, alcohol use, and smoking.

"...children who had experienced adverse events prior to age eight had elevated inflammatory biomarkers at ages 10 and 15."

Slopen and colleagues[14,15] demonstrated that children who had experienced adverse events prior to age eight had elevated inflammatory biomarkers at ages 10 and 15. They posited that inflammation at such early ages could explain long-term health effects in adults. Additionally, these researchers reported that elevated inflammatory biomarkers correlated positively and significantly with behavior problems.[15] McKelvey et al[25] found that ACEs occurring prior to or during the toddler years predicted obesity, respiratory problems, routine medication use, and lower parental health ratings for children by age 11. The researchers argued that these findings were disturbing since childhood obesity correlates with adult obesity, and obesity increases risks for other chronic medical conditions. Finally, other researchers have linked ACEs with depressive symptoms beginning in childhood/adolescence.[26, 27]

Scholars have focused efforts on exploring the impacts of ACEs on various educational outcomes. With one in four school children in the U.S. having gone through at least one kind of traumatic experience that could affect learning and behavior, it is imperative that our nation's educators, childcare providers, and other school personnel receive adequate training in trauma-informed practices.[28] Traumatized students are more likely to experience difficulty in self-regulation, hypervigilance, mistrust of adults, and other inappropriate social interactions.[29,30] Often lacking the ability to express difficult emotions in a healthy manner, these children may express their anguish through avoidance, aggressive behavior, or shutting down. If teachers are unaware of the possible root causes of these behaviors, it can lead to misunderstandings, loss of valuable learning time, and ineffective intervention strategies. On a neurological level, students have difficulty learning if they do not feel safe and cared for in their school environment.[31] When teachers and school environments as a whole are proactive and supportive of the needs of students with a variety of traumatic and ACEs, school can become a place of safety and belonging for all students leading to better learning outcomes. When immigration-related trauma is left out of discourse, however, the growing number of students impacted by these experiences may be overlooked and therefore not receive crucial support and services.

Poor academic achievement and failure to graduate from high school are related to early adoption of risk behaviors and long-term economic, psychological, and physical health problems.[32] Specifically, research links ACEs with poor school attendance, less engagement in learning, behavior problems, students requiring an individualized educational plan (IEP), lower academic performance, and grade retention.[32-34] ACEs were also found to be negatively associated with cognitive flexibility in college students, indicating educational impacts into adulthood.[35] Of particular relevance to this discussion on Latinx immigrants, there is evidence that immigration status is a predictive factor for school drop-out, even when controlling for other potential explanatory factors (including standard assessments of childhood trauma). This demonstrated correlation between immigration status and high dropout rates may be, at least in part, due to immigration-related trauma but this was not specifically assessed.[36]

Analysis of Current Immigration Literature

Immigration-Related Trauma and Outcomes

Of particular interest to helping professionals working with Latinx/Hispanic individuals and families are the long-term impacts of the migration experience on immigrants as well as subsequent generations of their families. Research has demonstrated that trauma is common before, during, and following migration to the United States,[4] and that traumatic experiences are not limited to people who meet the legal definition of refugee or asylum seeker.[37] United States Citizenship

and Immigration Services classifies a person leaving their country of origin to resettle permanently elsewhere into various legal categories or statuses, including asylee, refugee, and alien or noncitizen.[38] According to legal definitions as well as current cultural and political context, immigrants are distinguished from refugees or asylum seekers by the stipulation that they have chosen to emigrate. Quantitative and qualitative research has demonstrated, however, that immigrants arriving in the US, particularly those coming from South America and the Northern Triangle of Central America (El Salvador, Guatemala, and Honduras), have made this "choice" in order to escape violence, political and economic instability, and other deleterious circumstances due to a real or perceived lack of alternative options.[39,40] Although many of these immigrants do not meet the criteria to qualify for protected statuses, the evidence indicates that many of them still face some of the same traumatic experiences recognized among refugee and asylee communities. Even in the best of circumstances, when immigration is an informed and well-planned decision, the act of leaving behind family, social support, culture, and language to settle in a new place where they are likely to encounter discrimination due to ethnocentrism, nativism, and racism is a potentially traumatizing experience.[5]

In 2019 (the most recent year for which data are available), more than 124,000 migrants from the Northern Triangle region of Central America filed for asylum in the United States; only 7,622 people from the same region were granted asylum that year.[41] The low rate of asylum approvals results in many of these traumatized individuals being denied the protections of legal status and either being forced back to a dangerous situation in their country of origin or remaining as undocumented persons in the United States.

Understanding that immigration is not a discrete stressful life event and often can be preceded and followed by much adversity, researchers have studied health impacts relating to pre-migration, migration journey, and post-migration stressors and trauma. Stressors and trauma considered in this body of research have included extreme poverty, family separation, sexual and physical violence, state-sanctioned or organized crime, political persecution, anxiety about deportation, discrimination, language and cultural barriers, loss of heritage, and disproportionate exposure to substandard housing, difficult working conditions, unstable income, and food insecurity.[17, 39-43] While sexual and physical violence are included in traditional ACE screening tools, most of these other stressors and traumatic events are not.

Cardoso[44] conducted a mixed method study to explore the experiences of trauma among a sample of unaccompanied migrant youth from the Northern Triangle and Mexico. The youth were recruited from a Communities in Schools program, and the researcher sought to determine trauma exposures at each stage of migration, presentation of mental health symptoms, and any coping strategies employed by the youth. More than half of the participants met the criteria for PTSD and, even the youth who did not meet clinical criteria, acknowledged trauma exposure with a mean of more than 8 trauma exposures per youth. In a study with 97 primarily Central American immigrants who were seeking asylum, Mercado et al[45] found that 70% reported a history of crime-related trauma and 46% a history of physical or sexual trauma. Though trauma exposure did not relate significantly with lower ratings of self-reported health, post-traumatic symptoms did.

Multiple studies link chronic stress in Latinx immigrants with PTSD and other mental health diagnoses. Three groups of researchers reported associations between chronic worry about immigration policies and/or perceived discrimination and poorer health ratings, anxiety, nervousness, and sadness in Latinx immigrant and immigration-affected individuals.[43, 46, 47] Findings from a study by Perreira and Ornelas [42] correlated pre- and post-migration factors with greater risk for PTSD among a sample of Latinx immigrant families living in North Carolina. Among the parents, higher risk for PTSD was related to living in poverty before migration while the adolescents were at a higher risk if they reported perceived discrimination and living in an unsafe neighborhood post-migration.[42] Rates of PTSD symptoms were low for both adolescents and parents in the study, but the association between adverse experiences and greater risk for PTSD was significant in both cases. Sangalang and colleagues found that post-migration trauma resulted in a similar increase in psychological distress among refugees and non-refugee immigrants. Interestingly, they reported an

increase in the risk for depressive disorders only for the non-refugee immigrant study participants and not for the refugee group.[37] The researchers hypothesized that the latter findings are indicative of the experiences of undocumented immigrants, who face greater uncertainty and often have less access to support resources than those who qualify for refugee status. After commonly facing difficult circumstances leading to the decision to emigrate and harrowing experiences during the migration process, immigrants in the U.S. often "encounter threats of deportation, ineligibility for government services, and anti-immigration rhetoric", amplifying the cumulative effects of trauma on their mental health.[37](p.914)

Moving Beyond Conventional ACE Instruments to Capture Immigration-related Trauma

Numerous research projects have demonstrated that anti-immigrant rhetoric, a climate of anti-immigrant sentiment, and the near-constant threat of immigration enforcement by the U.S. Immigration and Customs Enforcement (ICE) or other law enforcement agencies constitutes psychological violence.[1,48,49] Research links chronic immigration-related stress with negative outcomes similar to those of ACEs and other trauma exposures; however, traditional trauma screening tools do not assess for these unique experiences.[48] Evidence suggests that detecting immigration-related trauma requires targeted questioning.[1] Neither the conventional nor the expanded ACE scales specifically assess immigration-related adversity or trauma, which are experienced widely by Latinx youth and their families. The ACE measures currently do not acknowledge the impact of law enforcement interactions when ICE detains or deports a family member. Additionally, the ACE screening excludes the potential traumatization of being targeted by or witness to an ICE raid, separation from parents or guardians due to migration, and anti-immigrant discrimination and rhetoric.[3] The exclusion from current ACE instruments of these four domains indicates that these tools fail to capture the traumatic experiences of all children. Flores et al[3] suggest that in order for ACE measures to accurately assess trauma, they would need to incorporate the recommended four domains that are currently excluded. This recommendation was supported by another team of researchers who suggested integrating "exposure to adversity," i.e., immigration-related trauma, to ACE measurement tools to better evaluate and treat immigration-affected clients.[2]

Research has begun to explore how the effects of immigration-related trauma parallel or differ from those of "conventional" ACEs. Barajas-Gonzalez et al[48] posit that like conventional ACEs, immigration-related trauma can be categorized as threats or deprivations which result in constant vigilance. Hypervigilance produces chronic stress and the related health effects. Another interesting analogy drawn by Barajas-Gonzalez and colleagues,[48] between the emerging research on immigration-related family separation and that of more established research on parental incarceration, paints a picture of analogous outcomes. The traumatic separation of incarceration can result in stigma and strained familial relationships. It also creates additional logistical challenges for the family including reduced income and instability of childcare, school, and housing arrangements, circumstances that also apply to families separated by immigration-related detention or deportation.[48]

To increase the understanding of Latinx trauma experiences and improve treatment options, research and evidence-based practices must also consider adversity through the lens of racial and ethnic disparity. According to Liu et al.,[50] White youth reported lower numbers of ACEs and more protective factors, and exhibited better overall health than their Black and Latinx counterparts.[50] To better serve marginalized communities and improve the well-being of all children, trauma screenings must be sensitive to the adversity and trauma experienced by immigrants. Like other children affected by ACEs, immigration-affected youth may experience a great deal of adversity and simultaneously develop healthy tools for adaptation. It is imperative that we understand the cultural protective factors that promote resilience, including aspects of cultural identity, that can interrupt the negative health outcomes and trauma effects on youth.[50]

Evidence of Immigration-related Trauma in Our Local Context

Education System

Yolanda Adams (co-author) has nearly a decade of experience in the Watauga County School system, first as an interpreter and more recently as the ESL Family Resource Coordinator. During this time, she has noted that a large percentage of Latinx students in Watauga County Schools who come from immigrant families are below grade level for reading and math, with many students performing several grades below their grade level. Instead of this gap getting smaller as students progress through the school system and receive ESL services and accommodation, the gap in achievement tends to widen over time. It is common for students in 7th or 8th grade to be at a 2nd or 3rd grade reading level, and many of these students are not receiving the emotional support they need to succeed academically. Some of the new students registered in the school system are unaccompanied minors moving into the households of distant family members or family friends who are essentially strangers; in some circumstances, these awkward new living situations come as a relief after the youth spent weeks in an immigrant detention facility. These youth are forced to adjust to an entirely new life and expected to adapt to the American school system while dealing with an array of difficult emotions. All the while they are also expected to perform at the same level as other students who have not experienced immigration-related trauma.

The increase of Latinx students in our local school system in Watauga County mirrors that of North Carolina's Latinx population as a whole. With the current Latinx student population at 9%,[51] it is imperative that our school system adapt and grow in response to changes in student body demographics. Section 1301 of the Every Student Succeeds Act (ESSA)[52] states that the program's purposes are:

…to ensure that migratory children receive full and appropriate opportunities to meet the same challenging State academic standards that all children are expected to meet; to help migratory children overcome educational disruption, cultural and language barriers, social isolation, various health-related problems, and other factors that inhibit the ability of such children to succeed in school.[52]

This legislation paired with our community's commitment to support trauma-affected families provides a mandate to address the unique educational needs of children from immigrant families.

In recent years, movement towards trauma-informed communities has spread throughout North Carolina, paving the way for more effective prevention, recognition, and treatment of trauma within agencies and community organizations.[53] Presnell[53] highlights the important work Watauga County Schools began in 2015 in collaboration with local youth-serving organizations to make classrooms and schools more sensitive and responsive to students impacted by trauma. While this was a significant step forward in creating learning environments that aim to meet the needs of all children, the resources utilized to educate our teachers on trauma continue to be limited to the criteria presented by standard ACE instruments; and the experiences of many of our students who have immigration-related trauma will likely go undetected. Immigration-related trauma must be assessed along with other forms of ACEs in order for school personnel to address the unique educational needs of many immigrant and Latinx children. While across the board screening of children for ACEs in the school setting would be challenging, training school personnel on an expanded and comprehensive set of ACEs would help create a school environment equipped to provide a high-quality, comprehensive education where all children can succeed.

Our school systems have resources in place, including counselors, social workers, and psychologists, to address student needs; however, targeted support and intervention often does not occur until a problem or red flag is identified, which could take years. Our school systems need to be proactive by putting systems in place that assess new students' needs when entering the school system. In rural areas like Watauga County, it is also uncommon to find both bilingual and culturally competent counselors and social workers.[54] This presents yet another barrier to service delivery as many Latinx students may not find adults within the school system with whom they are able to build rapport, limiting the crucial support and advocacy needed to succeed not only within the school system but in their personal lives.

Mental Health

Sarah Donovan's (co-author) practice experience of more than 15 years as a social worker in the High Country of Western North Carolina informs her opinion that mental health services remain the most overlooked and under-resourced area of service provision currently affecting the Latinx community. A standard web search turned up only one local private provider who advertises Spanish-language mental health services. Personal knowledge of resources in this small community confirms that bilingual mental health clinicians are rare and often limited to graduate students placed temporarily with established providers during internship training. Personal communication with non-profit health providers in the region indicates that behavioral health services are mostly available to Latinx immigrants on a sliding pay scale, but at the time of publication these agencies did not have Spanish-speaking clinicians, resulting in these services being provided to monolingual Spanish speakers via interpreter (Derrick Vela, email communication, October 21, 2021). The largest community mental health provider in the region reported that between January 1 of 2020 and December 26 of 2021, a total of 4,200 clients were served in the High Country region of North Carolina (Watauga, Ashe, Avery, and Alleghany counties); of that total number, only 73 self-identified as Hispanic/Latinx, which accounts for just 1.7% of the clients served (Daniel Platt, MSW, email communication, December 27, 2021). The 2020 Census Bureau report55 estimates the Hispanic community in these four counties as 6.7% of the total population (7,321 out of 109,357 people), suggesting that the percentage of Hispanic/Latinx clients served by community mental health providers is disproportionately low compared to the estimated number living in the community.

Given North Carolina's status as a new destination area for Latinx immigration (even more so in the rural counties of the state), it is reasonable to assume that the traumas of migration described in previous sections of this paper apply to a majority of the Latinx population in this region. The disproportionately low number of Latinx people receiving mental health support services suggests there is likely a significant number of Latinx immigration-affected community members who have not received treatment for trauma and related mental health disorders resulting from the triple-trauma paradigm of immigration. The authors' observations within our region suggest that barriers to mental health services for the Latinx immigrant community of the High Country include, but are not limited to: scarcity of culturally and linguistically appropriate services, cultural stigma related to receiving professional mental health support, lack of insurance coverage or other financial means to pay for services, and unpredictable work schedules that rarely provide flexibility for healthcare appointments.

Recent initiatives to encourage immigration-affected Latinx community members to access behavioral health supports, including some coordinated by the authors of this article, are well-intentioned and provide momentum toward the goal of improved services for all community members. These efforts, however, may find limited traction if the barriers to services for Latinx immigration-affected community members are not acknowledged and addressed.

Healthcare

As a family nurse practitioner who has worked in community health in the High Country for over a decade, Melinda Bogardus (co-author) has cared for many Latinx individuals and families, most of whom are immigrants or immigration-affected. Many of these individuals and families face multiple challenges in day-to-day life: poverty, job and wage instability, lack of paid time off, food insecurity, poor housing, limited or no transportation, language barriers, and lack of understanding of local institutions and services. Latinx immigrants who are undocumented express fear and anxiety about encounters with law enforcement and deportation; some share distress over discriminatory treatment. Many limit their use of services and avoid traveling distances to see specialists due to practical factors (e.g., lack of insurance, transportation, and paid time off) but also due to concern that applying for resources, like Medicaid and SNAP, and traveling far distances to unfamiliar places might result in deportation and separation from their children. Because they often cannot travel to their home countries, many share distressing stories of close family members becoming ill or dying and not being able to give them direct care or even attend their funerals. Such persistently difficult

and stressful circumstances and experiences no doubt contribute to the high rates of chronic disease and risks for such disease that are seen in these patients, in particular uncontrolled type 2 diabetes, elevated cholesterol, high blood pressure, obesity, and depressive and anxiety symptoms.

Though preventing and treating chronic physical conditions in this population is challenging, supporting mental health in Latinx immigrants is particularly difficult in our region due to the lack of bilingual-bicultural mental health service providers. The local mental health provider discussed above not only lacks bilingual-bicultural staff, crisis workers, and providers, but generally employs just one Spanish-English interpreter for multiple locations. Supporting Spanish-speaking patients reporting suicidal thoughts is challenging when calls to the crisis hotline do not yield an interpreter for the intensive assessment needed. Even practitioners who can speak Spanish are not typically trained to interpret for mental health-related crises; though our experience is that this is often necessary. Similar limitations occur when trying to connect Latinx immigrant non-English-speaking patients to intimate partner violence (IPV) shelters. Of the three IPV shelters in our region, just one currently employs a full-time bilingual-bicultural victim assistant. Due to the lack of bilingual-bicultural mental health and IPV workers in our region, there are too many missed opportunities in helping Latinx immigrants to overcome feelings of stigma, other cultural barriers, and fears to get care in psychiatric units or safety and support in IPV shelters. This leaves many Latinx immigrant adults and their children vulnerable to further trauma and chronic stress.

Suggestions for Future Practice and Research

Tapping into resilience, strength, and community resources

Much of this article has focused on the many challenges and barriers Latinx/ Hispanic individuals, both immigrant and immigration-affected, face in general and specifically in new settlement areas like the High Country of western North Carolina. We now shift our focus to the many strengths that Latinx immigrants settling in this region possess. Recognition of the many assets, skills, and accomplishments of this community informs our suggestions for expansion of services for the growing Latinx population in our region. In our capacities as educators, family and student advocates, social workers, and nurses, we have had the privilege of connecting with and learning from countless members of this community. We have witnessed incredible resilience in the face of trauma and on-going stressors: resilience to continually work hard; to value, support, and provide for their families; to sacrifice so that younger generations can study and plan for brighter futures; to share their cultural practices and customs proudly with others; and to transmit this cultural pride to posterity. We believe that our observations are not unique to our community; recent research supports the importance of building upon strengths to buffer the negative effects of trauma and chronic stress.

Cardoso[44] found that Latinx youth employed both adaptive and maladaptive coping strategies. Participants specifically discussed religion, positive distractions (e.g., participating in sports, listening to music), and family and other social supports as the most helpful strategies for coping, findings also supported by other research.[56,57] Notably, adaptive coping strategies have been found to protect youth from turning to substance use as a coping mechanism.[44] Positive parenting behaviors in Latinx immigrants are correlated with social support, as well as with maintenance of cultural identity and values and integration into a new cultural context.[58] Dixon de Silva et al[26] reported that the cultural value of familism, or family cohesion, partially mediated the relationship between experiencing traumatic events and reporting internalizing and externalizing symptoms for a sample of rural Latinx youth. These researchers suggested that mental health providers treating trauma-exposed rural Latinx youth should include family in the treatment and promote family cohesion as a protective factor. Guevara et al.,[59] who interviewed clinicians working with trauma-exposed Latinx youth, noted that the clinicians emphasized family-centered care, building of trust, and cultural humility as crucial components of effective care with this population.

Scholars exploring protective factors in more depth note the beneficial influences of family and cultural elements and identify additional factors in

other sociocultural contexts. In a sample of White, Black, and Latinx youth, Liu et al[50] observed that factors such as participation in community activities, school engagement, neighborhood safety, and feeling valued by a healthcare provider served as protective factors. The buffering effect was particularly strong in the Latinx youth.[50] Wilcox et al,[60] analyzing Black and Latinx adolescents' perceptions of prominent influences on their health and risk behavior, reported that issues surrounding justice, power and control, and discrimination and racism impeded their resilience. Cultural adherence, identity, cohesion, and access to material resources promoted resilience in the youth studied. The researchers argued that resilience, therefore, depends not just on individual characteristics but multiple contextual factors.

Research and practical application in a local context

In order to better understand and implement programs or intervention models to strengthen protective factors and reduce negative impacts of adversity on Latinx/Hispanic individuals and families, further research is required. In our local context, this group of authors noted that data collection related to conventional ACEs and immigration-related trauma, as well as associated outcomes, would be useful to inform our work on the micro level. We also noted that despite a number of excellent trauma-specific community initiatives in our region, we were unable to identify coordinated, proactive efforts to assess children and families for trauma or protective factors. Nor could we locate any accessible bilingual-bicultural professionals licensed and equipped to provide psychological therapy and other specialized trauma-informed treatment for Latinx immigrant children and families.

These observations point to the need not only for research, but also grassroots advocacy work moving forward. One such area of advocacy work is in the coordination and implementation of trauma screenings and strengths assessments as a regular component of childhood evaluations. For example, research suggests that pediatric nurses can employ specific trauma screenings as needed, or perhaps as an extension of other routine mental health/developmental screenings, to determine if somatic symptoms are manifestations of emotional trauma. Motivational interviewing techniques can also be used to identify strengths needed to build resilience.[61] Other research focuses on schools as the primary and most consistent setting in which children can be screened for trauma and protective factors. School nurses, social workers, counselors, teachers, and administrators can all play a role in ensuring adequate screening of children to detect the presence of trauma experiences but also, and perhaps more importantly, to determine strengths and protective factors that promote resilience.[62,63] Given the increasing data indicating potential for trauma and other mental health effects relating to immigration, students who are known to be immigration-affected should be evaluated as a component of enrollment in a new school.

Another area of advocacy work centers on building programs to train Spanish-English bilingual-bicultural mental health professionals and recruit such professionals to our communities. Coordinating and implementing trauma and strengths assessments across various settings and developing bilingual-bicultural mental health services will require intensive commitments of time and assets that may not be available to under-resourced agencies in rural, new settlement areas. Interprofessional partnerships with better-resourced institutions enables capacity-building to incorporate routine screening and expanded service provision.

Expanding university-community partnership

The expansion of traditional ACE measures to capture a wider variety of traumatic experiences, namely immigration-related trauma, is a critical component to better inform our collective efforts to equitably and inclusively prevent and/or alleviate the most damaging effects of trauma on health and well-being. Twenty-six percent of all US children have at least one parent who identifies as an immigrant.[3] A bipartisan, immigration-focused organization estimated that there are approximately 173,000 Kindergarten-12th grade students in North Carolina who have at least one undocumented immigrant parent.[64] Recent census data indicated that the Latinx population of the High Country stands at more than 7,000 people.[55] Given the evidence that trauma is transmitted intergenerationally, it is reasonable to assume that the effects of immigration-related trauma will continue to be felt in new settlement

areas like Western NC for years to come.[42-44] Within a rural community, resources needed to expand capacity for evaluation of and treatment for ACEs and other traumas are often limited. Although the growth of a large institution like Appalachian State University poses some challenges for the small mountain community in which it is located, the resources of the university also present an opportunity for partnerships to address some of these more complicated issues. Researchers within our institution are already working on educating the community about trauma and its far-reaching effects,[53] but there is potential for the expansion of these efforts to include additional data gathering, as well as the expansion of screening and treatment for target populations that are at an increased risk of trauma experiences.

As a growing number of first and second generation Latinx immigrant youth in this new settlement region reach the age of higher education and career pursuit, it will become increasingly important for local colleges and universities to recognize the assets that these students bring. The creation of specialized training programs focused on service provision for Latinx immigrants within established disciplines (e.g., social work, nursing, education) would encourage and prepare these young adults to serve their communities of origin and to help respond to the unique health needs of immigration-affected communities in new settlement areas. Through service learning, internships, and field placements, well-supervised students can both help to fill gaps in services while simultaneously preparing for a professional role in the community.

Conclusion

ACEs, immigration-related trauma, and chronic stress relate to a number of physical and mental health, risk behavior, and educational challenges in Latinx/Hispanic individuals, both foreign- and U.S.-born. Traditional ACE screening tools, and even those expanded to include some detrimental social determinants of health, do not capture trauma and stressors unique to the immigration experience and thus may neglect to identify Latinx immigration-affected individuals in need of support. Additionally, these traditional screenings do not take into account parental experiences of adversity as immigrants, nor intergenerational transmission of trauma. The paucity of local mental health providers trained to provide culturally or linguistically appropriate services to this community will become increasingly evident as the population of immigration-affected Latinx people in rural, underserved areas of Western NC continues to grow. To respond to this issue, current providers must receive specialized training to serve the unique needs of this community, especially those that are not currently being included in contemporary discussions of ACEs. To most effectively expand services for this population, community service organizations need to recruit, support, and retain teachers, social workers, healthcare workers, and other human services providers who share the lived experiences of Latinx immigrants. Colleges and universities in the region play a role in ensuring a well-trained workforce and an adequate number of new providers to fulfill local needs. Institutions of higher education need to commit resources to empower young Latinx adults to embrace their resilience and to become leaders in their community. When educational systems create inclusive, supportive spaces for immigration-affected students to succeed academically and to develop as leaders, these youth not only achieve their own goals but also become the representation that inspires others to follow in their footsteps. The aim of the proposed university-community partnership is twofold: to create short-term solutions for providing human services to those affected by trauma and to train a new generation of providers to support people who will continue to be affected by immigration-related intergenerational trauma for years to come.

Acknowledgments: The authors would like to thank the following individuals for their contributions to this publication: Daniel Platt, MSW, Lecturer of Social Work at Appalachian State University; Mollie Furman, MSW, Program Coordinator at The Mediation and Restorative Justice Center; Derrick Vela, Farmworker Health Coordinator at High Country Community Health; Lisbette Lundgren, MFT, Luna Psychotherapy; Mary Neal Meador, University Writing Center Consultant.

Acknowledgments: The authors of this article received no financial support toward the publication and have no conflicts of interest to report.

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The Watauga Compassionate Community Initiative (WCCI) – A Community Response

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ABSTRACT

The Watauga Compassionate Community Initiative (WCCI) is a local community grassroots organization that works to turn Watauga County into a trauma-informed community. Beginning with a conference in Spring 2017 to launch the initiative, WCCI has continued to grow and expand with a focus on awareness, education, policy change, and prevention. This article will detail the approach WCCI has taken to bring trauma-informed practices to our area and our directions for future growth.

"WCCI members represent over 40 different community agencies..."

The WCCI Approach

ACEs are events that occur before the age of 18 that can be traumatic and include physical, emotional and sexual abuse, physical and emotional neglect, having a parent with a substance use disorder or a mental illness, having a parent who is incarcerated, seeing your mother be physically abused, or divorce.[1] The impacts of these traumas vary depending on factors such as age, gender, previous trauma, extent and duration of the trauma, and whether there is a positive, consistent adult with whom the child has a connection.[2] Research since the Felitti et al. study[1] has identified multiple other sources of trauma, such as bullying, community violence, racism and discrimination, chronic medical issues, and traumatic grief.[2-3] ACEs are common and the more ACEs one has, the more likely the long-term negative impacts on health, wellness, opportunities, and even life expectancy. The knowledge that over 60% of people have at least one Adverse Childhood Experience (ACE) and 15% have four or more mobilized the community to work on what experts have said is a critical issue that needs our attention.[4]

In May of 2015, a group of people from youth-serving agencies in Watauga County, North Carolina began discussing how to better serve area youth. A short time

later, one of the school social workers, Denise Presnell, was pursuing her MSW and given the task of turning Watauga County into a trauma-informed community as part of that effort. Along with a team of over 20 volunteers, they planned and hosted the State of the Child Conference in May of 2017, organized around the topics of Adverse Childhood Experiences (ACEs) and resilience. Speakers in the morning sessions shared how they saw and addressed ACEs in their agencies. In the afternoon, workgroups discussed how to better recognize and treat trauma. Conference attendees were invited to a meeting a few months later to form a steering committee to continue the work, and about 60 people attended this "next steps" conversation. The Watauga Compassionate Community Initiative (WCCI) was born.

"While WCCI was founded on the concepts of adverse childhood experiences, the leadership acknowledges that trauma and resilience are lifespan issues."

For approximately a year and a half, the structure was loose and informal. Based on the discussions, Presnell then asked ten community members with whom she worked and trusted to form a leadership team. This group included directors and staff of nonprofit agencies, members of the faith community, professors from Appalachian State University, school system employees, and private therapists. Over the course of the next year, they met for strategic planning to define their vision, map out the leadership structure and process, and plan other logistical details. They developed the vision for Watauga County to be a relationship-driven, thriving, and resilient community that is knowledgeable, inspired and empowered to promote wellbeing, prevent harm, and heal from adversity–and actively address systemic injustices and historical trauma in all of its forms. In the summer of 2020, the WCCI added a racial equity statement, which describes that WCCI supports the worldwide demand for the pursuit of racial and ethnic justice, increasing the knowledge and awareness of historic and systemic racial injustices, and commits to doing the work to embrace and support anti-racist policies and practices within our organizations and community.

Currently, WCCI members represent over 40 different community agencies, including directors and staff of nonprofits, members of the faith community, law enforcement, public schools, private behavioral and mental health providers, and the medical community. All the members are volunteers with the exception of one Outreach Specialist who works ten hours a week funded through a small grant secured by the leadership team. Members meet monthly, even throughout the COVID pandemic via Zoom. In addition, members gather outside the monthly meeting times to work on more specific issues such as housing and policy change.

Initially, five working committees were formed – Awareness, Data, Events, Policy, and Prevention. These groups were modeled after the framework suggested by the Center for Disease Control and Prevention's report on "Essentials for Childhood".[5] Over time, members of the Data committee realized that data tracking is part of each work group and those members were absorbed into other groups. Recently, the members from the Policy group and the Prevention group decided to work together to address a number of goals and continue to work jointly.

For the short duration of its existence, WCCI's list of accomplishments is significant and growing. Some of these include:

- Development of a beginner's trauma and resilience presentation that has been given in the community 97 times to over 1600 people.
- Monthly newsletter recognizing partnerships with agencies; needs within those agencies, such as the need for foster care parents; highlights about WCCI members; and dissemination of information surrounding resilience skills for wellness.
- Ongoing annual conference. The conference has continued (except for the spring of 2020 when COVID caused wide-spread shutdowns), growing to its maximum attendance of 600 people in 2019. The conference was virtual in 2021 and will be a

hybrid in 2022. The conference gives people a chance to connect around the common topics of trauma and resilience impacts and interventions and provides multiple class sessions where attendees can expand their knowledge base and skills.

- YouTube videos with service providers. Initiated after the cancellation of the spring conference, "Wednesday Conversations" were started. Every Wednesday at noon, Presnell spends an hour talking with either service providers or people with a trauma history about how they see the impact of trauma, how they help people build resilience, and how they stay well. These sessions are recorded and posted on the website (see below), as well as the WCCI YouTube channel.
- A website (https://wataugacci.org) has been created that provides information about the history of the organization, gives links to press about the group's work, houses all the monthly newsletters, gives details about WCCI events, compiles listings of books and articles and websites on trauma and resilience, and is home to the recordings of the Wednesday Conversations.

Other more recent and ongoing achievements include:

- Influence on systems and policy changes (i.e., addition of the Compassionate Schools Project and Daymark Recovery Service's ACEs screening at intake)
- Articles in journals and presentations at national conferences
- Elevated knowledge of ACE's in the community
- Motivated and inspired leadership at all levels in Watauga County
    - Universities
    - Schools
    - Nonprofits
    - Community
    - Health Sector
- A mobilization of community stakeholders to examine local housing conditions and gaps and propose solutions to alleviate disadvantage in this area, such as lack of available housing, lack of affordable housing, or housing that is substandard or unsafe.

WCCI has also had the advantage and benefit of working with multiple professors and student groups from Appalachian State University. Student volunteers have helped with community awareness by giving Trauma and Resilience Presentations and spreading awareness about WCCI events. Interns work daily on our social media accounts, including our Facebook and Instagram pages. Other students have assisted with analyses from WCCI archives regarding processes and membership composition and made recommendations about how WCCI could be more effective in their work.

"We believe that relationships heal and that the number one factor to offset trauma is a relationship with a positive, consistent, caring adult."

Future Efforts

Currently, the Awareness committee has the goal of expanding membership to be more diverse, particularly in regard to people with lived experience and those from disenfranchised groups. They plan to do this through community conversations and listening sessions, at least through the Spring of 2022. WCCI plans to continue to educate our community on the short and long-term impacts of trauma and resilience, with the overarching goal of reducing trauma for future generations. The Events committee is continuing Wednesday Conversations and planning the 2022 Conference, which will be a hybrid of virtual and in-person classes held in May of 2022. The theme this year is "Rooted in Resilience: Connection and Transformation." The Policy and Prevention committee is working on housing and policy change. Housing in Watauga County can be expensive and, when affordable, substandard or unavailable. WCCI members are working on policies in the workplace, examining existing family-friendly or trauma-informed policies, and networking with local businesses to help move similar policies into existence and practice. WCCI leadership team member Kellie Ashcraft helped launch a Watauga Housing Forum in collaboration with Hospitality House

of Western North Carolina and numerous sponsors, including the Blue Cross NC Institute for Health and Human Services. This collaborative group has worked to bring together stakeholders to look at local issues related to housing, identify gaps and barriers, and develop solutions that are realistic and feasible.

While WCCI was founded on the concepts of adverse childhood experiences, the leadership acknowledges that trauma and resilience are lifespan issues. We believe that relationships heal and that the number one factor to offset trauma is a relationship with a positive, consistent, caring adult. We also believe in the power of connections and community and encourage everyone we come into contact with to check on one another, provide support for one another, and be a source of compassion for others whenever possible. It will take the work of all members of our community sectors to make our community a safer, more nurturing environment for its residents. This is our long-term commitment: to reduce trauma for future generations and help one another heal and thrive.

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Developing Nonprofit Collaborations to Build Regional Capacity to Prevent ACEs and Build Resiliency in One Appalachian Region: Lessons Learned

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ABSTRACT

This article outlines an initiative initiated by funding from the North Carolina State Employees Credit Union Foundation to create impact through not-for-profit organizations on health and well-being in Western North Carolina. Appalachian State University faculty worked with community partners to identify the critical need to address adverse childhood experiences (ACEs) through not-for-profit organizations who were working with these issues. Through a process of surveying, interviewing, and discussing, three organizations were brought together with the potential to create a larger regional impact on those individuals, families, and communities impacted by ACEs.

Introduction

North Carolina's State Employees' Credit Union Foundation "promotes local and community development by primarily funding high impact projects in the areas of housing, education, healthcare, and human services."[1] After noting a lack of applications from more rural areas of the state, the Foundation approached Appalachian State University, East Carolina University, and the University of North Carolina-Pembroke to assist with a Rural Opportunity Grant. Each of the universities was awarded a $50,000 grant intended to build nonprofit capacity to address issues noted by the Foundation's board members as the most significant issues for each area.

Appalachian State University was asked

to partner in this building capacity of nonprofits in northwest North Carolina, a region defined by the Foundation, to address a salient health issue. The pilot grant program was broad and flexible in its goals but the work relied on faculty expertise to facilitate a regional advisory council that would provide expertise and make recommendations to the foundation; collaborate with experts selected to manage the broader grant program and facilitate information sharing across all three university grantees; and assess and provide trainings to build nonprofit capacity. A group of faculty from Public Administration, the Beaver College of Health Sciences/Institute for Health & Human Services, and key stakeholders began to meet. After several meetings, two Public Administration faculty with practical experience and academic expertise in program development and nonprofit management were selected to lead the project for Appalachian.

This article focuses on Appalachian State University's collaborations with community members and not-for-profits and their efforts on this project in the northwestern part of North Carolina, describing the process to date, particularly as it relates to Adverse Childhood Experiences (ACEs), which was the health issue identified in this region as the most salient. The article describes the concepts that shaped the approach to the grant process based on expertise, the process itself, and early lessons learned developed with input from the nonprofit partners tasked with developing an approach for capacity building.

"To develop a collaborative partnership, it is important to allow the organizations time to develop an understanding of each organization's strengths and approach to work."

Narrowing Scope

Public administration literature, particularly related to policy change, formed our foundational approach to filling a health policy gap. The basic policy process model suggests change happens by setting an agenda, proposing and adopting a solution, and implementing and evaluating the policy. Although the model is simply stated, the process takes a great deal of effort and support. To take full advantage of the opportunity to create change in our rural area, we understood that there had to be energy to address the issue, the ability to create meaningful outcomes, and funding to support such a project. We set about trying to understand where there might be a trifecta of Energy, Impact, and Funding.

First, to determine where there may already be an agenda and proposed solution, the team gathered information from community resources and spoke with community leaders to determine where work may be going on to address health issues in the specified geographic area. There were a number of discussions about building resilience in the communities encompassed. Additionally, there were efforts aimed at children, which would serve to build a brighter future for the area. As the team worked to narrow the focus, one of the major common denominators of work being done addressed Adverse Childhood Experiences (ACEs).

Literature suggests that policies diffuse from one unit to other like units. In other words, state-level policy will eventually diffuse to other states in the region to maintain competitiveness with their neighboring states.[2] Berry and Berry[3] suggest that policy was more likely to be adopted by other states (or diffuse) if there was motivation for innovation, fewer obstacles, and resources to overcome any obstacles. In addition to more macro-level influence, policy literature suggests that there are policy entrepreneurs, or those change makers, who also influence the system.[4] In the early phases of research to narrow the scope of this project, the team found that other southeastern states had incorporated information addressing ACES into their policies. For example, North Carolina's western neighbor, Tennessee, had developed the "Building Strong Brains" initiative, linking policies to address ACEs to the economic future of the state. In particular, Tennessee has undertaken "a major statewide effort to establish Tennessee as a national model for how a state can promote culture change in early childhood based on a philosophy that preventing and mitigating adverse

childhood experiences, and their impact, is the most promising approach to helping Tennessee children lead productive, healthy lives, and ensure the future prosperity of the state" (Tennessee Department of Children's Services, no date).[5]

North Carolina had similarly expressed interest in trauma-informed strategies. For example, the Department of Health and Human Services identified preventing trauma and ACEs and building resiliency as part of its opioid addiction prevention strategy,[6] although the plan was not as prominent as Tennessee's bold initiative. Conversations with local leaders, as well as google searches, confirmed that building resiliency through a trauma-informed approach was a recurring theme within the communities of Northwest Carolina where the team was working, however. Several of the communities had built coalitions aimed at building resilience, suggesting that there may be some energy within the process. In these coalitions, community organizations were discussing the connection between ACEs and adverse long term health outcomes, as well as existing opportunities to work through nonprofit organizations, government institutions, and private support to address them.

Given the focus on ACES at state and local levels, the topic emerged as a way to address local needs and to address the interest of would-be funders. There was evidence that the energy, impact, and funding necessary to create change may be present in Northwest North Carolina. However, given the broad geographic span of the 12 counties included in the SECU Foundation's boundaries for Northwest North Carolina, it was necessary to narrow to a smaller geographic scope, which included many community boundaries.

Narrowing Place

The 12-county region defined by the funder, is primarily centered in the Appalachian Mountains and includes counties that are about 3 hours driving distance at their farthest points. Research suggests that collaboration is difficult and requires trust to build meaningful interactions, a process which may be helped by rural areas.[7] Oftentimes collaborations that are for purposes of receiving funding result in some partner organizations feeling marginalized or co-opted,[8] making trust even more important for any organization to agree to collaboration with the faculty. Although the faculty leaders had connections in many of the counties included in the funder's region, their closest ties were in the counties surrounding the university, where each of the faculty facilitators had successful working relationships with local nonprofit, government, and business leaders.

After reviewing the coverage areas for local nonprofits, health departments and the council of governments, the faculty grantees selected a 5-county region (Alleghany, Ashe, Avery, Watauga, Wilkes). Three of the counties are overseen by the same health department, which also has some responsibility for the hospital in the fourth county. Although the fifth county is not in the same health department district, several nonprofits operate in the county and the county, the largest in the area, is also a member of the local Council of Governments.

Improving Impact

After narrowing the scope to address some aspect of ACEs within this five-county region, twelve local leaders with knowledge of relevant issues and the ability to help build community and financial support for a healthcare project were asked to serve on a Regional Advisory Council (RAC). Representatives from the following organizations participated: Hospitality House; Watauga County Schools; Blue Ridge Development Day, Alleghany County; Ashe County Social Services; High Country Council on Governments; Wilkes County Chamber of Commerce; Crossnore Presbyterian Church; Wilkes Community College—College Access; NC State Employees Credit Union; and from Appalachian State University – The Blue Cross NC Institute for Health & Human Services, Department of Marketing and Supply Chain Management, and the Department of Philosophy. After multiple discussions about known issues in the area, the Council recognized a need to understand current service activities and gaps. Through existing online resources and Google search, the university facilitators identified contact information for approximately 90 organizations with programs that could have an impact on ACES. The list was vetted

through the RAC to identify any missing organizations or misinformation. After the list was agreed upon, faculty and RAC developed a Request for Information survey to determine more about organizational operations including ACES factors addressed,[9] programmatic needs, and operating strategies, including collaborations.

One-third of the organizations responded to the Request for Information, providing details about their work in the area. After several meetings, the RAC decided that to have the most impact and be able to reach all five of the counties represented on the Council, collaboration was necessary. Additionally, to further narrow the scope of the collaboration, the RAC looked for gaps in services. Utilizing the self-reported data from the Request for Information survey, we were able to create a color-coded pivot table, or heat map, of activity in the 5-county region. As shown in Table 1, the heat map allowed for a direct comparison of the 30 organizations who responded and where gaps in services may exist in their collective programming. The data showed that while there was programming in terms of intervening to lessen harm and strengthen economic support, there was also a large need for providing quality care and changing social norms across all counties. Additionally, three counties showed a need for resources to enhance parenting skills. Looking across the five counties, Alleghany had the least amount of reported activity, suggesting that intentional effort would be needed to reach that part of the region. Lastly, a qualitative review of the responses suggested that while school aged children were the focus of a number of programs, families of children aged 0-5 faced a gap in services.

To address gaps while also building on some identified strengths across the counties, the RAC selected three organizations that showed a strong commitment to collaboration but that each had different strengths. One, the Children's Council, had expertise in serving the children aged 0-5 and their families, working primarily in Watauga but branching out to serve two of the other counties of interest through specific programs and collaboration with other Smart Starts partnerships. Second, the Health Foundation, Inc., focuses on serving the community by improving the health and well-being of Wilkes County. Lastly, the Hospitality House of Northwest North Carolina serves individuals and families experiencing homelessness and poverty-related crises across a seven-county region. These three organizations were asked to become collaborators in the project. The executive director and a senior staff member from each of the

By County

ACES Prevention Strategies	Alleghany	Ashe	Avery	Watauga	Wilkes	**Total**	Unique Organizations
Strengthen Economic Support	6	9	8	10	9	42	14
Changing Social Norms	3	4	5	7	5	24	9
Provide Quality Care	2	3	4	6	2	17	7
Enhance Parenting Skills	6	9	7	10	8	40	13
Intervene to Lessen Harm	8	11	11	11	13	54	17
Other	4	7	7	8	6	32	13
Total	29	43	42	52	43		
Unique Organizations	10	15	15	18	16		

Table 1

three organizations met regularly with the faculty facilitators to draft a plan.

The collaborating partners have some similarities but also significant differences. All three organizations had strong reputations as experts in their areas of service provision. While all were collaborative in nature, two of the organizations had not worked together previously, with the third having worked with both of the other organizations. Additionally, two of the organizations are focused on direct service provision. The third has a different focus as a funder, convener of stakeholders, and pilot projects. Furthermore, two of the organizations have missions that focus primarily on their own county while the third works across all five counties of focus and beyond. The result is different perspectives and approaches to carrying out work, particularly as it relates to the delicate balance of giving a strong voice to communities being served while also valuing professional expertise.

Of course, challenges to the project emerged along the way. First, as with most policy-making endeavors, the end goal was not entirely clear. Facilitators asked collaborators to further frame the issue that had been identified by the RAC based on the Request for Information responses. This posed challenges as two of the organizations worked almost exclusively in their own counties. Initial efforts were made to hear the voices of organizations that primarily served families of young children aged 0-5, but the onus was still on the three partner organizations to take the lead role in framing.

Additionally, while proposing funding for a capital project was the goal at the outset of the project, the focus changed over time. In conversations with the funder, the focus began to shift from proposing a long-term capital project to a proposal for a different type of funding, that of mission development. This funding would allow the partners to continue to develop the capacity to build a capital project proposal in the longer run. In the short term, however, faculty facilitators were asked to help identify and address immediate capacity building needs for the three organizations, who would then each apply for smaller grants to continue their efforts to develop a plan that collaboratively addresses ACEs across the five counties.

Covid-19 presented significant challenges. The organizations were faced with responding to current crises while being asked to plan for innovative ways to address systemic issues. Not only did the pandemic create additional operating stress on the collaborators, but it also slowed progress in building relationships among the partners. After meeting virtually for four months, the three organizations and facilitators were able to begin meeting in person, which quickly led to a significant breakthrough, as organizations were better able to communicate their perspectives as experts, demonstrate possibilities for gaining community input, and raise questions.

Lastly, working with university partners can be difficult for community organizations. Two of the organizations were based in the same county as the university and had worked with faculty, staff, and students from the university. The other organization looked forward to working with a university in close proximity. It was important for the facilitators to help coordinate the work of the group, relay information to the funders and seek guidance about any challenges from the funders, as well as remind the collaborating partners about the task at hand. This takes attention to building and maintaining trusting relationships.

Early Lessons Learned

As a pilot project, reflecting on lessons learned is important to determine a path forward. In this case, the project will continue beyond the first phase, narrowing scope and finding partners, to now a second phase of data gathering and planning. Although the funder had originally envisioned a capital project proposal as the outcome of phase one, through conversations about the process in all three areas of North Carolina, it became apparent that more than one year of planning would be necessary. It was discovered that funders who want to impact communities have to learn and adapt to community needs.

Early lessons include:

Regional approaches are different in rural communities: Regional approaches to large scale public problems are often assumed to be preferable. In rural communities, however, there are barriers – both cultural and physical – that may present challenges for

developing solutions. This is particularly true for capital projects. In this project, both RAC members and collaborators noted the differences in culture among the five counties as well as physical barriers that present challenges for developing one capital project to address ACEs in children aged 0-5. Traditionally, the nature of capital projects has been bricks and mortar.

"We envision collaborative support networks that empower individuals and families to build resilience in themselves and foster resilient and healthy communities...so that every child has a future that is healthy, connected, and full of purpose."

However, in rural communities, one capital project may not be able to serve a region, as the barriers to accessing one building could preclude many residents from accessing the facility. Instead, funders and service providers may need to think about innovative approaches to funding and service provision.

Another issue that partnering organizations noted repeatedly was that while they each had expertise and collaborative skills, additional expertise from community leaders and nonprofit professionals was also essential. The RAC's decision to rely on collaborative organizations to develop a project that would serve all five counties was deliberative. The partner organizations, however, note that not having representation from all five counties is an impediment. Developing methods to include these voices across each community and multiple organizations is important. To this end, in this project, resources are being devoted to developing a process map, or a network analysis, that will guide the partners in seeking out community members' lived experiences and expert voices from all five counties. It was noted, more than once, that there is a difference in "ground-up" development of capacity building and "top-down" development of the same. One other issue noted by the collaborators is "who is at the table?" For example, Smart Start Partnerships are critically important in the geographic area, but four of the five were not formally at the table.

Develop shared goals that honor individual missions:

Nonprofit organizations are legally bound to uphold their missions. Each organization develops plans and programs that help it to meet these missions. To develop a collaborative partnership, it is important to allow the organizations time to develop an understanding of each organization's strengths and approach to work. It is also important to develop a set of shared values and commitments. In this project, the organizations each agreed to a shared set of values related to the goals of the project but also that were congruent with their missions. This has helped the organizations stay engaged in the project.

Focus on relationship building:

In this project, the organizations were selected specifically because of their collaborative nature, an attribute all three organizations note as a reason for engaging. Ensuring the collaborators know each other and the facilitators is important for building trust and commitment to the project. In this project, we have tried to start meetings with a brief period of conversation. We have learned to have at least some of the meetings in person, especially if partners have not worked with each other extensively. While virtual meetings do help decrease costs for time and travel, meeting in person may allow for better communication that results in more shared understanding. Lastly, we have also learned the importance of supporting a facilitator to convene and carry out some of the work. Two of the collaborators note the importance of the facilitators in helping maintain the momentum and engagement.

Document the process:

In this process, having documentation helped the facilitators remind all stakeholders of the progress made and then to develop next steps.

Early data gathering was assisted by the work of university graduate assistants and as work began, community and organization data presented a visual understanding of the broader community in which we were engaging. For this project, we also developed a shared folder online for documents that collaborative partners could collectively edit, for example. Having documentation also helps to focus conversation and build trust. Having a framework with which to discuss these notes with stakeholders may also help to continue progress. For example, in presenting information to the RAC and often to the partner organizations, the facilitators often use the language developed in their initial discussions: energy, impact, and funding. Relying on repeated language helps to create focus and shared understanding. One other example of the importance of documentation, when collaborators recently shared with the RAC their work thus far, the project's mission statement was on screen to remind all of our purpose: *We envision collaborative support networks that empower individuals and families to build resilience in themselves and foster resilient and healthy communities...so that every child has a future that is healthy, connected, and full of purpose.*

Conclusion

Committed stakeholders who share a passion for addressing a shared issue, and who collaborate to carry on that passion, has helped to keep this project moving forward despite many setbacks. ACEs have to be addressed, and the three organizations working with this project are thrilled to be doing so. Heather Murphy, Executive Director of The Health Foundation in Wilkes County, acknowledged to the advisory board in their April 2022 meeting that it's challenging to create policies that can be put in place to work across organizations and settings and to make changes sustainable. But she also acknowledged that the work has to be done. Tina Krause, Executive Director for Hospitality House of Northwest North Carolina, couldn't have agreed more, pointing out that higher scores on ACEs assessments has been correlated with a reduced life expectancy of up to twenty years; and there has been an unprecedented number of their clients who have died just in the past year. "We have to start somewhere," she said.

"Having a high ACEs score is one thing, but having a high resiliency score is another."

All agree that building resiliency, in people and communities, is critical. "Having a high ACEs score is one thing, but having a high resiliency score is another," said Murphy. Everyone shares the critical common goal of addressing ACEs in a meaningful way and building that resiliency. That shared interest among dedicated individuals and organizations, along with knowledgeable leaders in community organizations, and, of course, funding from an invested entity, should lead to project success. ACEs will not cease to occur, but the community response to individuals and support for those individuals and their families will create a truly trauma-informed and supportive community.

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