Chapter

The MHISTREET: Barbershop Embedded Education Initiative

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Abstract

The United States (US) is in the midst of a mental health crisis. More than one in four (26.2%) adults experience a diagnosable mental health disorder each year, and 46% of the population will do so in their lifetime. Collectively, mental health disorders are a leading cause of disability and account for one-third of all years lived with disability and premature mortality. Black Americans constitute about 12% of the US population, but they make up more than 18% of the population affected by mental disorders. Black men are 30% more likely than non-Hispanic white men to report having a mental illness but are less likely to receive proper diagnosis and treatment. Black adults are 20% more likely to report serious psychological distress than white adults. Despite this, many Black people do not seek mental health care for various reasons. Causes of higher morbidity and non-care seeking behavior in Black people and Black men in particular include racism, discrimination, stigma, and distrust of the healthcare system. Across the District of Columbia (DC), Black Americans are twice as likely as other ethnicities to report a serious mental disorder, especially if they live in poverty and did not complete high school. In the project service area of Ward 8 in Southeast DC, 92% of the population is Black, 30.7% live in poverty, and only 85% of the population age 25+ completed high school. Evidence shows common mental health disorders are distributed according to a gradient of economic disadvantage across society; the poor and disadvantaged suffer disproportionately from common mental health disorders. In Southeast DC, this negative impact on mental health is compounded by the geographic concentration of underemployment, lack of economic opportunity, poverty, and underutilization of mental health services. Improving mental health literacy is a non-systemic intervention shown to increase mental health care-seeking behaviors. Mental health literacy is the knowledge of, attitude about, and behavior toward mental health issues and mental health services. The goal of the Mental Health Improvement through Study, Teaching, Rebranding, Embedded Education, and Technology or (MHISTREET) initiative is to improve mental health in Black men through embedded education in non-traditional spaces such as barbershops.

Keywords: black mental health, depression, black American, community-based interventions

1. Introduction

1.1 Mental Health in the United States

The United States (US) is in the midst of a mental health crisis [1–7]. More than one in four (26.2%) adults experience a diagnosable mental health disorder each year, and 46% of the population will do so in their lifetime [1, 2]. Collectively, mental disorders are a leading cause of disability, accounting for one-third of all years lived with disability and premature mortality [3].

Despite the heavy burden of disease, availability of mental health care services is inadequate. Available care services are often underutilized because mental health disorders impair one's ability to seek and adhere to care, delaying the receipt of effective treatment. Screening, early detection, and effective ongoing treatment of mental health disorders can have a positive impact on the quality and quantity of life. Unfortunately, this often does not occur; many people experience their introduction to mental health treatment in emergency settings at a late stage in the course of the disease. Elements influencing mental health treatment-seeking behaviors include systemic factors, knowledge, beliefs, attitudes, and stigma [4].

1.2 Mental Health in black Americans

More than 18% of people in the US who experience mental health morbidity are Black, but Black people account for only 12% of the population [4]. Black adults are more likely to have feelings of sadness, hopelessness, and worthlessness than are white adults [6]. Despite this higher morbidity, many Black Americans do not seek mental health care [4]. Multiple factors contribute to the higher burden of mental health morbidity in Black Americans and include, but are not limited to, racism and other forms of discrimination, stigma, distrust of the health care system, a perception of bias and lack of cultural sensitivity in the health care system in general, inadequate mental health literacy, and poverty.

1.2.1 Racial discrimination, stress, and trauma

Hankerson et al. cited individual and institutional racial discrimination as a risk factor for depression [8]. Institutional racism results from policies and practices within organizations that contribute to discrimination for a group of people [9]. Living with a plethora of discriminations that manifest as police brutality and other forms of racial harassment can result in racial stress and have a deleterious effect on the health and well-being of Black people. Racial stress often occurs as a result of repeated everyday discrimination known as micro-aggressions. Research shows that repeated acts of micro-aggression are a more consistent predictor of depressive symptoms than single instances of major discrimination [10, 11].

The persistent psychological assault of racial stressors culminates in the form of racial trauma. Racial trauma occurs when African Americans are surrounded by constant reminders of the dangers of being African American [12]. Washington called these reminders a form of Persistent Enslavement Systemic Trauma (PEST) [13]. PEST describes a specific dimension of the trans-generational trauma pervasive in all walks of Black American life. PEST is a systemic trauma that has residual effects on the daily activities of African/Black people and influences multiple aspects of their lives. Washington asserts PEST affects the entire psychological well-being of people of African descent, including their physical bodies, minds, perceptions of reality and themselves, relationships with themselves and others, and notions of what it means to be a person [13].

1.2.2 Stigma

Stigma is a collection of attitudes, beliefs, and behaviors that assign shame to an individual who exhibits actions or traits outside of a perceived norm [14]. Connor et al. posited that both public stigma (negative attitudes held by the public) and internal stigma (negative attitudes held by stigmatized individuals about themselves) are important barriers to successful mental health treatment [15]. Their study found Black American adults as a whole tended to internalize the stigma of mental illness and sought treatment at half the rate of non-Hispanic white Americans [15]. Upon seeking treatment, Black people were reported to skip sessions and terminate treatment at higher rates than their white counterparts [15].

1.2.3 Distrust of the health care system

The history of deliberate medical and scientific mistreatment of Black people in the US is well-chronicled [8]. One of the most significant events was the 1932 Tuskegee Syphilis Experiment, in which Black men with syphilis were followed by the US Public Health Service to observe the course of the disease [16]. Researchers withheld treatment allowing the disease to progress and, in some cases, to infect wives and children of the subjects. The Tuskegee Experiment was one in a series of events throughout history that instilled social norms of medical mistrust in the Black community.

Qualitative studies show that some Black Americans today have a fear of being used as "guinea pigs" [16]. This fear drives decreased healthcare utilization, treatment compliance, and decreased willingness to participate in research and clinical trials [8, 17].

Some Black Americans identified the mental health system specifically as a stressor [15]. Many perceived that Black Americans had a more difficult time accessing mental health services and expressed frustration with the process of seeking care.

1.2.4 Bias and lack of cultural sensitivity

Multiple studies of the US health care system have documented implicit bias—thoughts and attitudes that exist outside conscious awareness. In one such study, Hall et al. examined 15 articles and used the Implicit Association Test to assess implicit bias. They concluded that most health care providers appear to have an implicit bias in terms of positive attitudes toward whites and negative attitudes toward people of color [18].

Several studies have shown Black Americans strongly prefer mental health providers of their same ethnic background [8, 15, 17]. However, Black people make up only 3.9% of psychologists [5] and 5% of physicians [17], a visible reminder of why Black Americans perceive the mental health system as being culturally insensitive.

1.2.5 Inadequate mental health literacy

An important factor related to seeking mental health support is mental health literacy, which is the "knowledge and beliefs about mental disorders which aid their recognition, management, or prevention" [19, 20]. In a 2010 study of Black Americans, participants were able to recognize their symptoms (trouble sleeping, excessive drinking, sadness, and fatigue) but did not relate them to depression [21]. Upon learning the relationship, a majority of participants believed they needed to deal with them on their own and were averse to the idea of seeking treatment. Many

believed that treatment would be ineffective or feared the idea of taking medication [21]. Many Black people do not perceive a need for mental health care as shown in a 2017 study using data from the National Survey of Drug Use and Health (NSDUH). Only 9.4% of Black Americans reported a perceived need for mental health care compared with 17.9% of their white counterparts [14].

1.2.6 Poverty

Economic challenges prevalent within the Black community also affect psychological well-being. Black adults living below poverty are two to three times more likely to report serious psychological distress than those living above poverty [6]. A 2013 review of depression in Black men found that higher-income served as a protective factor against depression, and job security correlated with a lower frequency of depressive episodes [22]. In a 2011 study of Black men, major depressive disorder (MDD) was associated with lower income, less education, and being unmarried [23].

1.3 Mental Health in Black American men

Black men, in particular, have increased morbidity due to mental illness. Data from the US Department of Health and Human Services show Black men are 30% more likely than non-Hispanic white men to report having a mental illness [5]. Suicide attempts among Black males are 1.6 times higher than white males [5]. A 2017 Health and Human Services study found the death rate from suicide for African American men was more than four times greater than for African American women [6].

Racial stress contributes to the total burden of stress on Black men and impacts mental health outcomes. In a 2006 longitudinal prospective study of over 700 Black men, racial discrimination was strongly associated with poor physical and mental health [24]. A 2011 study using data from the National Survey of American Life found that Black American men below the age of 30 had greater depressive symptoms, experienced greater perceived discrimination, and had a lower perception of mastery than their counterparts above the age of 54 [11]. Belgrave & Brevard state African American boys have many potential stressors, even relative to African American girls, that negatively impact their psychological well-being throughout their lives [9].

A 2012 review analyzing beliefs of masculinity among men of color found an association between "machismo" or traditional masculinity beliefs and the inability or unwillingness to describe emotions - "taking it like a man" [25, 26]. Masculinity is often associated with certain expectations and standards a man must uphold. In a 2019 qualitative study, Black men reported endorsing the role of caretaker, someone who needs to display strength for their family [26]. Displays of emotion or vulnerability were perceived as a weakness and negatively affected mental health treatment-seeking behaviors [27, 28].

Research by Holden et al. showed Black men are more likely to struggle with describing depression and their emotional state [5], making acknowledging the need for care increasingly difficult. Even if Black men recognize the symptoms of depression, they are less likely than Black women to believe mental health treatment would be effective. Younger Black men were the least open to the idea of seeking mental health treatment as compared with older African American men and women of all ages [4]. Cook et al. and others have shown Black American men have lower rates of use of psychotropic medication than their white counterparts [8, 29].

1.4 The Initiative's service area

The broad geographical area within the District of Columbia (DC) where the initiative operates is referred to as "Southeast DC" or "East of the Anacostia River". The unemployment rate across DC is four times the national average with twice the rate of alcohol abuse, twice the rate of alcohol-related driving deaths, and 20 times the violent crime rate [30]. Most of these figures are driven by data from Southeast DC, the service area for the **M**ental **H**ealth **I**mprovement through **S**tudy, **T**eaching, **R**ebranding, **E**mbedded **E**ducation, and **T**echnology or MHISTREET.

Life expectancy in Southeast DC can be up to 10 years less than other neighborhoods three miles away, with limitations due to physical or emotional health more common. More than 10 times as many families as those who live in other areas of DC reside in poverty, and child poverty rates are as high as 47.1% compared with 20.3% nationally [31]. Additionally, one in five (20.3%) Southeast DC residents is unemployed.

In MHISTREET's specific area of Ward 8 in Southeast DC, 92% of the population is Black, 30.7% of the population lives in poverty, and 85% completed high school [7]. Southeast DC is unfortunately emblematic of numerous disenfranchised communities in the US [32]. African Americans living here experience the highest rates of mental health disorders in DC [33]. Contributing factors include constant exposure to environmental factors such as discrimination, violence, limited health service access, and poverty [34, 35]. Each factor is a significant barrier to mental health service utilization and exists at multiple social-ecological levels including individual/interpersonal, provider/mental health system, community, and societal levels [33]. Devising effective systematic approaches for improving the mental health of Black men living in Southeast DC must reflect an understanding of the ecological and system perspective.

2. Wicked problem impact project (WPIP) description

Wicked problems are unique in that they have no definitive formulation. They are interdependent, codependent, and symptoms of other wicked problems. Wicked problems have no true endpoints and no template to follow. As laid out in the introduction, poor mental health and wellbeing in Black Americans, particularly Black men, fit this description. It is an elusive, complex, "*wicked problem*" with no clear solution [36].

The selection of poor mental health and well-being among African Americans in Southeast DC is based on the authors' experiences at a medical clinic treating people living with HIV/AIDS. The clinic is located within the United Medical Center hospital, the only hospital in Southeast DC. United Medical Center operates as a safety-net hospital in the only designated mental health professional shortage area of the city. The authors surmised that the impact of negative social determinants (racism, discrimination, and underemployment) on the physical health of their predominantly Black and low-income patients was compounded by unaddressed mental health issues. Their patients who had mental health disorders (depression, anxiety, post-traumatic stress disorder) also had difficulty adhering to their care and treatment goals and consequently had poorer health outcomes. These outcomes also informed the authors' view that improving access to and utilization of mental health services in Ward 8 of Southeast, DC should be a key priority, and the first step should be increasing mental health literacy in the community to reduce the barriers to treatment.

3. Methods

3.1 Approach

The project design changed dramatically over the first few months and continued to evolve over the course of the initiative. Project evolution was possible because the team drew from community-based participatory research (CBPR) principles [37, 38] and used an action research approach [39].

3.1.1 CBPR principles

- Use community settings and involve the community in the project design and implementation
- Build on strengths and resources within the community
- Focus on problems relevant to the community
- Use an ecological perspective that attends to multiple determinants of health and disease
- Openly address race, racism, ethnicity, and social class

3.1.2 Five-step action research approach

- Problem identification
- Organization of plan of action
- Data collection
- Organization and analysis of data
- Planning for future action

3.2 Original project design

The initial proposal was to design a community hospital-based clinical support program at the patient, provider, and population levels. At the patient level, the plan was to screen primary care patients for mental health disorders and social needs and link them to mental health care and social services. For the providers, the intent was to support mental health education of Southeast DC private Medicaid primary care providers and share community mental health resources. Lastly, at the population level, the goal was to train community members on *Mental Health First Aid* and implement a social marketing program. After extensive qualitative and quantitative data collection among patients, healthcare providers, and community members, this original design within a traditional health care setting was abandoned.

3.3 Current project design

The project became predominantly community-based and was implemented outside the traditional health care setting to have a wider reach and deeper resonance within the community. After many cycles of the action research process, the

focus became African American men, and the core intervention became an educational program for barbers and community members to increase mental health using the culturally safe space of the barbershop to deliver "embedded education".

3.4 Project development and implementation

3.4.1 Formation of a mental health sub-committee of the Ward 8 Health council

The authors were regular attendees of Ward 8 Health Council meetings, created by a former DC mayor to convene diverse stakeholders committed to improving the health of Ward 8 residents. The Council consists of stakeholders from local managed-care associations, hospitals, universities, community-based organizations, and DC residents, who meet monthly and share information and ideas. The issue of poor mental health in Ward 8 was a topic of frequent discussion. The authors were invited by the chair of the council to create a mental health sub-committee charged with promoting and enhancing policies and practices that increase access to mental and behavioral health services, decreasing stigma associated with mental health disorders, promoting mental health wellness, and improving mental health literacy and outcomes for individuals living in Ward 8. Sub-committee members reflected the diversity of the council and were influential in the decision to change the original project design.

3.4.2 Pre-implementation data collection

Through the authors' rigorous review of the literature and consultation with the mental health sub-committee and other community members, the program evolved into a community-based intervention. The authors strongly believed the intervention needed to reach residents who were not engaged with the traditional health system.

Quantitative Data Collection: The authors developed an academic partnership with the public health school of a local university. MHISTREET team members served as site directors for eight master's level research projects designed to gain a better understanding of the mental landscape in Southeast DC. Projects included mental health literacy surveys of providers and patients, use of GIS mapping data to analyze drivers of emergency room visits, and systematic literature reviews.

Qualitative Data Collection: The authors conducted a listening tour and hosted several community-engaged sessions and informational interviews, to hear various perspectives on mental health from community stakeholders. Meeting participants included church leaders, health department officials, community residents, medical professionals, representatives from the National Association on Mental Illness (NAMI, DC Chapter), and local core service agencies (outpatient mental health clinics).

3.4.3 Selection of mental health literacy as core intervention

Myriad factors relate to and influence mental health treatment-seeking behaviors. One important factor is mental health literacy, the knowledge and beliefs about mental health disorders which aid their recognition, management, or prevention [19, 20]. Literacy is a significant determinant of mental health and has the potential to improve both individual and population health. Mental health literacy is conceptualized by Bjornsen et al. [40–43] as having four domains:

- understanding how to obtain and maintain good mental health
- understanding mental health disorders and their treatments

- decreasing stigma against mental illness and
- enhancing help-seeking efficacy

Domains are consistent with the qualitative input collected from community partners and stakeholders about their concerns with stigma, misinformation, and misperceptions about mental health. Their experiences echoed research findings on stigma, medical mistrust, and cultural norms within the African American population.

As a result of strong community input and data collection, increasing mental health literacy became the goal of the intervention. Closing the existing literacy gap was determined to be essential to improve community mental health.

3.4.4 Selection of anchor institution

The authors' understood that an anchor institution was critical to successful program implementation. The term "anchor institution" was coined by Michael Porter in 2002 [44] and is defined as a community-dependent resource which capitalizes on opportunities to create shared value and be a major economic force within the community by controlling important levers for community development [45]. In a review of outreach strategies directed at Black men, the highest yield was produced using personnel of the same ethnicity to conduct face-to-face outreach [17]. Results were amplified when the outreach came from within the Black community [21].

Emerging literature highlights the power and potential of universities, hospitals, and other institutions with long-term rooted investments in an area to transform neighborhoods, cities, and regions [46]. Originally, the authors thought the local hospital would serve as the anchor institution. However, that idea was abandoned based on community perceptions of the hospital and the team's desire to reach individuals not currently engaged with the health care system.

The authors then considered the Black church, given its historical importance and service to the Black community. The team connected with an out-of-state program called PEWS (Promoting Emotional Wellness and Spirituality) at the Mental Health Association of New Jersey. PEWS trains faith leaders in mental health to address the need within their congregations. The authors explored replicating the PEWS model in Southeast DC with the Faith-Based Director of the local DC Department of Behavioral Health. However, a nascent program was already in place, and the committee advised that large segments of the population would not be reached through religious organizations.

After much discussion, with Black men as the primary focal point of the intervention, barbershops were selected as the anchor institution to implement mental health literacy programming. Unlike healthcare sites and religious organizations, barbershops are regarded as a trusted and equalizing space and barbers as trusted members of the community. In addition, barbershops are non-medical and non-religious settings with no "negative psychological baggage" [47].

3.4.5 Use of the black barbershop for increasing mental health literacy

The team conducted a systematic review of barbershop interventions to evaluate their effectiveness and seek best practices from several existing programs in the US and abroad. They consulted with the Lion's Den in the United Kingdom, a barbershop mental health program recognized by former Prime Minister Theresa May and Prince William. In the US, the authors found several health-related programs in barbershops. The most robust and well known was The Confess Project led by

Lorenzo Lewis. Mr. Lewis's grassroots efforts in Arkansas and surrounding states were inspirational and confirmed the notion that the Black barbershop has long served an important social and cultural purpose.

Barbershops have historically been a safe gathering place for Black men, a place where people have received the news, registered to vote, and shared personal struggles. The barber often not only cuts hair but also serves as a confidant. The barber/client connection in Black communities places the barber in a unique position to be a strong partner and leader in increasing mental health literacy among Black men. In addition, the authors' speculated the Black barbershops' place in the community would enable interaction with women and children, so this health intervention could potentially impact families and the broader community.

The use of barbershops for health interventions dates to the 1980s. This model has been used to address Black American health issues such as hypertension, prostate cancer, and HIV/AIDS, but the MIHSTREET team found no published reports in peer-reviewed literature regarding its use for mental health interventions [48–50]. All intervention studies reviewed by the team found greater health improvement among those interacting with the barber [51–55]. The literature, composed of non-experimental studies, suggested that several common factors were present in successful barbershop interventions, including the training of the barber in health knowledge, referring clients to a healthcare provider (physician and/or primary care provider), and the use of a theoretical model to guide the intervention. These findings influenced the authors' approach to project design and implementation, specifically the training of the barbers and the need for an immediate connection to services.

3.4.6 Use of embedded education for increasing mental health literacy

MHISTREET chose embedded education, a recognized public innovation in governance tool, to deliver mental health information [56]. Embedded education is the practice of educating people through everyday interpersonal encounters within organizations that exist for non-educational purposes [57]. Embedded education uses existing social relationships and trust between individuals and organizations or within social networks, to deliver content that learners can immediately use and share [58]. By using the existing trusting environment of the barbershop and minimal additional supplies, MHISTREET's barbershop approach provides the potential to reach a mental health service-neglected population. As a client waits for or receives services, he becomes a learner in a health-related educational encounter. The encounter occurs between the barbers and their clients and/or between community residents/peer educators and the clients. The educational content is mental health information transmitted via conversations between barber and client or between a community resident/peer educator and clients.

3.4.7 Barbershop embedded education (BEE) curriculum development

With guidance from multi-disciplinary community partners on the Ward 8 sub-committee, the authors created a culturally relevant mental health education curriculum for embedded education in barbershops. The curriculum was based on the previous work of a collaborating partner, Dr. Kevin Washington, a professor of psychology, who had developed a mental health curriculum specifically designed for African American men. The final product was a six-module curriculum that incorporated pop-culture, race, and social justice themes, and used interactive lessons, music, video, and audio presentations.

3.4.8 BEE training

The program structure for BEE involved training barbers on mental health and having them engage with and share resource information with interested clients. A pilot cohort of barbers received the initial training in 2018 and provided structured feedback. Specific feedback included comments such as, "This was great; I hear people's problems all the time and I didn't know how to help them!" and "I used to think peoples' issues were too big to overcome and now I know there is help out there" and "I did not realize there is help out there for my brothers." Participants also stated the training was beneficial but too long. It interfered with their work schedules, led to a loss of earnings, and financial incentives provided for attendance were not enough to counterbalance lost income.

3.4.9 Program redesign

Feedback from barbers and input from community advisors led to program modifications. The revamped MHISTREET program included not only barbers but also 40 community members. The inclusion of community members was modeled

INPUTS →	ACTIVITIES →	OUTPUTS →	OUTCOMES
1. Literature review 2. Expert opinions 3. Surveys of patients, providers, and community members 4. Inventory Of community resources 5. GIS Mapping	1. Community Engagement meetings 2. Curriculum development 3. Barber and community resident training (BEE Squad) 4. BEE Squad presentations in the barbershops 5. Social media development	1. Number of barbershops 2. Number of clients per shop 3. Number of barbers and community members trained	**Short-term outcomes (knowledge change)** 1. *Kirkpatrick Training Evaluation* 2. BEE Squad's increase in mental health literacy 3. Barbershop Clients increase in mental health literacy **Medium-term outcomes (attitude and behavioral change)** 1. Clients are more inclined to seek MH care 2. Clients seek mental health care 3. Clients actively engage in a mental health care plan arid follow through **Long-term outcomes (changes in well-being)** 1. Reduced rates of untreated mental health disorders 2. A decline in mental health disparities among black men 3. Black men become agents over their own mental health with effects on the greater community

Table 1.
The "MHI-STREET" *initiative project logic model.*

after an existing program, The Confess Project in Arkansas [58], led by community mental health advocate Lorenzo Lewis. Mr. Lewis shared his moving story of adversity and the benefit he received from mental health counseling. Through storytelling, he was increasing the mental health literacy of barbershop clients in Arkansas and surrounding states.

3.4.10 Use of storytelling for mental health literacy

Storytelling is an evidence-based education method that increases the likelihood of behavior change based on the activation of neurotransmitters in the brain responsible for concentration, empathy, and connection [59]. Storytelling, particularly stories that resonate individually, has the ability to change one's attitudes, beliefs, and behavior, and can be a powerful vehicle for change.

3.4.11 Program expansion - barbershop embedded education squad

The authors used their original barber training to develop a program similar to The Confess Project [58]. The MHISTREET team hosted a one-day training event for the new iteration of the project. The authors then met monthly over six months with the new team affectionately referred to as the "BEE Squad". The six BEE Squad members learned more about mental health, rehearsed their stories, and practiced facilitation of group discussions.

3.4.12 Logic model

The logic model that the authors used as a framework to develop the Barbershop Embedded Education program. Provides the inputs, activities, outputs and outcomes related to the project (**Table 1**).

3.5 Inputs

3.6 Data collection and analysis

3.6.1 Resident/patient survey

The authors developed, administered, and analyzed a 200-patient mental health knowledge, behavior, and attitude survey in the only safety-net hospital in Southeast DC. Data showed that over 80% of respondents had some degree of knowledge about mental health but over half indicated significant stigma around using mental health services for themselves or loved ones.

3.6.2 Provider survey

The authors developed and administered a survey to six local Medicaid primary care providers on their knowledge and practices in mental health care. All of the providers reported that they were caring for many patients with mental health disorders and five of the six providers were interested in learning more about mental health and available services.

3.6.3 GIS mapping

In partnership with George Washington University (GWU), the team collaborated on geographic "hotspot" mapping in Ward 8 to determine whether a

correlation existed between emergency room use and mental health diagnoses. While informative about the overall prevalence of mental health disorders, the analysis did not show any particular "hotspots" for the high prevalence of mental health disorders within the Ward 8 boundaries.

3.6.4 Service inventory

The authors' supervised eight GWU public health student projects. One project resulted in an inventory of Ward 8 mental health and social service resources as requested by stakeholders. Information from the inventory was incorporated into the BEE training curriculum.

3.7 Activities

3.7.1 Community engagement

Over the first two years, the authors built an active and engaged network of professionals from the Ward 8 Health Council, including several community-based leaders from around Washington, DC. The authors regard this as one of the project's strengths and earliest successes.

The MHISTREET creation and leadership of the Mental Health Sub-Committee Advisory Group of the Ward 8 Health Council allowed access to the insight and knowledge of thought leaders. It generated active collaborations with local clinics, DC managed care organizations and mental health professionals in order to gain a deeper awareness of local strengths, resources, and needs.

The sub-committee members also convened three Southeast DC faith leaders and organizations from the local community and around the US for advice and guidance. Among the most prominent organizations was the Mental Health Association in New Jersey through their PEWS program (Promoting Emotional Wellness and Spirituality).

Other community engagement activities implemented included:

- Convened a core group of five barbers to serve as an advisory team for the embedded education approach and curriculum development

- Met with three local Core Service Agencies, which are the DC Department of Behavioral Health funded MH outpatient clinics, to introduce the program and gauge interest in partnerships

3.7.2 Barbershop embedded education training

In 2018, the team piloted their curriculum with a cohort of five barbers (**Table 2**). Weekly 2-hour sessions were held for six weeks. Lunch, refreshments and $50 Visa gift card incentives were provided.

The team developed a partnership consisting of the Confess Project, members of the original advisory committee, and the DC Commission for Fatherhood, Men, and Boys (DCFMB) to expand the project to include community members. The training was a one-day conference with 40 men from the community recruited with support of the DCFMB. Twelve men stated a willingness to share their stories in barbershops and connect people to resources. Two-hour, monthly training sessions for six months followed the conference.

The BEE Squad conducted the barbershop trainings, in pairs, over the course of three months. The attendance of customers at the barbershops was highly variable.

Element	Description
Existing relationships	
Host	Barbershops
Encounter	1. Barber engages client during service 2. Peer Educator engages room of clients during services or while waiting for services
Target Individuals	Black American Men (barbers, owners, clients)
Community	Family and friends of the target population, barbershop visitors
Embedded Education Practice	
Content	Personal stories of mental health service use; positive accurate messaging on mental health
Learning Objectives	1. To increase mental health literacy 2. To increase knowledge of the local mental health resources in the Southeast, DC community,
Anticipated Change	Knowledge, attitude, and behavior change around mental health; increased likelihood of seeking mental health services
Pedagogy	Listening to peer educators, participatory interactive dialog
Tools	Peer stories, barber discussions
Activities	Connection to services if desired
Educators	Non-medical community residents/peer educators trained by program staff

Adapted from Embedded Education Case Study Barbershop [60].

Table 2.
Curriculum design elements.

Some shops had upward of 30 guests, while others had only 4 to 5 customers in the shop. The presentations were also highly variable due to the variance in presentation skills of the participants, as well as the layout of the shops, the time of day and the day of the week. In some cases, the presentations got curtailed due to distractions in the shop. Also, some of the presentations served refreshments. All of these factors influenced the learning environment of the embedded education sessions.

3.7.3 Social media

The team's third area of activity was the development of a social media presence. The purpose was not only to promote the program but also to stimulate conversations around mental health. One of the authors attended a Social Entrepreneurship training with SeedSpot at Booz Allen Hamilton to develop an "elevator pitch" to market the program and also enrolled in a graduate-level social marketing course at a local university to gain a better understanding of social marketing. The team hired a consultant and developed a social media presence for MHISTREET and the Barbershop Embedded Education (BEE) program (Web site: http://www.mhistreet.com/; Twitter: @MHISTREET; Facebook: The MHI Street Initiative) The team continues their work as members collaborate with public health communications trainee to develop additional marketing materials with positive mental health messaging and resources targeted to barbers and their clients.

4. Outputs

Between sessions, the authors and their team visited all of the barbershops in Ward 8 (n = 13) and approximately half the barbershops in Ward 7 (n = 6) to

share information about the project. All but one barbershop showed interest in the BEE session. The authors then arranged the dates and times for the BEE Squad to perform the intervention.

5. Outcomes

The Kirkpatrick Training Evaluation Model was used to evaluate the core intervention of this initiative, embedded education with storytelling in the barbershop [61]. The Kirkpatrick Model is a four-level evaluation method for assessing learning processes and considers any style of training, both informal and formal, to determine aptitude based on four criteria: reaction, learning, behavior, and result.

5.1 Reaction: what learners thought or felt about the training

The authors and their partners used reflection and facilitation summary at the end of each barber and community member training session. Presenters elicited feedback from the audience to learn how they were interpreting the information by having 'check-in' points and pausing the education sessions periodically to talk through any misunderstandings or emotionally difficult topics. The lead facilitator was a trained psychologist and was able to debrief and provide feedback in a professional and therapeutic manner.

5.2 Learning: to what degree learners acquired intended knowledge, behavior, and attitudes

Post-then-Pre evaluations were conducted after the training sessions with the barbers during the pilot (N = 5) and the BEE Squad (N = 40). All of the barbers completed the evaluation and approximately half of the BEE Squad did so. Without exception, all of the trained team members reported an increase in knowledge related to mental health in their community. Additionally, at the beginning of each session with the barbers, the previous session's content was reviewed, and any comments, confusion or participant feedback were clarified.

5.3 Behavior: to what degree did learners apply what they learned; what was the extent of behavior and capability improvement and implementation

After educational sessions were completed, participants practiced their storytelling and presentations with the larger group. The group and facilitators provided feedback. When visiting barbershops, each BEE Squad presenter was accompanied by a BEE Squad 'buddy' and a member of the MHISTREET team to ensure the accuracy and proper delivery of the messaging. Presentation styles varied greatly, but the accuracy of the content was reportedly consistent among the BEE Squad.

5.4 Result: effects resulting from learners' performance

The MHISTREET team received IRB approval to collect data in the barbershops by distributing surveys after BEE Squad presentations. However, the team quickly determined that conducting surveys with clients in barbershops would not work. Clients were willing to talk and contribute informally but were not comfortable answering surveys. Consequently, barbershop sessions became brief presentations of storytelling with subsequent question and answer periods. This format also provided a forum for clients to share opinions, thoughts, and fears comfortably. The

less-structured format removed barriers to delivery. Feedback on the format provided evidence for the feasibility and acceptability of this intervention as barbers and customers were highly engaged in conversation around mental health. Some reported that this was their first opportunity to speak about this topic. Barbers and barbershop owners became comfortable accepting flyers with information about local resources and mental health information. The team was able to leave materials in 85% of barbershops in Ward 8 at the conclusion of the Clinical Scholars' funding.

6. Discussion

The initial success of the MHISTREET initiative demonstrates the positive outcomes achievable when an engaged multidisciplinary and influential community network functions cohesively to improve mental health literacy through embedded education. Access to relevant data, purposed to inform the initiative, has driven the creation and maintenance of alliances in the built environment of Washington DC. Alliances between barbers, healthcare providers, and community stakeholders in the local Southeast DC community has proven to be of great benefit toward achieving the aim of this initiative, which is to provide a non-traditional, non-healthcare platform for black men to share and hear stories of mental health resilience, encourage mental health-related conversations among barbershop clients, and serve as a bridge to mental health services.

The MHISTREET initiative encouraged both barbers and BEE Squad members to recognize improving mental health literacy is a likely precursor to undertaking health-preserving actions necessary for mental health wellness and maintenance. BEE Squad members also recognize embedded education is a viable means of improving mental health literacy. Recognition was likely facilitated by the "autonomy-compatible interactions" among Black men, barbershop clients and barbers, and networks of professionals, community-based leaders, and organizations. When people assume responsibility for their own mental health as a direct result of improved literacy, they are making an autonomous decision. Autonomous decisions are likely to result in acts of health-preservation such as seeking medical care or sharing stories of lived experiences of mental health issues to help address them.

A key challenge faced by all involved in delivering the MHISTREET initiative was navigating the process of helping Black men and barbershop clients undertake health-preserving actions, without overriding or undercutting their autonomy to do so. This is a common challenge faced by consortia delivering initiatives designed to help others help themselves. In the context of this initiative, overcoming this challenge required all involved to recognize and uphold two self-evident truths: 1) Help must start from the present situation of the men who share their stories of resilience in the face of mental health issues, and 2) MHISTREET cannot be delivered as a benevolent gift or "plug-in" program. Rather, the focus should be on devising ways to cost-effectively replicate the initiative in other cities to maximize local support available for improving the mental health literacy of Black American men.

The MHISTREET initiative uses the benefit of non-traditional, proactive, and behaviorally-focused self-management support. Results suggest BEE may be an effective form of structured education by which self-management strategies for mental health issues can be learned and applied by Black men. Embedded education has the potential to both alleviate the pressure on and work in concert with health and social care services. If Black men make early informed decisions that result in early care-seeking, issues with mental health could potentially be less chronic at the point of care and less difficult to manage. Such efficiency could translate into less severe mental health disorders and fewer health and social care dollars spent

on treatment and recovery. The MHISTREET team encourages like-minded groups in cities across the US and beyond to replicate this initiative to determine its true health and economic value when widely disseminated.

7. Leader learning

7.1 Building trust

Perhaps the most critical aspect of this work was building trust within the community. Being a professional and healthcare provider does not automatically grant one trust. The trust required to work with barbers, community stakeholders, and other concerned citizens comes with time and following through on your word. Without trust, none of this work is possible.

7.2 Partnerships and networks across sectors

One of the project goals was to work across sectors with a variety of healthcare and non-healthcare professionals. Being part of the Ward 8 Health Council was a good entrée, and networking continued by engaging with anyone and everyone who expressed an interest in this work. Through building diverse networks, the authors learned that having more thought diversity and perspectives on the team led to a greater understanding of the problem and more thoughtful and "real-world" solutions.

7.3 Flexibility and patience

New grass-root programs do not happen immediately but take time to develop. Progress occurs in "fits and starts" and does not follow a particular curve. You must be flexible with your model and not make assumptions when the work begins. In addition, opportunities may arise unexpectedly and you must be ready to take advantage of them. Plans also backfire or do not work as envisioned, and you must have a plan B, C, and D!

7.4 Community engagement

The strength of this and similar projects is the voice of the community. This work cannot be accomplished by outsiders, (clinicians, academics, etc.) without the collaborative effort of people who live, work, and play in the community. Community voices are invaluable and often lead to new insights and ideas. People who know the community know what will work and what will not. To have sustainability and buy-in, community engagement at all levels of the project is requisite.

8. Toolkit

A comprehensive toolkit can be found at: https://clinicalscholarsnli.org/community-impact.

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