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BIPOC Health Promoter: A Paradigm for Preventive Medical Clinics in Underserved Areas Struck with Illicit Substance Use

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Abstract: The Black, Indigenous and People of Color (BIPOC) Health Promoter (HP) is a preventive medicine-based clinic serving the Black and Indigenous communities in Philadelphia, Pennsylvania. As part of Saint Joseph's University's Institute of Clinical Bioethics' (ICB) health promoter program, the BIPOC clinic is modeled after the ICB's four other health promoters—African, Hispanic, Asian, and Mobile/Rural. The BIPOC clinic is founded on the principles of education, community outreach, solidarity, respect for the human person, and accompaniment; it is also built on the availability and cohesion among seven elements: 1) program coordinators, 2) volunteering medical and dental professionals, 3) undergraduate and graduate volunteers, 4) organizational partnerships, 5) location, 6) funding, and 7) community support/engagement. Offering monthly medical and dental services to African American and Hispanic communities affected by the opioid epidemic in Philadelphia's Kensington—an open-air drug market—the BIPOC HP may be a paradigm for preventive medical services and community outreach worth adopting and implementing by city officials in regions struck with illicit substance use.

Keywords: Institute of Clinical Bioethics, Health Promoter Program, BIPOC Health Promoter, Preventive Medicine, Paradigm, Kensington, People who use drugs (PWUD).

INTRODUCTION

The Health Promoter Program (HPP), run by Saint Joseph's University's (SJU) Institute of Clinical Bioethics (ICB), is a preventive medicine-based healthcare program established for purposes of raising community awareness and bridging the gap between the underserved/ uninsured/ undocumented and basic health care. HPP currently consists of five different medical clinics—Asian, Hispanic, African, Mobile/Rural, and BIPOC health promoters— of which the BIPOC is the newest. Each health promoter (HP) is named after the population it seeks to serve and is run by SJU undergraduate research fellows at the ICB, in collaboration with medical and dental professionals from the Philadelphia area.

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The BIPOC HP is a preventive medical clinic tailored to serve communities of Black, Indigenous, and People of Color in the greater Philadelphia region; census data from 2022 estimates that Philadelphia's population is 38.6% African American, 15.7% Hispanic and 7.2% Asian.[1,2] Structured on principles of solidarity, community service, health care outreach, empathy, accompaniment, and respect for the human person, the BIPOC clinic calls for interplay between seven different elements: 1) program coordinators, 2) volunteering medical and dental professionals, 3) undergraduate and graduate volunteers, 4) organizational partnerships, 5) clinic sites, 6) funding, and 7) community support/engagement. These effective collaborations and foundational elements have contributed to the BIPOC HP becoming a sustainable, recurrent establishment in the nation's leading open-air drug market, Philadelphia's Kensington neighborhood.

Provided with the aforementioned, the purpose of this article is threefold: 1) discussing the BIPOC HP's layout as well as the historical and social motives behind its establishment, 2) kindling interest in basic preventive medical services, especially in areas with high prevalence of illicit opioid use, and 3) establishing the HP as a potential paradigm adaptable to local politics and jurisdiction.

BIPOC HP Background

The BIPOC HP first arose from a collaboration with Penn Oncology, which has been offering free cancer screenings at the ICB's HPs since 2022. The ICB collaborated with Penn Oncology to establish the first BIPOC clinic at Penn Treaty Park on September 17th, 2023. Although initially targeted to serve the area's Native American population, the clinic attracted many from other backgrounds. Two of those attendees were Sisters of Saint Joseph who displayed interest in hosting monthly BIPOC clinics at *Mother of Mercy House* in Philadelphia's Kensington neighborhood. *Mother of Mercy House* is a non-profit offering various services ranging from sheltering people suffering from homelessness and facilitating their acquisition of Philadelphia identification cards to hosting weekly food pantries, clothes drives, and wound care services.

Following the second BIPOC clinic held at UPenn's campus on September 30th, 2023, *Mother of Mercy House* hosted its first on December 9th, 2023. Since then, the BIPOC HP has become a recurrent clinic there, running every second Saturday of the month and extending medical and dental services to not only Blacks, but also underprivileged White and Hispanic residents, particularly people who use drugs (PWUD), as part of the national fight against the opioid epidemic.

OPIOID EPIDEMIC

National Level

In the United States, opioid addiction persists, and in the past few decades, a surge in the number of opioid-related overdoses has characterized the epidemic. Between 1999 and 2021, approximately 645,000 people have died from opioid overdose.[3] A myriad of factors have contributed to the multifaceted problems posed by the opioid epidemic, making it a seemingly insurmountable problem.

In the United States, opioid use to treat pain was heavily stigmatized throughout the 20th century, but this began to change as studies highlighting pain undertreatment arose.[4] Many encouraged the treatment of severe pain with opioids because their therapeutic use was believed not to cause dependency.[5] Although these anecdotal studies were deeply flawed, the American Pain Society launched its "pain as a fifth vital sign" campaign in 1995, aiming to standardize the evaluation and treatment of pain symptoms.[6] These initiatives incentivized physicians to prescribe opioid medications to receive federal healthcare funds and attain better satisfaction rates among their patient population. At times, however, the drastic increase in prescription opioids led to a greater incidence of opioid-use disorder, even though only 10% of people who are prescribed opioids develop dependency.[7] More prescriptions also created a surplus of opioids used for non-medical purposes, further exacerbating the situation.[8]

As the number of prescriptions increased, so did skepticism regarding the safety and efficacy of using opioids for pain management.[9] Overdoses from prescription opioids marked the first wave of the opioid epidemic with nearly 310,000 people dying between 1999 and 2022.[3] Starting in 2010, the number of overdoses from heroin began to increase as prescription opioid deaths remained constant, but beginning in 2013, there was a significant increase in overdose deaths from synthetic opioids, such as illegally synthesized fentanyl.[3,10] From 2010 to 2017, the total number of opioid-related deaths due to fentanyl and other synthetic opioid ingestion rose from 14.3% to an impressive 59.8%.[11,12] In addition to its lower production cost, fentanyl is fifty times more potent than heroin, both incentivizing distributors to lace more expensive substances (such as heroin, counterfeit pills, and cocaine) with fentanyl and increasing the risk of (accidental) overdose.[13,14]

Alongside the high overdose risks, opioid use often interferes with one's life, threatening with the loss of financial stability, social connections, family, and consciousness of the real world, rendering PWUD homeless.[15] Meanwhile, the national homelessness crisis has reached drastic levels as 653,104 people experienced homelessness in the United States during 2023,[16] largely because of unaffordable housing, insufficient mental health resources, and inadequate economic opportunities. While not all homeless people deal with substance use disorder (SUD), there are certain areas of the U.S., such as Philadelphia's Kensington and San Francisco's Tenderloin, to which people gravitate because opioids and other drugs are readily available. In Philadelphia's Kensington alone, there are over 700 homeless people.[17]

Local Level

The Kensington Community of Philadelphia is disproportionately affected by the grave medical, sociological, economic, and psychological sequelae of illicit substance use. Numbers of unintentional deaths by overdose have escalated by more than 11% over the past five years, and inordinately more so for Black and Indigenous communities in Philadelphia (over 20%).[18]

Fentanyl, the drug most implicated in intravenous overdose-related deaths in Philadelphia, accompanies other, older opioids, such as heroin, with similar potential for harm. Even more recently, other synthetic non-opioid drugs, such as xylazine ('tranq,' a veterinary sedative) and medetomidine (a synthetic analgesic/anesthetic approved for use in dogs, similar to Precedex, a sedative approved for humans) are entering the market, causing less predictable medical, psychological, and long-term effects for patients and presenting new challenges for healthcare providers.[19]

Besides the threat of overdose, those who use intravenous drugs are at risk for numerous other medical conditions. These include wounds from unsterile or repeated injection which are often initial inconveniences made a constant threat to bodily integrity as they refuse to heal; serious infections or clots, including sepsis, thrombophlebitis, and gangrene from the aforementioned wounds left untreated–direct threat to life and limb; co-transmission of bloodborne illnesses, such as hepatitis and HIV from those sharing exposure—life-changing diagnoses and hazards to public health.

These medical issues do not speak to any underlying psychiatric or socioeconomic drivers or results of drug use. This population, if seeking abstinence, often benefits from intensive counseling, psychiatric medication, and wrap-around financial and social support services. Therefore, the BIPOC health promoter, too, serves as a foot-in-the-door for patients seeking these services, for advising patients about potential resources and healthcare agencies that can provide basic health literacy is at the core of the BIPOC's healthcare mission.

HEALTH PROMOTER MODELS/TEMPLATES

As the newest of the ICB's five HP clinics, the BIPOC HP has drawn inspiration from the other four clinics. However, the ICB's original health promoter's social, medical, and cultural aims originate from a similarly purposed initiative: the Mercy Health Promoter. Established to ensure equal access for undocumented and uninsured African immigrants in Philadelphia to respectable, adequate, and most importantly, reasonably affordable healthcare, the Mercy Health Promoter was largely inspired by three different template HP models: *Partners in Health's* model, the Dominican Sisters' Health Promoter, and *Creighton University's Institute for Latin American Concern's* (ILAC) model.

Partners in Health (PIH) initially started out of a Haitian community-based initiative to treat the most vulnerable Haitians suffering from HIV/AIDS. As an international non-profit public health organization, PIH seeks not only to bring the benefits of modern medical science to those in most need of them, but also to serve as the antidote to despair and promote health as a fundamental right, not a privilege.[20] In reaching out to the most vulnerable communities, PIH is supplementing the charity work with accompaniment.[21] PIH's community-based model is constructed on two big pillars: preventive medicine and education. Realizing that effective intervention in medically desolate regions of the world entails not only medical infrastructure changes, but also community support, PIH hired "community health workers" to nurture a holistic and sustainable medical and social presence within communities.[22] Serving the social and economic needs, ensuring treatment accessibility, and community participation are also at the forefront of PIH's mission of ensuring the poor receive "a fair shake".[21] As of today, PIH's community-based model has been implemented in Rwanda (2005-present), Haiti (1985-present), Russia (1998-present), Peru (1996-present), Kazakhstan (2009-present), Mexico (2011-present), Liberia (2014-present), Malawi (2007-present), Sierra Leone (2014-present), and Lesotho (2006-present).[22,23] In light of the medical support, profound local

trust, and socioeconomic benefits of community-based models, PIH also implemented modified versions of its international programs in the U.S.—in the Boston area, in particular.[24]

Alongside the PIH model, the Dominican Sisters' health promotion initiative in Las Cruces de Arroyo Hondo in the Dominican Republic also serves as inspiration for the BIPOC HP, especially from the communal solidarity perspective. The two fundamental purposes of the Dominican Sisters' model are proper education and enhanced community health. Unlike typical health promotion initiatives, the Dominican Sisters sought to strengthen community bonds by emphasizing teamwork and prioritizing the common good. The Sisters rely first on empowering and training women to lead multiple initiatives aimed at building basic infrastructure—small laboratories, pharmacies, schools, and bakeries—while ensuring the community assumes responsibility in cost-effectively running these programs. The Sisters also highlight the importance of education in bringing about cost-effective/ productive and long-lasting changes. Notably, their approach proved successful in fostering solidarity among the community members.[24]

Creighton University's Institute for Latin American Concern (ILAC) has also established a health promotion initiative in Santiago, Dominican Republic.Though similar to the PIH model, ILAC's model offers further insight into the workings of a HP. ILAC hires "health promoters", also known as *cooperadores de salud*, local to the served area. The health promoters are assigned to one of nine ILAC sites supervised by a regional coordinator; they are then tasked with educating their respective communities and offering primary medical care alongside prevention and health services. A cohort of ILAC nurses, physicians, and administrators coordinate not only the distribution of medical supplies but also the training of the health promoters. Over the course of one year, health promoters are comprehensively educated on and trained in "Health and Nursing Basics, Environmental Sanitation, Maternal and Infant Attention, Child and Adolescent Attention, Feminine Attention, Adult Attention, and Human Formation"; they must also sit for written tests and satisfy training criteria. Candidates approved by ILAC's training committee go on to serve their respective communities by working with ILAC physicians to offer screening services (for diabetes, glaucoma, HIV, and many other conditions), primary care services (blood pressure monitoring, glucose and cholesterol tracking, eye exams, and many other medical services), education on disease/infection prevention and sanitation, and programs tailored towards pregnancy, STD prevention, and nutrition.[24]

BIPOC HP SETUP

Logistics of Recruiting Volunteers

The volunteer recruitment process begins approximately two weeks before each health promoter event via broadcasted announcements to the fellows and associate fellows at the ICB, pre-medical students enrolled in the John D. Meehan Pathways to Medical Professions Program, pre-dental students inducted into *Delta Delta Sigma* (pre-dental honor society), and students enrolled in Saint Joseph's University's Doctor of Pharmacy program. Student volunteers are trained to run each health screening station before the start of the HP and are often paired with experienced volunteers. Certain stations, such as the Opioid Education and Prevention and Wound Care stations, require additional training. Given Philadelphia's approximately 15.7% Hispanic population,[2] three to four additional students are recruited to serve as Spanish interpreters. These students, either ICB fellows or enrolled in SJU's *Medical Spanish for Medical Professionals* course, are placed at individual stations or work directly with the medical residents to mitigate language barriers.

Concerning non-SJU partners, an independent dentist and medical residents affiliated with Mercy Fitzgerald Hospital at Darby, PA or Jefferson Health Northeast may staff the clinic; on average, four residents and one dentist volunteer their time to preside over every HP. Likewise, organizational partners, such as Drexel Hope, Penn Oncology, and Horizon House, are asked to participate.

With regards to advertisement, the staff of *Mother of Mercy House* promotes the clinic. Information regarding clinic logistics is spread via local advertisement and word-of-mouth at church services and gatherings.

Services Offered

At the door, patients are given a pamphlet in their preferred language, which serves as their data registration tool. Students fill the pamphlet out as patients go through the clinic's stations and benefit from the following services:

1. *Height, weight and body mass index (BMI) measurements:*

According to the Centers for Disease Control and Prevention (CDC), approximately 67.9% of adults and 41% of children ages 6-17 in Philadelphia are overweight or obese.[25] In North Philadelphia's neighborhoods, including Kensington, the CDC reports that nearly 70% of the youth population is overweight or obese, about double the national average.[25] Many factors play into these numbers, including lack of access to healthy fruits and vegetables and insufficient physical activity. In fact, nearly 25% of youth and 30% of adults in these regions consume one serving or fewer of fruits and vegetables per day, and up to 25% of children do not partake in physical activity even once per week.[25] Therefore, it is essential to report participants' height, weight, and body mass index (BMI)—BMI is an estimate of total body fat based on one's height and weight.[1] The circumferences of the participants' waists and hips are also measured. This information is recorded in the participant's medical pamphlet for later review by medical residents.

2. *Blood pressure & pulse oximetry tests:*

According to the World Health Organization (WHO), around 1.28 billion adults, many of whom are of low or middle income, have been diagnosed with hypertension (HTN).[27] However, around 46% of adults living with HTN remain undiagnosed and are unaware of their condition.[27] Furthermore, HTN rates in Philadelphia rank nationally among the highest per city, with about 34% of its adult population living with HTN,[28] disproportionately affecting non-Hispanic Black adults.[29]

At the BIPOC clinic's blood pressure/pulse oximetry station, blood pressure is measured electronically or manually. A normal blood pressure is around 120/80, while an abnormally high one exceeds 140/90, which, when observed on two separate occasions, corresponds to stage II HTN.[27,30] Pulse oximetry— a test for blood oxygen levels that can also be indicative of underlying conditions such as heart failure, chronic obstructive pulmonary disease, and many other health issues— is also offered.[31] In fact, hypoxic patients– those suffering from low blood oxygen saturation– may suffer from undiagnosed heart conditions, sleep apnea, emphysema, bronchitis, and restrictive lung disease.[32]

3. *Blood glucose and cholesterol tests:*

Type 2 diabetes (DM2) is a chronic health condition known to contribute to and worsen heart disease, kidney disease, and vision loss, and can result in severe complications, including serious infections, limb loss, and coma.[33] DM2 consists of two main physiological problems: 1) the pancreas being unable to produce enough insulin to regulate the movement of blood glucose into cells, and 2) body cells responding poorly to secreted insulin.[34] As a result, blood glucose levels remain abnormally high, possibly leading to circulatory, nervous, and immune system disorders.

According to the CDC, approximately 40% of all Americans, including over 50% of African Americans and Latinos, will develop DM2 in their lifetime.[35] In 2017, an estimated 135,000 adults in Philadelphia had been diagnosed with diabetes, representing an increase of over 50% from 2002.[35] However, these statistics exclude those who have not been formally diagnosed by a healthcare professional, and undiagnosed diabetes is more frequent in Hispanic adults compared to non-Hispanic White adults.[35]

Since the Hispanic community is a large component of the Kensington population, blood glucose testing is available at every BIPOC HP. Although a single blood glucose reading is not sufficient to diagnose an individual with diabetes, monthly testing may make patients aware of the risk of developing diabetes, prompting them to take preventive measures—i.e. consult with medical professionals on necessary lifestyle changes and seek primary care— especially, if their test results are high.

Additionally, patients may elect to sample their cholesterol. Cholesterol is a lipid substance found in the blood and required for the buildup of healthy cells; however, excess cholesterol increases one's risk of heart disease, as fatty deposits accumulate in blood vessels, rendering proper blood flow difficult and elevating one's blood pressure. Moreover, if a fatty deposit breaks, a clot can travel to and block the arteries of the heart and/or brain, causing a heart attack or stroke.[35] For many individuals, high cholesterol (hypercholesterolemia) correlates with lifestyle factors such as a high-fat diet, obesity, and a sedentary lifestyle.[36]

Therefore, in accordance with the United States Preventive Services Task Force's (USPSTF) recommendation, trained undergraduate student volunteers offer total cholesterol (TC) tests for all patients at the BIPOC HP, considering that the opioid epidemic

[1] Individuals with a BMI between 18.5 and 24.9 are within the normal BMI range. Individuals with BMIs below 18.5 are considered underweight, between 25 and 29.9 are considered overweight, and above 30.0 are considered 'obese'.[26]

has limited Kensington residents' access to healthy food and discouraged them from outdoor exercise. Point-of-care TC tests may be the initial indicator of hypercholesterolemia, and thus stress the need for therapeutic lifestyle changes.

4. *Reading glasses distribution:*

With age, visual capacity drops, largely due to presbyopia– a condition characterized by loss of lens flexibility and the resultant inability to focus the eye on nearby objects. Nearly 35 million Americans suffer this condition,[37] colloquially called farsightedness, which is typically treated with reading glasses. At the BIPOC HP, patients undergo a rapid eye exam using a diopter sheet. They are then permitted to choose from a selection of free reading glasses, ranging in prescription strength from +1.00 to +4.00 OD.

5. *Prenatal, kids, and adult vitamins distribution:*

The *2020-2025 Dietary Guidelines for Americans* describes a healthy dietary pattern as one that consists of nutrient-dense foods and beverages across all food groups.[38] This includes moderate consumption of vegetables, fruits, whole grains, low-fat dairy products, protein-rich foods, and oils. Maintaining a healthy diet is associated with beneficial health outcomes and reduces the risk of developing cardiovascular disease, obesity, type 2 diabetes, and certain cancers.[39] Conversely, there is a correlation between poor diet and negative health outcomes. For instance, residents of neighborhoods like Kensington, with fewer fresh produce sources, are at a higher risk for developing diabetes and obesity.[40] Additionally, food insecurity is associated with micronutrient deficiencies, which can be detrimental to one's health and development.[41] To combat these issues, student volunteers distribute a one-month supply of kids and adult multivitamins to patients at every BIPOC HP and offer directions for proper consumption.

Furthermore, prenatal vitamins are available for all pregnant women to help prevent pregnancy complications and infant health problems. It is known that blood levels of many essential vitamins decrease during pregnancy, thus increasing a pregnant person's risk of anemia, depression, gestational diabetes, hypertension, preeclampsia, and even premature rupture of membranes.[42] Prenatal vitamin deficiency can also cause numerous health issues for the infant, such as asthma, autism, low birth weight, and congenital abnormalities.[42] Thus, prenatal vitamins are provided for expecting mothers– some of whom may not be able to afford prenatal care elsewhere– at each BIPOC clinic.

Patient education is also fundamental to the prenatal care station. Both expecting and new mothers receive educational materials on pregnancy-associated mental and physical health complications such as perinatal depression and preeclampsia. Furthermore, pregnant women are provided with educational sheets on the importance of seeking prenatal care, if accessible, and on "Dos and Don'ts" during pregnancy.

6. *Pack N' Play distribution:*

According to the Mayo Clinic, risk of sudden infant death syndrome (SIDS) increases when babies sleep face-down or in conditions crowded with toys or fabric.[43] Sharing a bed with a baby or accidentally falling asleep with them can be incredibly dangerous as babies are at risk of suffocating when prone against the mattress or pillow, or even covered by blankets.[44] According to the American Academy of Pediatrics, there are about 3,500 infants that die every year from SIDS,[45] with a high chance of babies suffocating when sharing the bed with their parents.

Consequently, to prevent SIDS, the BIPOC clinic ensures that pregnant women and new mothers receive a free Pack N' Play (a portable safe baby space interchangeable between a crib and bassinet), alongside $100 worth of supplies– a bag containing one pack of diapers, a feeding bottle, pacifier, and thermometer. Recipients sign a form, providing contact information and gestational age. An ICB research fellow will then call at 3, 6, 9, and 12 months postpartum (for expecting mothers) or post-receipt of a Pack N' Play (for new mothers) to inquire about the baby's health and provide additional support.

7. *Feminine hygiene products distribution:*

Period poverty is a lack of access to safe and hygienic menstrual products during a woman's monthly period.[46] When women can't afford menstrual products, they are forced to use unsafe substitutes or wear hygiene products for dangerously long periods of time, increasing their risk of developing skin infections, urinary tract infections, bacterial vaginosis, and toxic shock syndrome.[46] Additionally, many women feel shame about menstruation, especially when unable to safely and comfortably manage their periods.[46]

Since many Kensington residents face financial hardships, the BIPOC HP aims to combat the prevalent health issues arising from period poverty by distributing feminine hygiene products to all women who approach the feminine hygiene station. Women are given a discrete pouch that contains a one-month supply of various menstrual products.

8. Cardiac and cancer screening:

At the BIPOC clinic, patients may opt to undergo a non-diagnostic cardiac and cancer screening. Patients are asked for the metrics noted down on their data registration tool, in addition to background information, daily eating habits, and family history. All data is collated into a *HIPAA*-compliant data bank via RedCap. In return, patients are provided with a heart risk factor score quantifying their risk of developing cardiovascular disease. Moreover, if deemed eligible through a screening questionnaire, patients may also benefit from free diagnostic colorectal, cervical, breast, lung, and/or prostate cancer screening provided by Penn Oncology, a vital organizational partner ensuring continuity of care for patients at the BIPOC HP. The patients testing positive for one of the five above-mentioned types of cancer are then linked to free cancer treatment services.

Furthermore, data collected at this station contributes to the already small pool of data on minorities and undocumented populations in the U.S.

9. Opioid prevention resources and education services:

In 2022, 1,413 Philadelphia residents lost their lives due to unintentionally fatal drug overdoses, an increase of 11% from the year prior.[47] At the BIPOC HP, all willing Kensington residents are supplied with Narcan (naloxone), an intranasal opioid antagonist. When sprayed into an individual's nostril, Narcan quickly reverses an opioid overdose.

At the BIPOC HP, Narcan is distributed along with Deterra drug deactivation pouches, fentanyl test strips, and xylazine test strips. Deterra drug deactivation pouches can be used to safely dispose of unused medications or drugs while fentanyl and xylazine test strips can be used to identify drugs that have been laced with either substance.[48] Testing for xylazine is vital because, unlike fentanyl, xylazine is not an opioid, so opioid antagonists (e.g. Narcan) can't completely reverse xylazine-induced overdoses.[49] Therefore, the distribution of these test strips is essential in the quest to combat the severity of the opioid epidemic, preventing future fatal overdoses caused by the unintentional use of fentanyl- and/or xylazine-laced substances.

The student volunteers selected to run the opioid education and prevention station are part of Saint Joseph's University's *Opioid Education and Prevention Seminar* course. In this class, students receive training on how to properly administer Narcan and use xylazine, as well as fentanyl, immunoassay test strips and can teach that to the patients at the BIPOC HP. This initiative not only helps increase the amount of Narcan available in Kensington but ensures that those who have the medication can properly administer it.

10. Drug reconciliations:

Many patients are unaware that drug interactions can do more harm than good due to their pharmacological interactions.[50] For instance, in a patient who takes a prescribed sedative medication to help with sleeping but is also taking an antihistamine for allergies, everyday activity, such as driving, is impaired.[50] Data shows that elderly patients are seven times more likely than younger patients to be hospitalized because of negative drug interactions.[51]

At the BIPOC HP, Pharm-D candidates offer free drug reconciliation, sitting down with patients and reviewing their medication lists and schedules. The purpose of reviewing the list of drugs is to ensure patients are not over-prescribed or taking medications that can interact poorly with one another. The pharmacists also act as liaisons between patients and volunteering medical residents, informing the latter of any suspected dangerous drug interactions.

11. Physical and occupational therapy services:

As of 2018, musculoskeletal (MSK) conditions are the leading cause of disability in the U.S., impacting more than 50% of the population,[52] and particularly those facing financial barriers to accessing therapeutic outpatient physical and occupational therapy. At the BIPOC HP, physical and occupational therapy are offered free of charge.

With the supervision of faculty members, graduate students in SJU's Doctor of Physical Therapy and Doctor of Occupational Therapy programs evaluate interested patients. The physical therapy team further educates patients on exercises and stretches that can

be done to alleviate their pain and strengthen areas of interest. Moreover, the occupational therapy team will work with patients struggling to perform daily tasks, providing them with exercises to enhance their fine and gross motor skills. If the faculty members identify conditions that may need further treatment, patients are referred to Saint Joseph's University's Samson Free Rehab Clinic for follow-up care.[53]

12. Dental care:

Studies estimate around 90% of Americans have suffered tooth decay, and 26% have left it untreated.[54] Additionally, around 1 in 6 African American adults have lost at least six teeth because of tooth decay or gum disease.[55] At the BIPOC HP, dental care packs consisting of toothbrush, toothpaste, mouthwash, and dental floss for adults (and pediatric kits containing additional entertaining products such as a sand timer and tooth box), are distributed, and a licensed dentist and trained pre-dental student offer free fluoride treatment for both adults and children. Following the HPP's philosophy of preventive medicine, fluoride treatment involves applying high concentrations of fluoride onto teeth to counteract tooth decay. Patient education is also emphasized as with educational handouts and lessons on how to properly brush and floss teeth.

13. Free consultation with medical residents:

Approximately four to five medical residents are recruited for every BIPOC HP. Two of the medical residents perform wound care at *Mother of Mercy House* or on Allegheny Avenue, while the remaining two to three residents meet with and counsel participants after they have completed the aforementioned screening stations. Medical residents review patients' vital signs and medication reconciliation to identify symptoms of already existing or developing illnesses. The medical residents offer short physical exams and personalized medical recommendations. If patients need follow-up care, the medical residents can refer them to a list of local federally qualified ambulatory clinics that will admit them free of charge or at a discounted rate, regardless of their insurance status.[53]

14. Wound care:

Unlike the ICB's other four HPs, the BIPOC HP offers wound care services, both at *Mother of Mercy House* and along the sidewalks of Allegheny Avenue. Wound care services target those who inject drugs, particularly xylazine, which is associated with severe, infectious, and ulcerated wounds.[56,57] Both on-site and mobile wound care services are offered by teams composed of a medical resident, medical student or EMT, and 1-2 trained ICB research fellows. On average, on-site and mobile wound care teams treat around 5-10 and 15-25 patients per clinic, respectively; the discrepancy between the two numbers arises from mobile wound care teams treating handicapped and non-ambulatory patients lying against building walls or along the sidewalk.

The medical resident leads the team, and all members follow a treatment protocol to ensure their safety when handling biohazardous waste. Products available for wound cleaning at the BIPOC HP include normal saline solution, disinfectants such as chlorhexidine, antiseptic solution such as Dakin, and xeroform petrolatum dressings.

Meanwhile, a designated team member is assigned to assess every wound, gathering metrics on its location, size, and exudate. De-identified patient information– weight, height, comorbidities, previous medical treatments, and knowledge of wound care products– is also collected for purposes of tracking the status of the patient's wounds and providing public data on the severity of xylazine-induced open wounds in Kensington.

15. HIV and hepatitis screening:

In 2022, it was estimated around 1.2 million U.S. residents, 13% of whom were unaware, were HIV-positive.[58] Furthermore, recent data on Kensington's opioid epidemic estimates that HIV infection is seven times more prevalent among PWUD as compared to the general population, as PWUD risk encountering the virus through use of contaminated injection needles and exposure to others' open wounds.[59,60]

Hepatitis C (HCV) rates are also high, as anywhere between 2.7 and 3.9 million U.S. residents suffer from chronic HCV, and around 17,000 new cases are reported yearly.[61] In Philadelphia, 2021 data estimates around 52,640 residents suffer from chronic HCV.[62] Although 95% of HCV cases are curable with direct-acting antiviral (DAA) medicines, only 1 in 3 insured patients with HCV receive timely treatment, with the remaining, either insured or uninsured, risking irreversible liver damage, transmissibility, and other

complications.[63] Therefore, every BIPOC HP offers free HIV and hepatitis screenings provided by Drexel Hope, a program falling under Drexel University College of Medicine and Drexel's Partnership Comprehensive Care Practice. Drexel Hope also provides free STI prevention, education and treatment services to interested patients.

ETHICAL ANALYSIS

In the last four decades, the U.S. has been trying to improve the quality of its healthcare delivery system; however, despite these efforts, disparities continue to be prevalent and have led to unjust consequences for racial and ethnic minorities. Advances in technology and a better understanding of the disease process have greatly improved due to research in the field of medicine. This has contributed to better management of the disease process, which has, in turn, improved the morbidity and mortality rates of many patients and increased life expectancy in the U.S. Unfortunately, however, the improvement is reported predominantly among White Americans while other ethnic groups, especially BIPOC, remain medically vulnerable; in addition, data shows that race, ethnicity, socioeconomic status, and geographic location factor into a person's capacity to achieve optimal health.[64] Even though our health care system, in principle, ranks among the best in the world,[65] it is flawed and has left millions of Americans as well as documented and undocumented individuals with inadequate or even no access to basic healthcare services.

"In 2022, there were 1.16 times more Black or African American (Non-Hispanic) residents (621k people) in Philadelphia, PA than any other race or ethnicity. There were 534k White (Non-Hispanic) and 126k Other (Hispanic) residents, the second and third most common ethnic groups".[2] In addition, Philadelphia county data estimates that 47,000 undocumented/ unauthorized residents, 42% of whom are Hispanic, 28% Asian, 7% Dominicans, and 15% South Americans, reside within its borders. Many of the Philadelphia residents who identify as BIPOC report medical conditions such as diabetes, SUDs, HTN, HIV, TB. Additionally, national data estimates that around 18.0% of nonelderly American Indians and Alaska Natives, 19.1% of Hispanics, 12.7% of nonelderly Native Hawaiian and other Pacific Islanders, 6% of Asians, and 10.0% of Black people are uninsured.[66,67] As health care providers, it's our duty to improve the health of the community we serve. To achieve this goal, it is important to both identify the diseases most prevalent in that community and develop services tailored to meet its medical needs. The disparity in access to basic healthcare is not only a medical problem, but also an ethical issue, as allowing race and ethnicity to factor into people's access to healthcare infringes on the basic principles of morality. In fact, the BIPOC HP attempts to step in and bridge the gap between the underserved/ uninsured/ underinsured and medical care.

Although the BIPOC HP currently serves mainly Kensington's PWUD population, which is composed of people from various racial backgrounds, the following ethical argument is tailored to the BIPOC population at large. It will be argued that—according to the ethical principles of respect for persons, beneficence/ nonmaleficence, and justice— the current medical and ethical concerns associated with the BIPOC population's inadequate access to healthcare mandate immediate action, one form of which is setting up medical clinics such as the BIPOC HP.

Respect for Persons

The principle of respect for persons incorporates two ethical convictions: first, that persons should be treated as autonomous agents; and second, that persons with diminished autonomy are entitled to protection. This principle thus divides into two separate moral requirements: to 1) acknowledge autonomy and 2) protect those with diminished autonomy.[68] Essentially, respect for human persons refers to the person's right to exercise self-determination and be treated with dignity and respect. Failure to provide any person with adequate health care, regardless of their race, creed, color, national origin, and sexual orientation, violates the basic rights emanating from the principle of respect for persons.

Second, minorities, especially the undocumented, many of whom identify as BIPOC, are of the most vulnerable medically. When African, Hispanic, Asian, and other refugees, asylees and immigrants arrive, they are often traumatized, shocked, have neither jobs nor financial support to fall back on, and suffer poor-health. The children may not have been in school for years or entered at all. Also, statistics show that racial and ethnic minorities are, on average, poorer than whites and more likely to have family incomes falling below 200% of the federal poverty level, thereby discouraging them from purchasing health insurance plans. In 2002, more than half of African Americans, Hispanics and American Indians/Alaska Natives were poor or near-poor.[69] This vulnerability, compounded with racial disparities, diminishes these individuals' autonomy, especially when seeking medical care.

In 2002, an Institute of Medicine (IOM) report, which was requested by Congress, reviewed more than 100 studies that documented a wide range of disparities in the U.S. healthcare system. This review yielded that racial and ethnic minorities in the U.S. receive less healthcare than Whites, even when both races' insurance and income levels are the same, and this incongruity in medical care spans the spectrum of many disease areas.[69] These disparities are even greater among the undocumented population. Giselle Corbie-Smith, MD, and her colleagues found that minorities were "more likely to believe that their physicians would not explain research fully or would treat them as part of an experiment without their consent".[70] Medical abuses have come to light through the oral tradition of minority groups and published reports as minorities believe that their physicians cannot be trusted, physicians sometimes use them as guinea pigs in experiments, and they are sometimes not offered the same medical procedures that Whites are, even though both may have the same clinical symptoms.[70] This fear and mistrust among the minority population in the U.S. is evident in both the documented and undocumented communities.

As a result, many undocumented, and even documented immigrants, in the Philadelphia area are not seeking medical care until they reach late stages of their disease(s). Furthermore, according to those who work with the undocumented populations and have gained their trust, undocumented individuals mistrust the medical establishment and fear that if they present to an Emergency Department, they may be turned over to the Immigration and Customs Enforcement (ICE) for deportation. Even though Catholic hospitals are against medical deportation, there still is a great fear among the undocumented. Therefore, the latter seek medical care only out of desperation, when they can no longer stand the pain or have collapsed in a public setting. In most cases, the disease has progressed to the extent that treatment is often futile or extremely expensive. Such fright from seeking medical treatment is a violation of the basic tenets of the principle of respect for persons.

Failure of the medical establishment to proactively address the undocumented and underserved communities' medical needs is a denial of these individuals' basic rights of dignity and respect upon which the medical profession is founded, thus also violating the ethical principle of respect for persons; these vulnerable populations, seeking residentially cheap areas such as Philadelphia's Kensington neighborhood, and sometimes resorting to illicit substances for coping with stress, are suffering needlessly. Until we can improve the overall quality of care and work to aggressively promote public health interventions on diseases such as HTN, diabetes, obesity, and even HIV for minorities identifying as BIPOC, in general, and undocumented, specifically, both the minorities' distrust of the medical system and the ever-widening gap in quality of care will persist.

Minority patients' autonomy and the basic respect they deserve as human beings are being violated as they are allowed to endure pain, suffering, and even death when such hardships could be alleviated. All hospitals, and especially Catholic hospitals (governed by the Ethical and Religious Directives for Catholic Health Care Services), have a moral and ethical obligation to address the medical disparities existent in minority communities.[7`] In light of such concerns, the BIPOC HP upholds the medical mission/commitment and emphasis on patient dignity and empowerment. At the core of the BIPOC HP is a philosophy of recognizing the current medical threats to minorities' autonomy, thereby acting to ease that population's fear and address some of its basic medical needs.

Beneficence/Nonmaleficence

The principle of beneficence obligates the prevention, removal, or minimization of harm and risk to others, in addition to promotion and enhancement of their good. Beneficence lies in conjunction with nonmaleficence, which prohibits the infliction of harm, injury, or death upon others. In medical ethics, the principle of beneficence has been closely associated with the maxim primum non nocere ("Above all, do no harm"). Essentially, allowing a person to endure pain and suffering that could be managed and relieved violates the principles of beneficence and non-maleficence, because one is not preventing harm and, therefore, not acting in the patient's best interest. When applied to physicians—moral agents—the two principles necessitate that the patient's best interest takes precedence over a physician's self-interest, thereby requiring physicians to treat their patients in a way that maximizes the latter's benefits and minimizes their harm.

According to the Pew Research Center, "in 2021, the nation's 10.5 million unauthorized immigrants represented about 3% of the total U.S. population and 22% of the foreign-born population".[72] "As of 2023, half (50%) of likely undocumented immigrant adults and one in five (18%) lawfully present immigrant adults report being uninsured compared to less than one in ten naturalized citizen (6%) and U.S.-born citizen (8%) adults". This discrepancy is largely because "noncitizen immigrants have more limited access to private coverage"—working in jobs that are less likely to provide health benefits— "and face eligibility restrictions for federally funded coverage options, including Medicaid, the Children's Health Insurance Program (CHIP), Affordable Care Act (ACA) Marketplace coverage, and

Medicare".[73] Nevertheless, citizens eligible for coverage face a range of enrollment barriers including fear and confusion about eligibility rules, in addition to language and literacy challenges. One can assume that if the situation is as bad as it is with minority citizens, the situation must be even worse for the undocumented foreign populations. Furthermore, according to the CDC, the average percentage of undiagnosed cases of diabetes in the U.S. between 2017 and 2020 was 3.4%. That number increases to 5.4% for the Asian community, 4.4% for the Hispanic community, but decreases to 2.7% for the White community.[74]

Disparities in accessible healthcare services expose minority patients, many of whom identify as BIPOC, to unnecessary risks, including possible injury and, even, death. Physicians have a moral responsibility to do what is good for their patients. Hospitals, also, have a responsibility towards their communities. If HTN, DM2, obesity, HBV and HCV are prevalent in a community of underinsured or uninsured individuals that a particular hospital serves, then it is the ethical responsibility of the respective hospital administrators and healthcare professionals to formulate programs that address that population's medical exigencies. Failure to recognize prejudice and bias is a failure not only of the test of beneficence, but also that of nonmaleficence. By contrast, the BIPOC HP is not only founded on the ethical principles of beneficence and non-maleficence, but also seeks to engrain the philosophy of "Above all, do no harm" in its volunteering undergraduate and pre-health-professional bodies.

Justice

The ethical principle of justice recognizes that each person should be treated fairly and equitably and be given his or her due. The issue of medical disparities among minorities, especially the undocumented, also focuses on distributive justice—the fair, equitable, and appropriate distribution of a society's medical resources. At a time when reforming healthcare in the U.S. has become a high priority, failure to initiate preventive measures that would save medical resources in the long run violates the principle of distributive justice. When applied to the BIPOC community's healthcare challenges, the justice principle can be addressed from two perspectives: equality in treatment and equality in resource allocation.

Among Americans, inequality in access to adequate health care is a well-documented fact. For years, this inequality was attributed to socioeconomic factors. However, with the publication of the 2002 IOM report, it became apparent that subtle racial and ethnic prejudice, alongside differences in the quality of healthcare plans, are also among the reasons why even insured members of minorities may receive inferior medical care. Prejudice and negative racial and ethnic stereotypes may be impairing physicians' and other healthcare professionals' clinical judgments. Whether explicit or unconscious, medical bias is a violation of the principle of justice. One such violation is members of minority groups not receiving the same standard of care that Whites do, even when both have the same symptoms. "Majority-Latinx and majority-Black tracts have the lowest average life expectancies in Philadelphia of 72.9 and 73.3 years, respectively; the average life expectancy of majority Non-Hispanic-White tracts is roughly 5.2 years greater than that of majority-Latinx and majority-Black tracts. This discrepancy persists across other health measures as well. Majority-Black and majority-Latinx tracts have the highest prevalence of chronic disease (20.4 and 19.8 percent, respectively) and the highest vulnerability to COVID-19 (66.1 and 53.2, respectively)".[75]

From the perspective of fair and equitable allocation of resources, incidence rates of several medical conditions, one of which is breast cancer, among people identifying as BIPOC also raises an alarm. According to the National Cancer Institute, "among women under age 40, African American women have a higher incidence of breast cancer than white women. African American women also have the highest death rate from breast cancer".[76] If the incidence of breast cancer has increased at a faster rate in Black women compared to other racial/ethnic groups, mainly because of a lack of adequate preventive medical services, then the principle of distributive justice would dictate that programs be implemented for early screening, assessment, and treatment of Black women and other minorities for such disease, not only for their benefit, but also for that of society. Specialized prevention programs, not only for cancer, but also for other prevalent medical conditions, would help with early identification of developing diseases, thus sparing individuals unnecessary pain. These programs would also preserve valuable medical resources, the failure of which to do is a blatant disregard of the principle of justice.

In other words, the principle of justice, which entails equality of medical treatment and distributive justice, mandates the establishment of preventive medical measures to combat the variations in disease prevalences among different communities. The BIPOC HP, in admitting all interested patients and treating/offering them equal medical services, upholds the basic tenets of healthcare justice.

CONCLUSION/FUTURE DIRECTIONS

All in all, the ICB's BIPOC HP/clinic has promising potential to offer underprivileged communities hope and accompaniment. In response to the ethical healthcare concerns facing the BIPOC community, both documented and undocumented, the BIPOC HP—an initiative inspired by already similarly established programs in developing nations—has not only perpetuated the ICB's mission of "healthcare is not a privilege, but a right" in the Kensington community, but has also saved countless lives—connecting patients with severe HTN/diabetes or in need of amputations to free immediate medical care. Racial and ethnic disparities in healthcare constitute a complex issue that pertains to individuals, institutions, and society as a whole. Unless officials address these disparities and begin to eradicate them, the goal of equitably providing high-quality health care in the U.S may never be attained. Although limited in its resources and must be adopted and upscaled to the level of resourceful agencies, the BIPOC HP model may not only uphold patients' medical autonomy and save valuable medical resources but may also spare some individuals from bearing preventable diseases, hence addressing the BIPOC community's medical needs.

Furthermore, the BIPOC HP appears as a paradigm for city officials responsible for upholding the health, dignity, and stability of communities to adopt, promote, and implement in disadvantaged residential areas suffering from SUD and IV-drug use. Founded on a belief in the importance of preventive healthcare and the need to safeguard the decency and communal respect people living with SUD ought to be treated with, this HP offers a variety of basic yet significant medical, health-educational, and dental services.

Following the design of the ICB's other four HPs (African, Hispanic, Asian, and Mobile/Rural), the BIPOC clinic is founded on seven interdependent pillars: program coordinators, medical and dental professionals, undergraduate and graduate volunteers, partnerships, locations/sites, funding, and community support. However, the BIPOC clinic, still in its early stages and limited to just one site, is far from reaching its full potential. Possible future modifications and ongoing initiatives to render the BIPOC HP a more holistic and comprehensive preventive health care clinic include:

1. Designing and Implementing a mental health promotion station in response to the unprecedentedly high rates of mental and behavioral disorders in the U.S.– In securing partnerships with non-profit organizations, such as Pennsylvania's Horizon House, the ICB is striving towards a) promoting a norm of self-introspection on one's mental health status and combating the prevalent stigma against the perils of poor mental health, in addition to b) ensuring free access to psychiatric counseling and therapy for the underprivileged community members, notably those with dual diagnosis (simultaneously suffering from SUD and a mental disorder)
2. Designing and implementing a diet and exercise promotion station that would offer diet plans and exercise programs contingent on the patients' earlier screening results (BMI, blood pressure, blood glucose, and cholesterol levels, in addition to heart risk factor score).
3. Developing an educational segment tailored to patients who may be interested in rehabilitation– both the internal and external wound care service personnel are adept at cleaning the patients' festering wounds, but the essential impact lies in encouraging and enhancing patients' receptivity to rehabilitation.
4. Seeking future partnerships with a school of optometry to offer high-quality and professional eye exams as well as prescription glasses– the current eye-glasses station lacks adequate equipment and capacity to help patients with different eyesight diseases, but there's interest in expanding current services and seeking out the assistance of optometrists.
5. Expanding a pharmacy-led vaccine initiative to offer free flu shots and seasonal vaccines to children and adults– although the BIPOC HP set its first vaccine station up through the assistance of SJU pharmacy students back in February 2024, there's interest in offering season-long vaccine services.
6. Establishing partnerships with external parties who can assist with resolving housing and legal conflicts for the homeless and undocumented patients.
7. Expanding pediatrics health services— free asthma screenings and the option for medical residents to refer patients to discounted or even free pediatrics asthma clinics.

8. Partnering with the American Health Association to launch a new Blood Pressure (BP) Buddies program that aims at examining how owning a blood pressure monitor and cuff may encourage people with high blood pressure to eat healthier and ensure their systolic/diastolic numbers remain in the physician-recommended range.
9. Creating assessment tools to first assess patients' awareness of the location of wound care services in the Kensington area and then educate them on how to maintain their wounds clean from one wound-care session to another.

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