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Reducing Cancer and Cancer Disparities: Lessons From a Youth-Generated Diabetes Prevention Campaign

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Abstract

Adolescence and young adulthood, a period essential for determining exposures over the life-course, is an ideal time to intervene to lower cancer risk. This demographic group can be viewed as both the target audience and generator of messages for cancer prevention, such as skin cancer, obesity-, tobacco-, and human papillomavirus-related cancers. The purpose of this paper is to encourage innovative health communications that target youth; youth behavior; and the structural, environmental, and social determinants of youth behavior as critical areas of focus for cancer prevention and disparities reduction. The authors describe the rationale, processes, products, and early impacts of an award-winning youth diabetes prevention communication campaign model (The Bigger Picture) that harnesses spoken-word messages in school-based and social media presentations. The campaign supports minority adolescent and young adult artists to create content that aligns with values held closely by youth—values likely to resonate and affect change, such

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as defiance against authority, inclusion, and social justice. This campaign can be leveraged to prevent obesity, which is a cancer risk factor. Then, the authors propose concrete ways that The Bigger Picture's pedagogical model could be adapted for broader cancer prevention messaging for youth of color and youth stakeholders regarding tobacco-related cancers, skin cancers, and human papillomavirus-related cancers. The goal is to demonstrate how a youth-generated and youth-targeted prevention campaign can: (1) reframe conversations about cancer prevention, (2) increase awareness that cancer prevention is about social justice and health equity, and (3) catalyze action to change social norms and confront the social and environmental drivers of cancer disparities.

INTRODUCTION

Adolescence and young adulthood, periods considered essential for determining exposures and behaviors over the life-course, is the ideal time to intervene to lower cancer risk. This demographic group can be viewed as both the target audience and the generator of messages in cancer prevention. The purpose of this paper is to encourage new strategies to promote health communications that reach youth, influence behavior, and confront the structural, environmental, and social determinants of youth behavior as critical areas of focus for cancer prevention and disparities reduction. To this end, the authors will describe the conceptual framework and impacts of an innovative, award-winning type 2 diabetes mellitus (T2DM) prevention communication campaign (The Bigger Picture [TBP]) that harnesses racial and ethnic minority youth-generated, spoken-word performance through school-based and social media presentations (www.thebiggerpicture.org). TBP brings together youth artistic expression with public health to tap into deeply held adolescent values of social justice and defiance to motivate individual and communal behavior and policy change. The authors will then consider strategies for adapting and amplifying the TBP model to achieve prevention messaging for minority youth stakeholders in cancers with extant racial and ethnic disparities—cancers in which exposure and behaviors developed and solidified in adolescence and young adulthood determine future cancer risk. Focusing this adaptation for obesity-related cancers, tobacco-related cancers, skin cancers, and human papillomavirus (HPV)-related cancers, the authors argue that minority youth-generated and youth-targeted prevention messaging campaigns can: (1) reframe conversations about cancer and cancer prevention, (2) activate youth around prevention by framing it as a social justice and health equity issue, (3) influence youth social norms by tapping into the adolescent value of defiance against dominant forces, and (4) catalyze action to reverse the social and environmental drivers of cancer disparities.

SALIENCE TO CANCER PREVENTION

Obesity-related Cancers

Although the percentage of cancer attributed to obesity is low, its public health impact on cancer is significant because obesity is so prevalent.¹ However, for some cancer types, particularly endometrial and esophageal, the contributions of obesity to cancer are as high as 40%. Racial, ethnic, and socioeconomic disparities in obesity (including obesity in childhood and young adulthood) and cancer are both well-documented.² Obesity in early

years is a strong predictor of obesity in later life.³ From a life-course perspective, preventing or mitigating obesity among youth could significantly reduce the cancer burden associated with obesity.

Tobacco-related Cancers

Tobacco is responsible for one third of cancer deaths⁴ and is the single most important contributor to cancer risk.⁵ The tobacco industry has a long history of targeting marketing to youth and young adults, particularly using lifestyle and social environments,^{6,7} including bars and nightclubs,^{8,9} co-promotion of tobacco and alcohol use,^{10,11} and use of sports,^{12,13} music,^{14,15} and consumer databases.¹⁶ These marketing strategies entrench assumptions about tobacco use being “natural”; for example, young adults frequently state that tobacco and alcohol go together “like milk and cookies”¹⁷ and there is a well-documented association between tobacco and alcohol use.^{18–23} Tobacco companies have developed marketing campaigns to reinforce alcohol and tobacco co-use,¹⁰ and built alliances with the alcohol industry to oppose policies that would limit such promotions.²⁴ Tobacco marketing also exploits minority and vulnerable groups; campaigns encourage use among groups such as racial/ethnic minorities, poor women,²⁵ rural males,^{12,26–28} and young people.^{14,15,29–32} There is a critical and ongoing need to counteract predatory tobacco marketing.

Skin Cancers

Basal cell carcinoma and squamous cell carcinoma are the most common forms of skin cancer, with more than 5 million cases diagnosed in the U.S. each year.^{4,33,34} The majority of skin cancers are associated with exposure to ultraviolet radiation, inadequate sunscreen, and other sun protective behavior. In addition, indoor tanning is linked to all major types of skin cancer, including melanoma and basal cell carcinoma.³⁵ Adolescents and young adults are a priority population for skin cancer prevention efforts. Skin cancer is the third most common cancer among U.S. young adults, and much of a person’s lifetime ultraviolet exposure occurs during childhood and adolescence.³⁶ Tanning before age 35 years is associated with a 75% increased risk of melanoma.³⁷ Although skin cancers are most commonly found in white non-Hispanics, racial and ethnic disparities in survival rate from skin cancer are striking. Blacks have significantly worse survival rates from melanoma, and late-stage diagnoses are much more prevalent among minority patients.^{4,38} Contributing factors include differences in risk perception and disparities in education. African Americans and Hispanics are more likely to perceive themselves as at lower risk of developing skin cancer and most education efforts have focused on whites.³⁹

Human Papillomavirus–related Cancers

HPV is the most common sexually transmitted infection in the U.S., with an estimate of more than 7 million individuals aged 15–24 years being infected. HPV prevalence in U.S. women is highest among individuals aged 20–24 years, at 53.8%.⁴⁰ White women experience cervical cancer at an incidence rate of 6.2 per 100,000 people compared with 7.8 for black, 8.2 for Hispanic, and 9.4 for American Indian/Alaska Native women.⁴¹ Black women experience the highest mortality rates from cervical cancer in the U.S. compared with all other racial and ethnic groups, which has been underestimated previously.⁴¹ Disparities in HPV vaccination rates mirror disparities in cervical cancer incidence and

mortality. The HPV vaccine has been licensed for use in females since 2006 and in males since 2009,^{42–44} with recommendations for starting at age 11 or 12 years; make-up vaccination for women through age 26 years and men through age 21 years; and for gay and bisexual men and immune-compromised persons through age 26 years.⁴² In 2015, only 42% of females and 28% of males aged 13–17 years received the three-dose vaccine series⁴⁵; only 23% of women aged 18–26 years and 7% of women aged 27–30⁴⁶ years and only 5% of men aged 18–30 years reported receiving at least one dose of the vaccine. Some studies have shown that black and Latina girls and women have lower odds of initiating and completing the vaccine series, whereas others demonstrate mixed results.^{47,48} For boys, being a racial/ethnic minority does not carry excess risk, and data regarding vaccine initiation are mixed.^{47,49} Contributors to disparities in HPV include geographical differences, access barriers, variable clinician recommendation, mistrust of the healthcare system, and variable vaccine literacy.^{46,50,51}

DESCRIPTION OF THE BIGGER PICTURE CAMPAIGN

Launched in 2011 by the University of California San Francisco Center for Vulnerable Populations at Zuckerberg San Francisco General Hospital and by Youth Speaks, TBP is an innovative diabetes prevention campaign with its conceptual foundations in public health literacy and youth empowerment models.^{52,53} TBP harnesses authentic minority youth voices (i.e., voices that have not been filtered or recast by marketing departments), delivered via spoken-word poetry and film (Figure 1). Merging artistic expression with public health messaging, TBP aims to shift the conversation from solely encouraging individual behavior change to inspiring youth to act for health justice by reversing the social, environmental, and structural forces that determine and perpetuate diabetes risk. As such, TBP represents a public health literacy campaign.⁵² TBP pedagogy is aligned with Brazilian Paulo Freire's seminal work, *Pedagogy of the Oppressed*,⁵⁴ and that of his compatriot Augusto Boal's related work in performance art, *The Theater of the Oppressed*.⁵⁵ Boal describes the *Theater of the Oppressed* as "always seeking the transformation of society in the direction of liberation of the oppressed. It is both action in itself, and a preparation for future actions ... it is not enough to interpret reality; it is necessary to transform it!"⁵⁵ The authors have previously described the TBP model and conceptual framework in detail and provide a brief overview.⁵⁶

The Center for Vulnerable Populations (cvp.ucsf.edu), a community-engaged research center and home to the NIH-funded Comprehensive Center of Excellence for Health and Risk in Minority Youth and Young Adults, aims to improve health in vulnerable communities and reduce social disparities in health. Youth Speaks (www.youthspeaks.org) is a youth arts and empowerment organization that activates and applies minority youth voices to issues of social change. Youth Speaks leverages high-quality live and digital artistic presentations using the spoken-word art form to create catalysts for culture change and shift the behavior of people, systems, and institutions to benefit minority youth. A novel academic–community partnership enabled the two organizations to create compelling artistic presentations for T2DM prevention. Although TBP's creative process is curated by experienced spoken-word poet mentors and public health communication experts, the creative work itself is generated by minority youth poets. With the goal of shifting from a traditional focus of individual

“shame and blame” towards calling out the social drivers of the disease, TBP strategies include:

- conducting professionally curated writing workshops for youth poets;
- creating authentic spoken-word pieces by minority youth;
- developing and disseminating well-produced, hard-hitting, spoken-word films with compelling musical accompaniment;
- delivering school visits at under-resourced public high schools;
- providing live performances at stakeholder and youth events;
- animating online platforms to promote broad dissemination and participation; and
- partnering with youth stakeholders and policy-oriented institutions to change the environmental drivers of T2DM.

Conceptual Framework of The Bigger Picture Campaign

Traditional health behavioral interventions targeting youth have rarely offered effective strategies, partly due to an overemphasis on long-term or future health outcomes. In contrast, TBP is based on frameworks of behavioral change targeting youth, including the Youth Empowerment Framework⁵⁷ (Figure 2 depicts the Logic Model of TBP campaign). Recently, behavioral science has increasingly embraced youth empowerment models. The work of Kim et al.⁵³ describes a movement from the health information deficit approaches of the 1960s, to affective humanistic approaches emphasizing self-esteem and interpersonal skills in the 1970s and 1980s, to social influence and social learning approaches emphasizing resistance training in the 1990s and 2000s, and to the use of social marketing strategies that employ narrative forms to influence norms in this decade.⁵⁸ This paradigm shift places emphasis on positive youth development, which promotes a greater participation of youth in the community, reframes youth as having risk factors or problems to viewing youth as community assets and resources, and places them at the center of shaping influential narratives to change social norms. The Youth Empowerment Framework has been described as the foundation for the “next generation” of tobacco control efforts that embrace an emancipatory tradition of community participation.⁵⁹ Additionally, new complementary research suggests that creating messages and campaigns that align with values held closely by adolescents are much more likely to resonate with them and effect change.⁶⁰ Adolescents aspire to being socially conscious, autonomous people worthy of approval by their peers and others whose opinions they respect.⁶⁰ Widely held values include social justice, defiance against authority, and autonomy. Infringement on autonomy can impede success of individually focused health behavior interventions, as they typically involve telling adolescents how they should make personal choices.

In this way, TBP encourages youth to see the “the bigger picture”: the social and environmental forces that create and perpetuate diabetes. This realization not only can lead to social action, but can move adolescents towards healthier behaviors, such as not consuming soda or junk food, as a way to “stick it to the man” and rebel against

industry executives' authority. TBP messages highlight the social injustices inherent in manipulative industry tactics, such as targeted marketing of unhealthy products to vulnerable communities. Minority youth poets have created content that motivates their peers to “take a stand against injustice” and advocate for vulnerable populations, eliciting righteous anger and activation for social change (Table 1). Youth have additional attributes and values that have been harnessed in TBP: a desire to be heard and take control (to have a voice in shaping the conversation), a thirst for social exchange, a particular receptivity to emotionally compelling appeals versus more “rational” approaches (“heart before head”), and deep engagement with multimedia content and creative forms of entertainment (Figure 1).

Core Principles of The Bigger Picture Campaign

TBP also draws upon the values and wisdom of the community to promote health through community-based participatory research^{61,62} in several ways. TBP is participatory, collaboratively engaging in joint decision making around programming and evaluation, such as youth arts organization staff co-creating the evaluation survey questions. TBP is cooperative, engaging community members and researchers in a joint process in which both contribute equally: public health professionals contribute their knowledge prevention expertise, while youth poets and arts community-based organization staff contribute artistic excellence and an insider perspective that reflects the communities of youth and of color disproportionately burdened by diabetes. TBP reflects a co-learning process, wherein participating public health professionals learn the cultural nuances of how sugar-sweetened beverages are marketed to communities that the youth poets represent, the ways in which sugar-sweetened beverages are incorporated into the traditions and cultural norms in these communities, and the types of messages most effective with these communities. The youth poets and arts community-based organization staff learn about the impacts of unhealthy environments, the scientific method, and health disparities. TBP involves systems development and capacity-building. Health professionals gain a better understanding of how to partner with community-based organizations, while artists and youth of color learn to leverage science toward health communications. Youth poets and youth and arts staff members have developed their own public health literacy, learned the value of evaluating programmatic outcomes, and built capacity for communicating health information and education to their respective communities and stakeholders. TBP develops systems of partnered health communication, which can be activated for other health messages, such as cancer prevention. Finally, TBP reflects an empowering process through which participants increase control over their lives, providing agency through activities to change policy and increase awareness. TBP offers youth poets the opportunity to protect their own health and that of their respective communities. TBP offers public health professionals a meaningful way of using research to directly impact the lives of the populations they seek to serve.

Rationale for Co-Creation

T2DM has drastically risen in the U.S. over the last decade, disproportionately affecting ethnic minority and lower-income populations. Over 22% of African Americans, Asians, and Hispanics, are diagnosed with diabetes, in comparison to 11.3% among whites. Over half of African-American and Latino children born in 2000 are projected to acquire T2DM in their lifetimes. Historically known as “adult-onset diabetes,” T2DM has increased in

youth aged 10–19 years by 31% between 2001 and 2009. There is an urgent need to engage at-risk youth in diabetes prevention efforts. The idea for “co-creation” of TBP emerges from a well-tested health communication approach.⁶³ Engaging members of the target community in creating messages increases message relevance and motivation for behavioral change. The authors’ experience suggests that co-creation does more than increase relevance and engagement: it leads to the development of novel ways to re-frame a health problem and its solutions, creating messages (and new messengers) that reflect the lived experience of the target population, and provides inroads that open up new possibilities for change. TBP is being disseminated through social media platforms, leveraging existing social networks of youth and young adults, many of whom are already connected online.^{64,65} To the authors’ knowledge, TBP is the first social media campaign that features wholly youth-generated content to promote social action in health.

Activities to Date

TBP campaign has delivered high school assemblies to more than 5,000 San Francisco Bay Area public high school students using a standardized script, live poetry performances, and short films. Assemblies, hosted by Youth Speaks poets and staff, have resulted in favorable shifts of youth perceptions and improved public health literacy. For example, a pre–post participant survey shows that students who identified that T2DM has environmental causes rose from 37% to 82%; those who reported “caring a lot” about diabetes prevention increased from 38% to 57%; and after the assemblies, nearly 90% reported that T2DM is preventable.⁶⁶ Although TBP messages do not specifically call out individual behavior change, one of its two overarching goals is to change social norms. As an example, the percentage of youth that expressed they would be more likely to “choose water over soda” increased from 31% to 48%. Furthermore, in surveying more than 2,000 youth stakeholders before and after being exposed to TBP presentations, the authors found that the percentage who believed young people could be agents of social change jumped from 67% to 99%.⁶⁶ TBP has broad online reach via the campaign’s 23 award-winning films, including well over 1 million YouTube views, more than 1,400 Facebook likes, and more than 1,000 Twitter followers. TBP has forged strategic partnerships to translate the campaign into real health impacts. Numerous Bay Area health and stakeholder entities (e.g., American Heart Association, Boys and Girls Clubs, three county health departments) adopted the messaging for their prevention efforts. The “Open Truth” initiative uses TBP messaging to educate the public about the health consequences of sugary drinks, highlighting industry’s marketing to youth of color.⁶⁷

Adoption and Recognition

In 2016, TBP scaled statewide to a total of eight California cities hardest hit by the diabetes epidemic. TBP catalyzed parallel efforts by the consumer advocacy group, *El Poder del Consumidor*, leading to a youth-generated campaign that merges art (rock and pop music) and public health in Mexico, leading to the release of a CD and live performances, *Dulce Veneno* (Sweet Poison, www.destapalaverdad.mx). TBP and its poets have delivered presentations at the National Academy of Sciences,⁶⁸ the Center for Science in the Public Interest’s National Soda Summit, the National Childhood Obesity Conference, and the James Beard Food Conference. TBP poets and content have been featured on major media

outlets and in the documentary film, *In Defense of Food*⁶⁹ (based on Michael Pollan's book of the same name), and in Marion Nestle's book, *Soda Politics: Taking on Big Soda (and Winning)*.⁷⁰ TBP poems and films have received awards, including the Real Food Media Contest Grand Prize, American Public Health Association Spirit of 1848 Award, and the Latino Coalition for a Healthy California Young Champions for Health Award.

APPLICATION OF THE BIGGER PICTURE APPROACH FOR CANCER PREVENTION

Obesity-Related Cancers

Efforts to prevent T2DM have nearly perfect overlap with efforts to prevent obesity. As such, TBP and its associated values-based messages can also be considered an obesity prevention campaign.

Tobacco-related Cancers

Current cutting-edge health communication efforts in tobacco control share some elements intrinsic to TBP's methods. Mirroring tobacco industry market segmentation, one can successfully target youth audiences using a combination of behavioral, contextual, psychographic (lifestyles, attitudes, and values), and demographic factors. For example, psychographic targeting employs youth-generated art forms to specific "peer crowds" of young adults (e.g., Hipsters, Partiers) for anti-tobacco interventions.⁷¹⁻⁷⁵ These interventions were developed by a commercial marketing agency founded by young adults⁷⁶ who utilized a combination of creative anti-tobacco branding, using young adult influencers as "brand ambassadors" to transmit the message to their peers, and integrated multi-channel communications to compete with tobacco brands in social environments (Figure 3).^{71,77} This work is outlined in an accompanying piece in this Special Issue of the *American Journal of Preventive Medicine*.⁷⁸ These "social branding" interventions are also the foundation for new U.S. Food and Drug Administration-sponsored campaigns targeting Hip Hop teens ("Fresh Empire"), rural youth ("Down and Dirty"), and lesbian, gay, bisexual, transgender young adults ("This Free Life").⁷⁹ For high-risk peer crowds, such as hip hop or hipsters, an authentic voice is critical, and that the connection between Big Tobacco and social injustice is most compelling. In addition, the focus on Big Tobacco as contributors of cancer disparities is an important frame to prevent the campaigns from being perceived as "preachy" or "anti-smoker."

These efforts have differed from TBP in important ways. Even though social branding campaigns show promise to decrease smoking rates, the focus to date has been on individual behavior change, rather than support for policies addressing tobacco use. In contrast, TBP has largely steered clear of individual-level messaging, opting instead to motivate young people to defy authority and become agents of social change for their communities; changes in social norms have been a secondary product of the campaign. Efforts to integrate effective elements of social branding with the social justice framing and advocacy for tobacco control policies are needed, particularly because U.S. Food and Drug Administration-sponsored campaigns are not able to educate about or support local policies. In addition, tobacco use patterns are changing (e.g., proliferation of multiple products), presenting new challenges

wherein the youth voice will be particularly pertinent.^{80–82} Compelling youth-generated messages are needed to address non-cigarette tobacco use (including little cigars/cigarillos, smokeless tobacco products and snus, hookah, e-cigarettes, and other electronic smoking devices).^{83–85} Youth-generated counter-marketing campaigns that embrace social justice and value defiance, that reflect a commitment to beneficence towards their peer group, and that fulfill a desire to be heard and to optimize autonomy and empower youth to “take a stand” have great potential to energize and support local policy and advocacy efforts.

Skin Cancers

To inform youth-oriented communications promoting sun protective behaviors and curbing indoor tanning, various attributes of TBP can be considered. First, it is possible to capitalize on the youth value of defiance and rebellion against corporate interests—in this case, focusing on the tanning industry. Such a counter-marketing campaign could highlight that industry’s advertisements target youth, and that industry profits from failure of policies to protect youth from indoor tanning (e.g., banning minors for indoor tanning services).⁸⁶ In addition, a youth-generated campaign could convey how industry peddles a standard of “beauty” that is unhealthy and potentially cancer-causing, and could offer an alternative view of beauty and body image. This perspective could empower youth to express—through narrative forms, visual media or mixed media—what an attractive body and skin tone means (i.e., healthy and natural), thus defying “traditional,” stereotypical views of attractive appearance. Furthermore, a youth-generated campaign that calls out the disparities in skin-cancer-related mortality and late-stage diagnoses for racial minorities could provide a social justice lens on the need to shed light on the limited efforts to date in educating darker-skinned minority youth about skin cancer risks, while empowering youth of all colors and skin tones to take ownership of their health and their bodies.

Human Papillomavirus–related Cancers

TBP framework offers a potential novel means for addressing HPV risk and prevention and reducing disparities. HPV vaccination messaging targeting youth behavior should be placed into a broader context of youths’ health. Provider recommendation for HPV vaccination is a well-established predictor for vaccine uptake,^{49,50,87–90} but this is insufficient to achieve sufficient coverage rates. Among teens who received provider recommendations, males, younger teens, and white teens were less likely to initiate vaccination.⁹¹ For boys, being a racial/ethnic minority does not necessarily carry risk, and may be associated with higher vaccine initiation.^{47,49} A recent systematic review of interventions to increase HPV vaccine uptake demonstrated better vaccine uptake.⁹² Use of a culture-centric narrative theory to create peer-expert videos of vaccine decision narratives successfully doubled vaccination rates among college-aged women.⁹³ However, an intervention among university students comparing the impact of gain- or loss-framed video messages found no effect on vaccine behavior,⁹⁴ and a recent culturally tailored, computer-delivered, media-based strategy among African-American adolescent females within public health clinics increased vaccination, though rates were lower than the national average.⁹⁵

Research suggests that messages to promote HPV vaccine uptake should be tailored to age and should be culturally and linguistically appropriate. Specifically, messages that

integrate a positive youth development framework and build on youths' assets, strengths, and protective factors are likely to be more effective than messages that seek to isolate HPV as a health concern.^{49,93,96} Youth advocates such as poets and artists from the targeted communities are in the best position to speak to the needs, concerns, fears, and competing priorities their peers confront in their daily lives. They are uniquely positioned to craft messages that recognize how their health decisions and behaviors are connected to and impact their larger community and their own personal dreams and aspirations. HPV prevention messages developed by youth, built on their identity and ethnic pride, natural sense of altruism and defiance in the face of gender stereotypes, and delivered within their community context, are likely to have a salient impact on increasing youths' awareness, motivation, capacity, and skills to enact preventative health behaviors, such as HPV vaccination. HPV vaccine messages should promote taking charge of their bodies and lives, providing both information about the vaccine benefits and resources for preventing HPV infection. Messages that emphasize the protection of future health may be less effective among adolescents; rather, youth-focused HPV vaccine messages may focus on youth concerns over vaccine safety and fears related to receiving "shots."⁹⁷ Messages targeted to young women should focus on increasing self-efficacy and empowerment, and seek to build capacity to know their options, identify resources, and make decisions related to their bodies.⁹⁸ HPV vaccine messages for older girls and young women could be framed as defying and overcoming dominant stereotypes related to adolescent female passivity or subjugation with respect to sexual health decision-making. Messages that target older boys and young men can align with their values by defying dominant stereotypes as people who do not care about their own sexual health or the health of their current or future sexual partners.⁹⁹

CONCLUSIONS

In this paper, the authors attempt to promote a new framework and innovative approach to cancer prevention communications that target youth, youth behavior, and the structural, environmental, and social determinants of health behaviors as critical areas of focus for cancer prevention and disparities reduction. This approach is a contemporary adaptation on the Positive Youth Development Framework, is implemented using community-based participatory research principles, and is augmented by the focus on youth art as a form of positive expression to align with deeply held adolescent values (Figure 2). The authors believe such work is especially critical in minority and low-income youth communities. In this regard, this demographic group can and should be viewed not only as the intended audience but also the generator of cancer prevention messages. The authors demonstrated this duality by describing features of TBP model for diabetes prevention. Instead of encouraging young people to modify their behavior for future health benefits, TBP motivates individual and structural change by mentoring minority youth to create authentic and captivating content that taps into the values that are most compelling to young people: defiance over conformity, autonomy over subjugation, and social justice (fairness and inclusion over injustice, oppression, and alienation). In so doing, TBP gives voice to traditionally disenfranchised communities. Although TBP shares some strategies employed by the anti-tobacco "Truth Campaign," it has evolved a more participatory model that

features the authentic voices of minority youth, organically presented in compelling ways and disseminated through live and digital means, capitalizing on social networks that youth engage in. TBP also goes beyond traditional youth-targeted campaigns by encouraging social action more than individual change.

The authors contend that these attributes can be harnessed to engender novel cancer prevention communication initiatives that both feature at-risk youth as creators and performers of novel content and target at-risk youth. This model will be most relevant for cancers in which exposures are largely determined by behavioral patterns solidified during adolescence. Even though the authors presented a number of possible approaches for cancer prevention communications, the authors presented the model largely to demonstrate how its methods nurture and support the talent, authenticity, and creativity of new messengers: youth whose lived experience can be expressed in powerful ways that not only can change the behaviors of their peers and influence social norms, but can also catalyze changes in the social, environmental, and structural conditions that shape cancer-related risk behaviors and underlie cancer-related disparities.

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Figure 1.

Still frames from the ending of the poem and film, *Chocolate Smile*, written by 17-year-old Marje Kilpatrick and filmed by Jamie DeWolf. www.thebiggerpicture.org. The verse from this scene is:... They won't tell you how her smile. Was corrupted by blue slushies and black licorice. Leaving brown pot-holes in their wake. And we still remain quiet. While they drain us of everything sweet. But the color of our skins and the sugar in our hips. In my neighborhood ... Our thighs are heavy. Our ass is thick. Our culture. Being weighed down. BY SILENCE.

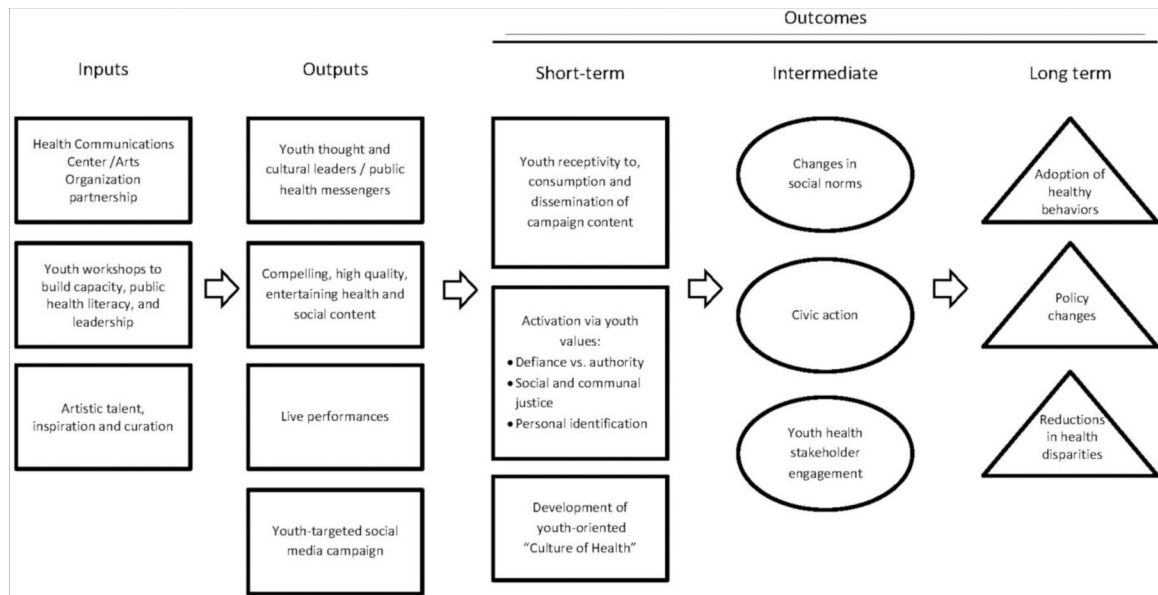


Figure 2. Logic Model for The Bigger Picture Campaign.

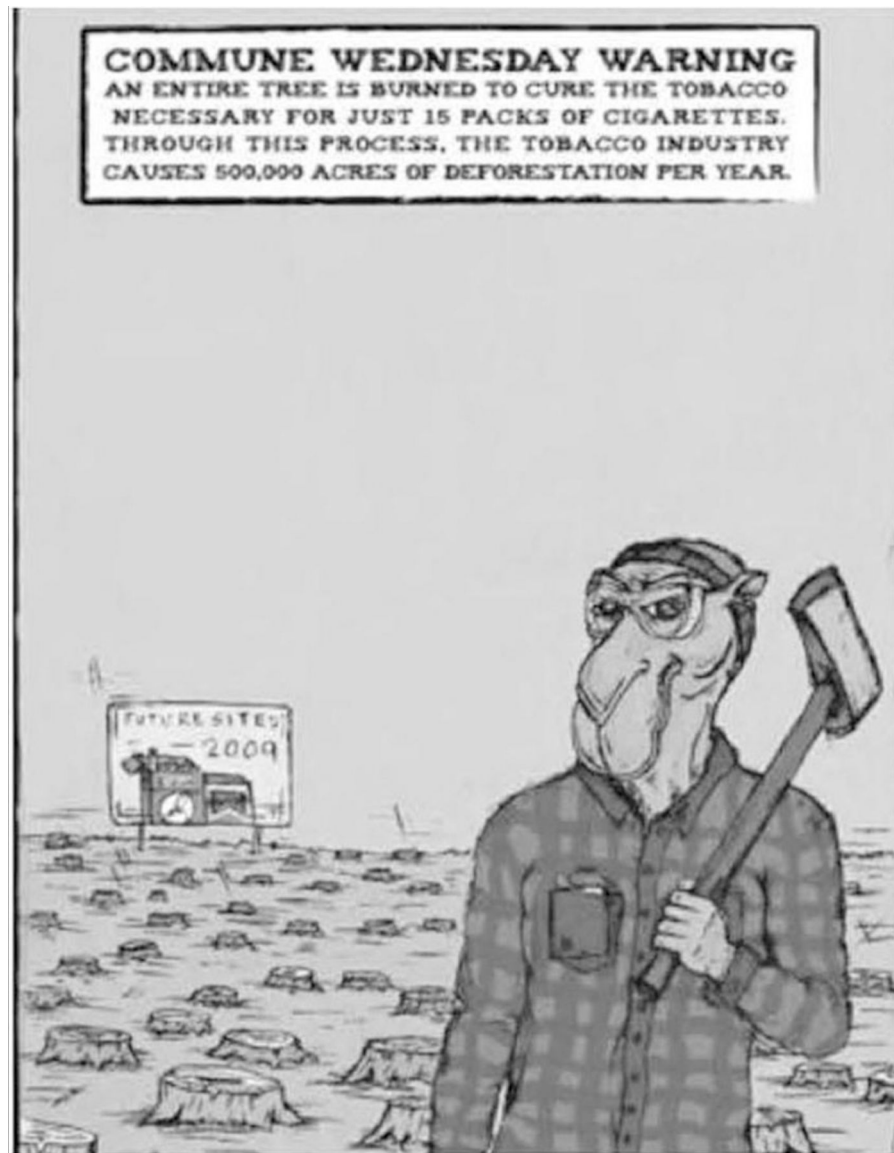


Figure 3. An example of counter-marketing against tobacco products that uses social branding that appeals to young people's commitment to protecting the environment. Art-work by Kevin Bonner (kevinbonnerdesign.com).

Table 1. Representative Bigger Picture Campaign Messages and Associated Adolescent Values

The Bigger Picture Campaign spoken-word piece and film ^a	Public health literacy message	Film genre (accompanying youth value)
1. <i>Pushin' Weight</i>	Profit-hungry food industries target youth with addictive sugary foods.	Dark parody (defiance)
2. <i>Product of His Environment</i>	Institutionally reinforced social conditions, such as poverty, food insecurity, and violence, increase diabetes risk.	Tragic drama (social justice)
3. <i>Health Justice Manifesto</i>	Policy call to action to address the type 2 diabetes epidemic by challenging the government and corporations and advocating for the public's health rights	Documentary/ anthem (social justice, autonomy, and empowerment)
4. <i>Block O' Breakfast</i>	Food and beverage industries utilize deceptive marketing and false advertisements to sell unhealthy, sugary, and processed foods to young people.	Comedic parody (defiance)
5. <i>Sole Mate</i>	Prolonged, unmanaged type 2 diabetes can lead to severe consequences, such as amputation of limbs. Increasing awareness can help prevent diabetes-related complications.	Horror (social justice)
6. <i>Farm Livin'</i>	We, as consumers, are clueless to what is happening behind the scenes of industrialized foods; we are being "fed" by profit-hungry corporations—like farm animals.	Documentary (defiance)
7. <i>Death Recipe</i>	Slavery and other forms of historical or contemporary forms of oppression shape dietary norms. Food addiction is a response to the stress and mental health problems that accompany oppression. Obesity and body image disorders are a result.	Autobiography/ testimonial (social justice and defiance)
8. <i>Quantum Field</i>	Trying to be healthy in an environment not conducive to healthy living feels like living in a nightmare.	Suspense (defiance)
9. <i>The Corner</i>	Inaccessibility of healthy food options in low-income neighborhoods makes "choice" an illusion	Testimonial (social justice and autonomy)
10. <i>Chocolate Smile</i>	Type 2 diabetes is a genuine social ill, a sign of a blighted community. It is a silent scourge that oppresses the vulnerable, just like inadequate housing, poverty, drug addiction, police brutality, and broken educational systems. We need to remain silent no more.	Guided tour (social justice and defiance)

^a All films can be found at www.thebiggerpicture.org.