

Regional and Cultural Norms Shaping Substance Abuse, HIV and Hepatitis C Virus Risk and Prevention Needs among Minority Young Adults in A U.S.-Mexico Border Community

Thenral Mangadu¹, Joao Ferreira Pinto² & Priscilla Guevara³

Abstract

Minority young adults in U.S.-Mexico border communities are at high risk for Substance Abuse(SA), and infection with the Human Immunodeficiency Virus (HIV) and Hepatitis C Virus (HCV). With funding from the Substance Abuse and Mental Health Services Administration (SAMHSA), a Hispanic Serving institution on the U.S.-Mexico border in partnership with two community-based organizations implemented integrated SA, HIV and HCV prevention among minority young adults on collegecampus and surrounding communities. Six focus groups (3 on campus and 3 in surrounding communities; N=48) were conducted with individuals 18 – 24 years of age to inform priority population needs and project strategic plan. Five themes emerged from campus and community feedback: (i) types of substances used and local norms shaping such substance abuse; (ii) risky sexual behaviors shaped by stigma, cultural and gender norms, (iii) gaps in HIV and HCV knowledge, (iv) barriers to access and utilization of prevention services, and (v) suggestions for effective SA, HIV and HCV prevention. The implications for addressing U.S.-Mexico border regional norms shaping SA, HIV and HCV risk behaviors among minority young adultsfor interventions that engage minority young adults' on and off campus networks are discussed.

Keywords: HIV, Substance Abuse, Hepatitis C, Minorities, U.S.-Mexico border

1. Introduction:

U.S.-MX border communities are vulnerable to a number of dire consequences related to substance abuse, infection with HIV and HCV, and other health disparities owing to conditions unique to border populations, such as migration, language barriers, lack of access to health care, poverty, low health literacy, and structural violence (Farmer, 2001; PAHO, 2012; PAHO, 2007). El Paso, Texas, is a city of 833,487 people (51.11% female), located on the U.S.-Mexico border, with 80.01% of the population of Latino/Hispanic (Mexican-American) origin (Healthy Paso del Norte, 2015).

As one of the lowest income regions in the state, 42% of the U.S. border residents do not have health insurance and more than 30% live below the poverty level(United States Census Bureau, 2014; Healthy Paso del Norte, 2015). Thispartnership between a Minority Serving Institution and Community Based Organizations (MSI-CBO) to develop an integrated substance abuse (SA), HIV, and Hepatitis C (HCV) prevention project was funded by the U.S. Department of Health and Human services (DHSS) Substance Abuse and Mental Health services Administration (SAMHSA) in 2014.

¹ Thenral Mangadu, MD, MPH, PhD, The University of Texas at El Paso, USA. tdmangadu@utep.edu

²Joao Ferreira Pinto, PhD, The University of Texas at El Paso

³Priscilla Guevara, BS, The University of Texas at El Paso

In partnership with two Community Based Organizations (CBOs), this project capitalizes on the unique and extensive access the Hispanic Serving Institution has to the priority population on campus and, through its students, to the surrounding communities for health promotion. As part of this project, six focus groups were conducted among minority young adults, 18 – 24 years of age, (N= 48) on campus and in surrounding communities to better understand existing disparities in access, service use and regional and cultural norms shaping SA, HIV, and HCV risk and prevention needs among this and other vulnerable sub-populations within this age-group. The conclusions of this needs assessment reflect the authors' work and findings and not necessarily the views of SAMHSA.

2.Literature review

Minority young adults in the U.S. are at risk for substance abuse, HIV, and HCV (AIDS.gov, 2014; CDC, 2013; NIDA, 2012) and in Latino/Hispanic populations 56% of new HIV infections in 2010 were among those aged 15-34 years. HIV is also the 6th leading cause of death among Hispanics aged 25-34 (CDC, 2013). Low education levels, limited health literacy, limited social skills, vulnerability to HIV stigma, cultural barriers to negotiating condom use, gender norms, and language barriers also make minority young adults a hard to reach population for HIV testing (CDC, 2013; Ferreira-Pinto & Ramos, 1995; La Fe Clinic-Salazar, 2010).

College students in the U.S. constitute a rapidly growing HIV incidence group and in general are at high risk for HIV, owing to increased frequency of risky sexual behavior and substance use which is enabled by the college environment and norms (Hirsch & Wardlow, 2006; Bocking, Rosser, & Scheltema, 1999; Williamson, 2010; Wilson et al., 2009; CDC, 2013). College students may also consider themselves “invincible” and immune to any detrimental health effects of their behaviors, and this perception in turn increases their vulnerability to HIV and other sexually transmitted diseases (CDC, 2013).

Substance abuse has dire consequences on the individual's family's and community's health. Such consequences include HIV/AIDS, HCV infection, teen pregnancy, suicide, domestic violence, motor vehicle crashes, and criminal behavior (HealthyPeople.Gov, 2013). Nationwide, 51.3% percent of adults 18 years of age and older have reported drinking regularly (Peinado, Villanos, Singh, Leiner, 2014). In 2013, 4.6 million persons aged 12 or older had used alcohol for the first time, and the average age at initiation of alcohol use was 17.4 (NSDUH, 2013). Alcohol consumption is also associated with illicit drug and tobacco use (NSDUH, 2013).

Also in 2012, 2.9 million individuals 12 years of age and older used an illicit drug for the first time, with the average age at initiation of illicit drug use at 18.7 years of age (NSDUH), 2013. Nationwide, young adults 18-24 years of age also had the highest rate of tobacco product use (NSDUH, 2013). Substance abuse is also linked to HIV risk, since it can increase HIV risky behavior due to poor decision-making, and among those infected also increases the human body's susceptibility to HIV/AIDS progression (CDC, 2015). Furthermore, shared injection drug use (IDU) paraphernalia can substantially increase HIV and other blood borne diseases transmission risk (CDC, 2015).

Residing and/or attending college in an international border community may further exacerbate SA, HIV, and HCV risk for minority young adults owing to risk factors inherent to a binational environment such as migration, language barriers, lack of access to health care, poverty, low health literacy, and structural violence (Farmer, 2001; PAHO, 2012; PAHO, 2007). Moreover, risky behaviors, such as alcohol consumption and recreational drug use, which are prevalent among college student populations, further increase HIV and HCV risk in minority young adults in the U.S.-Mexico border region. The dearth in comprehensive substance use data in communities along the U.S.-MX border contributes to gaps in the provision of SA services in this region. In 2012, there were 1,843 people living with HIV/AIDS (PLWH) (84.5% Hispanic; 87.2% male; 121 new HIV diagnoses;) in the West Texas region, with almost all of these individuals living in El Paso (PanWest-West Texas, 2013). In 2013, there were 4,570 PLWH (6.0%) on the U.S.-Mexico Border (TDSHS, 2014). Texas had the 10th highest rate of new HIV cases in the U.S. (TDSHS, 2014). El Paso, TX reported 108 new HIV positive cases in 2011, 137 in 2012, and 116 cases in 2013 109 cases in 2014 (TDSHS, 2014). The paradox of a relatively lower numbers of HIV cases reported in El Paso, despite the prevalent high risk and co-morbidities of HIV among Hispanics in Texas, is related mainly to delayed HIV testing due to barriers to access testing, such as stigma and lack of reliable transportation to testing sites. Minority young adults (18-24 years of age) in the El Paso region who are at high risk for HIV may also be at high risk for HCV.

The HCV rates for El Paso County have ranged from 79 to 36 cases per month since 2010 with a total of 434 cases diagnosed in 2013 (Nowicki, 2005). Along the U.S.-Mexico border, tattooing in unsterilized conditions and by unlicensed professionals were found to be independent risk factors for HCV infection among inmates in prisons/jails and among gang members or friends at home (Adefuye, Abiona, Balogun, Luboko-Durrell, 2009). Furthermore, of those who are infected with HCV, 50% do not know they are infected and hence may unknowingly be infecting others (Hand & Vasquez, 2005). The prevalence rates for HCV among IDUs in El Paso was 76.4%, and in neighboring city of Las Cruces, New Mexico was 80%, moreover 98.7% of IDUs were HCV positive in Ciudad (Cd.) Juarez, Mexico a city across the border from El Paso (Lewis, Miguez-Burbano, Malow, 2009).

2.1 Guiding theoretical framework:

This exploratory qualitative needs assessment was guided by the socio-ecological model (Glanz, Lewis & Rimer, 1990) and culture theory (Handwerker, 2002). The focus groups guides were based on the social ecological model domains related to individual, interpersonal, community, organization and policy level factors modifying risk and prevention needs. In addition, the organic/evolving nature of cultural norms and acculturation were examined in relation to the unique binational U.S.-Mexico border environment. The day-to-day transformer mobility between the study community in TX, U.S.A. and Chihuahua, Mexico constitutes a unique dimension to the concept of contact between the "sending" and receiving environment" (Berry, 2005) traditionally shaping acculturation. Individual, interpersonal (social and family networks), community, policy and organizational factors shaped by regional, cultural and structural norms, which in turn influence SA, HIV and HCV risk among the priority population, were examined in order to inform prevention strategies for this high risk population living in a dynamic binational environment. The main research questions which were guided by the above theoretical framework were: (i) what are the norms shaping SA, HIV and HCV risk and prevention at each socio-ecological model domain among minority young adults in this U.S.-Mexico border community? And (ii) how can these norms be utilized to design regionally and culturally appropriate public health interventions?

3. Methods

3.1: Participants:

For the focus groups on college campus, a total of 16 students participated including 1 female-to-male transgender student and 13 female students (75%). All participants were full-time students with 62% of the participants being seniors, 18% juniors, and the remaining being sophomore and freshmen. Thirty-one percent of participants were from the Health Sciences, 18% of the participants from the College of Science, 18% from the College of Engineering, and the remaining were participants from the other colleges across campus. Twenty-seven percent of participants identified themselves as White Non-Hispanic, 27% as belonging to more than two races, and 27% as Mexican International. The remaining participants identified themselves as Black Non-Hispanic and other international. The range of the participant's age group varied from 18-24, where the average age for the campus focus group participants being 21 years of age (Table 1).

Table 1. Demographics of on-campus focus groups participants (N=16)

Demographic Characteristics	%
Gender	
Female	75
Male	18
Transgender (Female to male)	6
Ethnicity	
White non-Hispanic	27
Black non-Hispanic	19
>2 races	27
Mexican international	27
Student Classification	
Junior	18
Senior	62
Full-time student	100
College Enrolled in	
Health Science	31
Engineering	18
Science	18
Other colleges	33
Average age = 21 years	

In the community three focus groups were conducted with minority young adults between the ages of 19-24. A total of 32 minority young adults participated in the focus groups. Participants included two male-to-female transgender minority young adults, 17 females and 13 males. Twenty-seven percent of participants identified themselves as White Non-Hispanic, 27% as belonging to more than two races, and 27% as Mexican Internationals and 10% as other international. The remaining participants identified themselves as Black Non-Hispanic. The average age was 21 years.

Table 2. Demographics of community focus groups participants (N= 32)

Demographic Characteristics	%
Gender	
Female	53
Male	41
Transgender (Female to male)	6
Ethnicity	
>2 races	10
Mexican international	25
Other International	10
Black	5
Average age: 22 years	

3.2 Instrument: A standardized semi-structured open-ended focus group guide designed with feedback from CBO partners and stakeholders was used to conduct focus groups among minority young adults on campus and in surrounding communities. The focus groups guide probed current substance abuse, HIV and HCV risk and prevention related norms in the priority population.

3.3 Data Collection

Approval of the study protocol was obtained from the Institutional Review Board (IRB) at the partnering MSI. Focus group participants from surrounding communities were recruited with the help of partnering CBOs while on-campus focus group participants were recruited through on-campus partners including the student organizations and faculty across colleges. The community focus groups were held at community sites (community clinics, community health centers etc.) convenient for the participants and on-campus focus groups were held in a private location on campus. Informed consent was implemented throughout the data collection stage.

As part of the needs assessment to inform the project strategic plan and interventions, six focus groups (3 on campus and 3 in surrounding communities; N=48) were conducted using a standardized open-ended semi-structured focus group guide with individuals 18 – 24 years of age on campus and in surrounding communities (partnering CBOs' service areas).

3.4 Data analysis

Qualitative data obtained from on and off campus focus groups with minority young adults 18-24 years of age were transcribed and coded. The transcriptions and coding were checked by at least two researchers for validity. The coding was developed to accommodate for themes which may emerge later in the analysis. The data were examined for patterns related to substance abuse, and HIV and HCV risk (Creswell, 1998). Emergent themes were then identified and interpretations were made in relation to the SA, HIV, and HCV prevention needs in the priority population on campus and in surrounding communities.

4. Results

Five main themes emerged from the six focus groups (N=48) conducted with students on the college campus (n= 16) and youth in the surrounding communities (n= 32): (i) Types of substances used, perceptions related to effects of substance abuse, and local norms shaping substance abuse, (ii) Risky sexual behaviors, (iii) HIV and HCV knowledge gaps, (iv) Access and utilization of SA, HIV and HCV prevention services, and (v) community-driven suggestion for effective SA, HIV and HCV prevention.

Theme 1: Substance abuse

On-campus focus groups participants noted that, since the study was conducted at a commuter campus with 90% of the students living in the community, most of their social networks extend to the surrounding communities. They reported that substance use by males and females was a given among their peers, either among those who attended college, or among same age peers who were members of their social networks off-campus.

"The exposure to substances I think starts before the alcohol. Usually the freshmen year they get access to substances. Under the influence of alcohol, it is a depressant. It gets you aggressive like fight with someone. ...with marijuana it is totally different, or have sex with someone, it keeps you calm. I don't know it's a bit different." They all agreed that alcohol and drug use impaired a person's decision to drive under the influence, and a majority said that alcohol makes a person more confident and courageous. Beer, vodka and tequila were the alcoholic beverages listed as being consumed by most members of their networks; a few mentioned that malt beverages and mixed drinks were also consumed. The choice of alcoholic beverages was based on their affordability. I think it depends on the budget that you have. So most of the time it'd be beer, but if you have a little more money it would be like Vodka or Rum or any other kind of mouth beverage."

All participants in the focus groups agreed that there was a difference in "being buzzed" and being "drunk". Being "buzzed" meant that, while under the influence of alcohol or drugs, one was aware of what they were doing; while being drunk meant acting "irrational" and not being able to control one's behaviors. All participants agreed that, whether "buzzed" or "drunk", alcohol affected a person's decision-making abilities. The majority of participants said that alcohol can make an individual more prone to violence and that they have observed males and females in their peer groups become violent verbally and physically abusive while intoxicated.

Moreover, after consuming alcohol their male peers have been observed to get into fights with other males, and that under the influence of alcohol, females tend to become accusatory and verbally abusive towards their male partners. Participants reported that not many of their peers consumed alcohol at campus venues.

They reported that venues for alcohol purchase and the social networks in which it was consumed reflected the local culture and also by commuter campus status. All participants mentioned that alcoholic beverages were most commonly consumed in social networks based off-campus venues, including family gatherings. House parties and bars around campus and in the downtown area, which is quite close to the Campus, were reported as the most common venues for alcohol consumption. Campus dormitories were also reported as venues for consumption of alcohol among their university-based non-commuting peers.

They explained that one reason for the prevalence of alcohol consumption is the Mexican-American cultural ethos, which allows for minors to be exposed to alcohol under supervision, and as young adults, unsupervised alcohol consumption at family parties. "Yes, especially if you are Hispanic, and come from a very Hispanic family, like at the time your 18, since in Mexico that's the drinking age is 18, so a lot of Mexican families start like at 16 or 17, even earlier sometimes." Moreover, there is a pattern that encourages this behavior in border towns. The legal drinking age in the contiguous city in Mexico, which lays a short walk across a bridge to downtown bars, is 18 years of age. Hence it is common for young people in communities in the border region to easily consume alcohol before the U.S. legal drinking age of 21 years.

"Especially that we have the border right here, it's easier for people to just like cross the border and just start drinking there, legally, and just come back here." Another incentive for increased alcohol consumption is the weekly offerings by bars around Campus of "college student specials" and "happy hour" specials from Thursdays until Sunday. Focus groups participants reported that for alcohol consumption—"the weekend begins on Thursday". "Before we go to a bar, I mean we're of age, but, before we go in, just so we don't spend a lot we just drink in the car, in the parking lot [of the bar]. Or someone who's not drinking and driving and the rest of us are just drinking in the car."

Marijuana was reported as the other psychoactive substance used by all members of the focus group participants' networks. Marijuana was reported to be consumed mostly at "raves" or music concerts, or in known locations in the surrounding desert region. Marijuana reportedly was used in order to calm oneself down and to counteract the aggression-inducing effects of alcohol. It was also reported to be consumed for stress management, especially when dealing with family related issues and closer to final exams.

"The exposure to substances I think starts before the alcohol. Usually the freshmen year they get access to substances. Under the influence of alcohol, it is a depressant. It gets you aggressive. For drugs for example with marijuana it is totally different, like fight with someone or have sex with someone, it keeps you calm. I don't know it's a bit different." All participants said that they witnessed the initiation of substance use among their peers while they were in High School and, that they had also experimented with a variety of drugs such as, marijuana, ecstasy, speed and prescription drugs. They reported that in college, alcohol and marijuana were the most commonly abused drugs. "...weed starts in High school then it gets worst, or Middle School even. " "...marijuana is abused among college going age groups. There is more like ecstasy. Weed is more common ... it starts in high school. I think for some people it may get more extreme. Like may be in high school it was like something they thought like the gateway drug."

In the Community focus groups, participants reported substance use in their social networks among males and females— including those peers who attended college. Vodka and Tequila were the preferred alcoholic beverages consumed, mostly as mixed drinks. The choice of which hard liquor to buy was based on the cost and some mentioned that cheap wine (Ripple) was also consumed. "When you're only 18 to 20 you can only get what people will help you get. Whereas after you turn 21 you can go and usually decide what you want. You have more options." " [Preference goes from] liquor, then beer, and then wine."

When asked what was the difference between being "buzzed" and being drunk, participants in all three focus groups stated that being "buzzed" meant that under the influence of alcohol, or drugs, one was aware and in control of what they were doing. Being drunk meant that the person was acting "irrational" and without control or their actions and of what they were saying. All participants agreed that alcohol affected a person's decision-making ability, whether "buzzed" or "drunk".

The majority of the focus groups' participants were adamant that alcohol abuse can lead to violence and that they have observed both males and females belonging into their peer networks become violent verbally and physically. Many males have been observed to get into fights after consuming alcohol, especially when they are in the group with other males. Participants in all community focus groups mentioned that alcohol use is prevalent in the "young adult culture" and is used as a means of relaxing in social situations. "I think when you're 18 you start partying a lot, you start drinking a lot. But then the closer you get to 24, drinking liquor, taking shots, hard stuff. And then by the time you're 24 you start to slow down a little bit. You stick to beer, or something light."

Alcohol is consumed in many venues and they mentioned that their peers drink mostly in parties, in bars, and in dance clubs. They also mentioned drinking in their cars and that driving to the desert to have "tailgate parties" is a common occurrence. "Sometimes people don't have anywhere to chill so they just chill in their car and they drink there. They'll park in the park, and then you'll have you and some friends and they'll drink in the car." "Sometimes when you're going from a party to another party. You pre-drink...you still want to keep being drunk, you do that [known as] pre-gaming."

Participants also reported that alcohol consumption increases during the weekend and that "binge drinking" on Fridays and Saturdays is quite common, but that "ladies night" and "specials" offered by bars during the week attract a lot of young adults from the community. "Bars have really good specials on Tuesdays and Thursdays. It's like college night..." "My friends, they usually pregame it, with alcohol and marijuana, and they go happy into the bar or club. They do more there and they're good for the night."

Marijuana "weed" was reported as being used by peers of all community focus group participants and that it was consumed in a variety of venues: in parties, at dance clubs, music concerts, and raves. It was also consumed in the "car parties" in the surrounding desert areas. Participants commented that Marijuana was used to "mellow out" and to manage stress caused by peers, family members and the "authorities". All participants agreed that as with alcohol, Marijuana use impairs a person's ability to make appropriate decisions, such as driving "buzzed" or drunk and having unprotected sex. In a contradictory statement, some participants affirmed that "safe sex" was more likely to happen when one is under the influence of marijuana, since one moves at a slower pace and has the time to think about the consequences of their actions.

"I think when they smoke marijuana, they become more observant and it's not like drinking, drinking alcohol. It's totally different." "[Marijuana] makes you think more... It makes you think...more cautious, they concentrate more on things. If you're on other type of drugs ... you go crazy. Marijuana normally calms..." All participants said that substance abuse was initiated in their peer networks while they were in high school and, that they experimented with a variety of drugs like marijuana, ecstasy, "speed", and prescription drugs during their high school years.

Theme 2: Risky sex behaviors

All participants in on-campus focus groups agreed that alcohol and drug use were associated with risky sex behaviors, and said that unsafe sex is more likely to be practiced if alcohol or drugs were consumed. Two participants reported unintended pregnancies among their friends as a result of engaging in unprotected sex while they were under the influence of alcohol. "When you're under the influence of alcohol and drugs you are kind of in the moment. Like if both people are under the influence of alcohol it's just going to happen. You don't know if like if oh, did they strap on a condom? or did she put a condom on me? It just happens and that's when you see HIV, STDs and stuff like that...unplanned pregnancies going on so..."

When asked what was understood as "having sex" among their peers, all participants mentioned that traditionally it was understood as penetrative sex, defined as vaginal sex among heterosexual couples, and anal sex among male same sex couples. "Some people say oral sex is not considered as sex. Vaginal penetration is the most common definition of sex." Participants shared that the emphasis on virginity until marriage in the local culture also resulted in many heterosexual couples engaging in anal sex or oral sex, which were not considered as "having sex". Moreover, these types of sexual activities may not always involve using condoms, since the fear of an unwanted pregnancy is removed. On average, participants reported that among members of their peer networks there were about five to seven long-term ("serious") sexual partners per year, while casual partnering ("hooking-up"), often under the influence of alcohol, was reported to involve up to 20 sex partners per year in the average. Female same sex couples were reported to be mostly in long-term relationships and have fewer sex partners compared to male same sex couples, who were reported to engage more often in unprotected sex.

Bisexuality was discussed as a trend among students in all focus groups. It was reported as acceptable more for female peers and it was considered in some of their peer networks to be "cool". Experimentation with bisexuality usually seems to begin in high school. "[Exploring bisexuality] is more open 'cause it's considered what everybody's doing" "Experimenting is more common in college."

In the community focus groups, all participants stated that safe sex was more likely to be practiced if alcohol or drugs were not consumed before and during a sexual encounter. Under the influence of alcohol, cocaine, and designer drugs, their peers engaged in more risk behaviors and more unsafe sex practices. "When you're intoxicated you definitely act...on impulse. You think it sounds good at the time and you go for it. You just do it. It doesn't matter at the heat off the moment." When asked what was defined as sex among their peers, all participants agreed that penetrative vaginal sex, among heterosexual couples, was the accepted definition of "sex". Anal or oral sex were not considered "sex" in the traditional sense. They reported that oral sex was more common among their peers.

Theme 3: HIV and HCV knowledge

All participants in on-campus focus groups possessed accurate and adequate knowledge about HIV transmission, prevention and treatment. Participants explained that unprotected sex could be a risk for HIV transmission for same sex and heterosexual partners. Participants also discussed vertical transmission of HIV and the benefits of getting tested for HIV. But, most participants were not clear on how dental dams can be used for protecting against HIV. All, except one participant, were not aware of hepatitis C (HCV) transmission, prevention, consequences, and treatment modalities. All participants suggested that the proposed interventions should focus on HCV health education and prevention among their peers.

"I know that in [colleges like]Business and Engineering[department], they don't have classes that teach them[students] about this [HIV/STDs/Hep C], it's more on the Health Sciences[classes] " "I would say that hepatitis C is a topic that is less common. Because when you think about sex and STD and stuff like that, I mean hepatitis C is not [on the radar], I don't know if it is considered an STD even though it can be transmitted sexually." "I think Hep C, and all the hepatitis in general, like HPV for example is really under. Like if you tell somebody that you should have safe sex to avoid HPV they are going to be like "what do you mean?". You know what I mean? Like a lot of people don't realize that it is a sexually transmitted disease."

The community focus group participants were recruited by community-based agencies that had HIV prevention as part of their mission. Accordingly, all participants possessed accurate information about HIV transmission, prevention and treatment. They all knew about the problems of unprotected vaginal and the anal sex. All were very aware of the need to have HIV testing. They were somewhat aware of the existence of Hepatitis C and the main mode of transmission by sharing needles. But they were not cognizant of the consequences of being infected with the virus. They all agreed that there should be more emphasis on Hepatitis C health education and prevention among their peers and to the whole community. "[In high school health class] we talk about HIV real quick, about abstinence, and then Hep C. real quick. It was a brief talk." "The [health] teacher [was] disinterested. They just want to get it [sex-ed lecture] over with..."

Theme 4: Access and utilization of prevention services

Most participants in on-campus focus groups said that they and their peers mostly used their primary care provider for all health services, including sexual and reproductive health services. They remarked that their peers frequently were not aware of resources being available to them on Campus. All discussed the taboo and stigma that existed among their peers, on and off campus, for accessing sexual and reproductive health services—particularly obtaining condoms. Both male and female peers were reported to be hesitant to obtain condoms if they were made available in a very public venue. In addition, given the stigma associated with possession of condoms, they stated they did not consider condoms readily accessible. In all on-campus focus groups, it was cited that another possible reason for students not getting condoms at health promotion events on campus was that the available condoms were considered to be of inferior quality, "they [the condoms] may break". As for accessing HIV testing events conducted on campus, focus group participants said that, given the stigma associated with HIV, their peers in all colleges across campus would not be seeking testing, if the testing events are held every time at the same venue.

Community focus groups participants stated that they have used preventive health services in the two agencies that are part of the program. They (community participants) complained about the lack of accessibility to condoms and also they mentioned the needs for a syringe exchange programs in local communities, like the one that exists in the neighboring state of New Mexico. "...first they [pharmacists] want to know like for what are you going to be using it [syringe], it's just ridiculous that you can't buy clean needles, like you should be able to tell them that I am a heroin user and I don't want to get AIDS." All focus group participants were aware of the existence of HIV testing venues and stated that their social networks relied on word of mouth for health fairs and other outreach events for HIV testing. Since HIV is not much discussed among their peers they are not aware where they access prevention materials such as condoms and dental dams.

Theme 5: Suggestions for interventions to address SA, HIV and HCV prevention

During the on-campus focus groups all participants provided feedback/suggestions on how to address service gaps and SA, HIV and HCV prevention needs among members of their peer networks, on and off campus. Most participants emphasized that interventions through the MSI-CBO partnership need to address the existing cultural taboo that prevents open discussions of sex with their family members, and also deal with stigma related to accessing condoms on campus. Almost all participants recommended having free condom dispensers in restrooms across campus, to deal with the stigma of openly possessing condoms. About one-third of the Campus participants recommended that condom dispensers can be made available in the campus sites like the library where there is heavy student traffic.

In relation to increasing the diffusion of the intervention among member of their peer networks, participants suggested using social media networks and digital media as the most effective modes of outreach. About half of the participants also suggested taking advantage of campus events by utilizing student leadership organizations as venues for intervention outreach. Social media venues recommended for interventions were Facebook, Instagram, Twitter and Snapchat. All participants said that any project website and any applications developed must be connected to these online social networks.

"The website should be easy to navigate, give the facts straight. If the student wants to go more into depth, [facilitate it] just at the beginning." As for the intervention messages, all participants recommended that any health promotion messages must be short, "catchy" and be said with humor. They suggested using memes, "vines" (short videos), gaming, "blogging" (video blogging) as tools to get messages about prevention and treatment across their networks. "I would say humor, maybe doing it through a meme. There's this Facebook page I follow and it's about student health. It's really funny! Because the meme are like sarcastic but they're actually funny... I think making it in a way that would make somebody laugh but still learn."

Any video messages related to the intervention were recommended to be about 10 seconds in length and not exceed a minute. Participants recommended that some form of incentives must be made available for all intervention participants to attract and engage them in the messages. Half of the participants suggested that the interventions must also engage all levels of the Campus administrative leadership, in spreading intervention messages, particularly in relation to reducing the stigma related to accessing condoms and talking about safe sex on campus. They also mentioned that training members of their social networks as peer educators would be more effective in reaching their peers with intervention messages.

"I guess it's the people that you look up to [to engage as educators]. So may be like students, I don't know like. Like that your best friends with, like your classmate, he's taking part in that so may be we should go check it out and stuff like that. You definitely need champions sending out that snaps, Instagram feeds, stuff like that." The community focus groups participants also provided feedback and suggestions on service gaps and the prevention needs in their peers. They stated that social networks should be used to address the lack of knowledge among minority young adults about prevention and treatment options.

Since discussions about HIV and hepatitis C prevention, and safe sexual behaviors were not a common theme among their peers, they suggested that the use of social media was the most effective way to reach them. Facebook was described as perhaps the most effective venue. They would like to have information presented in the small snippets that are colorful and interesting to watch. These messages, according to participants, cannot more than one or two minutes long, otherwise people will not watch them. They also suggested engaging athletes and some prominent political figures to spread the messages about prevention and access to treatment.

One message became quite clear among some of the community participants who have been dealing with substance addiction: they want more inexpensive drug treatment options for people who want to enter a rehabilitation program. “[Rehab] is expensive. Like if you are an addict and you don’t have the money...it’s going to cost like 150-300 for day plus everything else. It’s money that you don’t have. And for those that have Medicaid, they have to wait like a month to see if they tell you if you can get it, or you can only get treatment for like a month. Like one day you wake up wanting the help, because if you keep using then your mind changes. By the time you can get the help your mind is already decided like screw this, like this is too complicated.”

5. Discussion

The study findings provide insight on substance abuse patterns, risky sexual behaviors and barriers to prevention among minority Mexican American young adults in relation to regional, cultural and college campus norms. Social networks frequently include a subset of risk potential networks which play a vital role in shaping access to drugs and alcohol (Freidman & Aral, 2001). These are mainly peer networks of same age friends who engage in substance abuse and other health risk behaviors. Responses of participants in the six focus groups indicate that the cultural and milieu that impacts the peer networks in the population under study Mexican American young adults are shaped by the binational environment and the predominantly Mexican cultural norms of the border region. The cultural norms related to alcohol consumption facilitate early initiation of alcohol use and focus group participants indicate that they may be exposed to alcohol through family and at family gatherings, as preventive measure against future alcohol abuse. What is “legally underage exposure” to alcohol may be a contextual factor related to the different laws in the U.S. and Mexico. Even earlier (childhood) exposure to alcohol may be a cultural norm, and which seems to be prevalent on both sides of the border.

The exposure to alcohol at a young age is also facilitated by the Mexican government policy of a lower legal age for alcohol consumption at 18 years of age (Carpenter & Dobkin, 2011). Transborder mobility among residents from both sides of the border to shop and visit relatives also includes crossing over into Mexico for alcohol consumption. Participants’ responses indicate that this is particularly true of younger than 21 years old youth from the U.S. side of the border who have relatives, friends, and peers who live in Mexico whom they visit to socialize. Such norms seem to also be related to the finding that in participants’ networks, alcohol was frequently consumed at their, relatives’ or friends’ homes with family members/relatives being present. While access to alcohol in the home setting may be shaped by cultural and policy related norms, initial exposure to multiple drugs including marijuana, heroin, methamphetamines and prescription drugs seems to occur while in middle and high schools facilitated by school venues and networks. Marijuana seems to be the most common substance abused among the present study priority population.

Participants’ responses also indicate that cultural norms related to sexuality and gender roles may interact with religious norms to shape the norms related to risky sex behaviors among their peers. Cultural expectations shaping gender norms such as machismo and marianismo may shape risky sexual behaviors for males and females; while for males, multiple sex partners in general are acceptable and for a certain extent socially expected, women in general are expected to strive for maintaining their virginity until marriage. However, according to participants’ responses, this does not necessarily translate abstinence being widely practiced in their peer networks. Gender norms may shape risky sexual behaviors such as having unprotected anal and oral sexual contact, which seems not to be not defined as “sex” in traditional terms, and for females a way to have sexual contact while still maintaining virginity until marriage. Participants also reported that such sexual contact frequently is not practiced safely (i.e. using condom/dental dams). Existing social norms in the participants’ networks, which prevent open discussion about sexuality and sexual health within families at home settings, combined with the lack of easy access to condoms and the stigma to asking for one, or being under the influence of alcohol or drugs deter practicing of safe sex during anal, oral or vaginal intercourse. This seems particularly true among women the study population whom may lack the skills needed to negotiate condom use. Participants’ responses also indicate the higher risk for sexual and domestic violence under the influence of alcohol and drugs. Violence also reduces the opportunity and the power, particularly among women, to negotiate safe sex (CDC, 2014).

The prevalence of unsafe sex, anal sex in particular, among participants' networks coupled with the reported low level of HCV knowledge, may only increase the priority population's risk for HCV in addition to other STIs, and unplanned pregnancies (Freidman & Aral, 2001). The reported low levels of knowledge about HCV risk factors, including unsanitary tattooing instruments coupled with the high prevalence of tattoos among young adults/college students may impact HCV risk in this population (Hand & Vasquez, 2005; Quaranta et al., 2011). Participants' responses suggest that the stigma associated with sexuality and sexual health may also contribute to the reduced utilization of testing and treatment services by young adults on campus and in the community. In addition, although free condoms they can be obtained at the student health center, they are perceived by students as inaccessible. Participants' suggestion for incorporating free condom dispensers in all restrooms on the college campus should to be examined as a possible solution to the problem by increasing unobtrusive access and hopefully increased utilization.

5.1 Implications for intervention design

SA, HIV and HCV prevention interventions focusing on minority young adults must examine nuances and characteristics of risk potential networks and venues in which risk behaviors occur, taking into consideration cultural and regional norms. The binational environment in U.S.-Mexico border communities must be incorporated in intervention design in terms of understanding risk factors, barriers to accessing prevention and treatment interventions and maintaining long-term behavior changes within the priority population. For example, the cultural norms on both sides of the border related to young adults drinking patterns may influence the level of risk perception related to the use of other drugs, while proximity to the border may also increase access to alcohol and other drugs. Similarly, local gender and religious norms making the open discussion of sex more difficult could prevent members of the priority population from utilizing evidence-based prevention interventions.

Similarly, interventions not addressing the prevalent risky sexual behaviors such as unprotected anal and oral sex which occur because of stigmatizing gender and religious norms about virginity may fail to achieve intended outcomes (Moreno, 2007). In addition, semi-urban and rural U.S.-Mexico border community residents often face transportation related challenges to participate in interventions. Utilizing Promotoras (peer health educators residing in priority communities) may be examined as a strategy to address this barrier (Rhodes et al., 2006). Partnerships with local community based organizations and fostering champions in the affected communities – particularly peers among 18-24 years old individuals must be involved in multiple stages of prevention intervention design including pre-planning, implementation, and evaluation. Community-based partnerships to inform intervention design may help clarify the most pertinent needs, risk behaviors and barriers to intervention reach and uptake minority/immigrant communities (Wallerstein & Duran, 2006).

Given the age group of the priority population and the availability to social media tools practically at no cost to intervention planners and clients, particularly social network sites (SNS), a recent game-changer for health promotion, must be examined as an intervention strategy for SA, HIV and HCV among minority young adults (Neiger et al., 2012). The current availability of evidence-based SA, HIV and HCV social media products from federal agencies such as Centers for Disease Control (CDC) and SAMHSA may be used for dissemination of such materials or as a platform to design similar products/tools and incorporate any unique risk factors and structural challenges inherent to priority communities.

5.2 Implications for research

Racial minorities are at disproportionate high risk for undesirable health outcomes, even when adjusting for socio-economic status (LaVeist, 2002). Study participants' responses emphasized the need to examine the interactions between structural factors such as access to condoms, testing and treatment with socio-cultural norms such as stigma toward contraception and discussing sexuality, acceptability of alcohol use, and gender role biases promoting violence and risky sex (CDC, 2014).

Community-based participatory research (CBPR) is an effective strategy in understanding the interactions between structural and socio-cultural factors which shape SA, HIV and HCV vulnerability (Wallerstein & Duran, 2006). In addition, the strong family and social networks described by participants in terms of risk may also be examined in relation to resilience for SA, HIV and HCV. The priority communities' definition of "self" in terms of connections with families and other interpersonal networks may be studied to devise strategies to addressing community level factors perpetuating structural violence which promote undesirable health outcomes related to SA, HIV and HCV in minority communities (Caldwell, Guthrie & Jackson, 2006).

5.3 Implications for policy

Binational communities require comparable binational policy efforts to address regional health disparities. In the case of U.S.-Mexico border communities, differences in laws related to underage drinking and the emerging potential disparities in the legality of Marijuana possession and consumption, combined with the cultural norms related to sexuality, must be examined in terms of policy and laws the impact SA, HIV and HCV prevention. Conversely the binational economy which thrives on transborder mobility, the health of immigrants, and the evolving demographics of regional high education institutions, must be examined in terms of policy and law related to SA, HIV and HCV prevention.

The study findings related to substance abuse and risky sexual behavior initiating in middle and high school have implications for sex education and substance abuse prevention in middle and high schools on both sides of the border. Moreover, access to affordable HIV and HCV testing and treatment is critical in vulnerable low-income border communities (Healthy Border 2020). Perceptions related to one's immigrant/documented status, and the affordability of testing and treatment -particularly on the U.S. side of the border may also hinder or delay utilization of prevention services. Policy and lawmakers must work to dispel any misperceptions by clearly stating that any restrictions based on immigrant status to qualify for testing and treatment, while program implementers must be proactive in conveying the same message to their priority communities.

Lack of access to health services, HIV and substance abuse are major public health challenges in the U.S.-MX border region (Healthy Border 2020; TSDHS, 2012). The study findings have implications for advancing Healthy People 2020 objectives related to HIV, Sexually Transmitted Infections, Substance Abuse and Social Determinants of Health and Public Health infrastructure (Healthy People 2020) and Healthy Border 2020 objectives related to Access to Health Care and HIV prevention.

5.4 Limitations and strengths

Sensitivity of the topics addresses and the community stigma to discussing sexuality and HIV were main challenges in recruiting study participants. The small sample size (N= 48) is a limitation in terms of external generalizability of results. However, the descriptive validity (factual accuracy in reporting) and the interpretive validity (related to participants' responses) assured through all stages of the data collection and analysis and the hard-to-engage nature of the study population (Maxwell, 1992). In addition, the venues where participants were recruited allow for the specific traits related to SA, HIV and HCV risk and prevention to be generalized to the priority population, given that they are a hard to engage population (Heckathorn, 2002, 1997). The strengths of this study are that participants from a hard-to-engage population were successfully recruited and that critical insights related to trends in SA, HIV and HCV risk unique to young adults (majority Mexican-American in a U.S.-MX border community) were obtained.

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