"I don't see myself represented:" Strategies and considerations for engaging gay male Native Hawaiian and Other Pacific Islander teens in research and HIV prevention services

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Abstract

Significant efforts have been applied to the development of sexual health programs for minority young gay males. Given the absence of research with Native Hawaiian and other Pacific Islander (NHOPI) gay teen males, this study was done to assess how to reach them. Interviews were conducted with 20 NHOPI gay males ages 19–24 as near peers that can inform reaching teens. Data was analyzed using the Reflexive Thematic Analysis method. Three themes were identified: (1) Culture is a crucial factor for recruitment and engagement—whether participants realized it or not; (2) Confidentiality is key in recruitment to provide a safe space for NHOPI gay teen male research participation; and (3) NHOPI gay teen males experience multiple identity conflicts that must be considered for recruitment and engagement initiatives. Online recruitment efforts are optimal and should reflect distinct NHOPI cultures. More research is needed when it comes to understanding the cultural acceptance and understanding of homosexuality in NHOPI communities and how to integrate cultural education into recruitment methods and interventions.

Resumen

Se han realizado esfuerzos para el desarrollo de programas de salud sexual para jóvenes que se identifican como gay, bisexual o queer pertenecientes a minorías. Dada la falta de investigación con adolescentes gay nativos de Hawái y otras islas del pacífico (NHOPI por sus siglas inglés), este estudio se realizó para evaluar cómo llegar a ellos.Se realizaron entrevistas con 20 hombres gay NHOPI, que viven dentro de una misma comunidad o cerca, entre 19 y 24 años que pueden informar cómo llegar a ellos.Los datos se analizaron utilizando el método de Análisis Temático Reflexivo (Reflexive Thematic Analysi). Se identificaron tres temas: (1) La cultura es un factor crucial para el reclutamiento y la retención, ya sea que los participantes se den cuenta o no; (2) La confidencialidad es la clave en el reclutamiento, para proveer un espacio seguro para la participación en los estudios de investigaciones de adolescentes gay de NHOPI; y (3) los adolescentes gay de NHOPI experimentan múltiples conflictos de identidad que se deben considerar para las iniciativas de reclutamiento y retención. Los esfuerzos de reclutamiento en línea son óptimos y deben reflejar las distintas culturas de personas NHOPI. Se necesita más investigación cuando se trata de comprender la aceptación cultural y la comprensión de la homosexualidad en las comunidades NHOPI y cómo integrar la educación cultural en los métodos de reclutamiento y las e intervenciones.

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Introduction

There were an estimated 34,800 new HIV infections in the United States (US) in 2019. [1] Men who have sex with men (MSM) represent the majority of new infections (66%) and young people represent the largest groups of new infections (#1 is 25–34 year olds at 10,000 infections; #2 is 13–24 year olds at 5,700 infections). Furthermore, the largest percentage of undiagnosed infections were that among persons aged 13–24 years (44.3%), followed by persons aged 25–34 years (28.5%). As such, young MSM are a priority population for research and services related to HIV testing, prevention, and care as articulated in the HIV National Strategic Plan for the US. [2] Given the large number of cases among Black and Latino young MSM, these two sub-groups are identified as in need of urgent attention in this plan. Black and Latino young adult gay males have appropriately seen a significant focus in domestic HIV research, although much less research has been conducted with gay teen males from these and other racial/ethnic groups. [3].

Communities that represent a smaller proportion of the US population can receive less attention in such national plans, sometimes due to lack of data or being combined with other minority populations [4]. Native Hawaiian and Other Pacific Islanders (NHOPI) represent a community of people having origins in any of the original peoples of Hawai'i, Guam, Samoa, or other Pacific Islands. [5] Existing data indicate that NHOPI populations have higher prevalence of and/or poorer outcomes for a variety of health conditions, such as diabetes, [6] cardiovascular disease, [7] cancer, [8] depression, [9] and HIV/AIDS. [1], [10], [11] Traditionally, and continuing in many current studies, NHOPI individuals have been excluded, grouped together in health research as an "other" category, or grouped with Asians under the "Asian and Pacific Islander (API)" label. [4,12] NHOPI have long advocated for disaggregated racial data to better inform service delivery and public policy efforts to address health disparities. [13] More research focused on NHOPI is needed to better understand the health status and needs of this population and to address health disparities.

In regards to HIV/AIDS, specifically, the CDC's 2019 national estimates of HIV prevalence and incidence, [1] NHOPI was the racial/ethnic group with the third highest HIV prevalence after Black and Latino. However, for HIV incidence, an estimate is not provided due to a small number of identified cases per year. The smaller number of HIV cases per year has long played into the "model minority" stereotype that reinforces a concept that HIV is not a relevant concern despite an elevated HIV prevalence rate. [14] Based on case surveillance data in Hawai'i, the rate of new infections among NHOPI is not disproportionately higher than for White residents. There were 4,774 cumulatively diagnosed HIV infections in Hawai'i at the end of 2018. [15] NHOPI accounted for 543 of those infections (11%) although they represent around 27% of the state's population. [16] However, an assessment of hospital data in Hawai'i found that there are disparities in rates of hospitalization of HIV positive Native Hawaiians. [17] This study concluded that Native Hawaiian HIV patients are at a greater risk for being hospitalized at younger ages and are more likely to be on Medicaid than HIV patients from other ethnic groups, but we have yet to elucidate the underlying factors driving these differences. Cultural, economic, and legal barriers to HIV prevention, testing services, and primary and ongoing care disparities exist for NHOPI. [18,19] These differences in the pattern of disparities between the national picture among NHOPI and NHOPI in Hawai'i suggests the importance of local and community-engaged research that can help understand and contextualize community HIV trends and needs.

According to the U.S. Census Bureau, 628,683 people identify as NHOPI alone, but that number goes up to 1.4 million for NHOPI in combination with one or more races. [20] Analyses of the CDC's Youth Risk Behavioral Surveillance study examining sexual orientation by race/ethnicity found that the youth most likely to report any same-sex sexual behavior were multiracial (5.7%), Native Hawaiian/Other Pacific Islander (5.7%), and Black (5.6%). [21] The US census estimates that the population size for 13–18 year old NHOPI males is 70,227. [20] Generalizing from 5.7% engaging in same-sex behavior, it can be estimated that there are 4,003 NHOPI adolescent MSM in the US. Implementing an HIV prevention program with a population of this size requires special consideration in terms of reaching them with an effective HIV prevention program that is culturally congruent and can be delivered with fidelity. Traditional venues for teen HIV prevention programming already have challenges in serving gay teen males in general; for example, sexual gender minority (SGM)-inclusive sexual health education is often absent in school [22] and parents may be unequipped to provide sexual behavior and health information for SGM teens. [23–25] The poor representation of young MSM (of the 453 total young MSM respondents, 4% were categorized under "other" which includes NHOPI) in the 2015 pilot National HIV Behavioral Survey is further evidence of how challenging it is to reach this population. [26] Combined with the various significant HIV risk factors among adolescent MSM which include prevalence of condomless anal sex with a male partner, multiple oral or anal male sex partners, and sexual concurrency, addressing gay teen males are critical.

Digital interventions can make an important public health impact [27,28] by increasing access to health services and reaching more of the population. [29] Access to a smartphone among US teens is nearly universal. [30] Gay teens are

accustomed to using the internet and mobile devices to communicate and learn about sex [31–33] making this an ideal avenue for teen sexual health promotion. [34].

Serious funding and effort have been applied to the development of online and app-based sexual health promotion and HIV prevention and care support programs for gay teen males [35], including several that have demonstrated significant effects in gay teens [36,37] and with biomedical outcomes. [38] The majority of mHealth HIV interventions for gay males focus on adults rather than teens. [39] Despite the common misperception that technology-based interventions simply live online without need for efforts to support utilization, in reality, promoting the program to key populations requires organized and sustained effort. Researchers in gay teen male HIV prevention have relied on social media advertising. [31,40] Yet given the ever-changing social media landscape, reaching gay teens–particularly teens of color–is increasingly complex and costly, and requires engagement with the community of focus to inform the development of culturally responsive and compelling recruitment approaches. [41].

The focus of the current study is to use qualitative methods to elicit from young adult NHOPI gay males, approaches and practices that can help with recruiting and engaging NHOPI gay teen males in eHealth HIV prevention programs; although data collection was relevant to broader considerations for engagement of this population in research and health services. NHOPI near-peer informants (e.g., young gay male adults) can advise on the creation of a unique and tailored recruitment plan with increased reach into Hawai'i and in US mainland locations which have higher densities of NHOPI individuals (e.g., west coast). [42] Given the complete absence of research with NHOPI gay teen males, young adult near peers with lived experience as gay teen males was used as a feasible starting place to inform future engagement. Limited knowledge about recruitment of gay NHOPI men is amplified by the particular challenges of recruiting teens in research, such as regulations for advertising to teens on social medial platforms, sensitivity of questions about sexuality and behavior, and possible parental permission requirements (specifically for teen gay males who may have not come out yet to parents). [43,44].

Given the focus on recruitment of participants for eHealth research and health services, our qualitative interview guide and thematic analysis approach were informed by the CAN-DO-IT process model for developing and refining online recruitment in HIV and sexual health research. [41] The model reflects seven iterative steps: Conceptualize scope of recruitment campaign, Acquire necessary expertise, Navigate online platforms, Develop advertisements, Optimize recruitment-to-enrollment workflow, Implement advertising campaign, and Track performance of campaigns and respond accordingly. Given their importance across a wide range of health domains, a total lack of data from our focal population, and relevance to recruitment for research and service delivery, our study focused primarily on the A, N, and D steps of the process model.

Methods

Data Collection

A sample of 20 individuals were interviewed. Purposeful sampling was used to help assure participants of diverse backgrounds (Native Hawaiians, various Pacific Islander groups, college students, non-college students, born and raised on their home island, born and raised in the contiguous US) were included. To be eligible for the study, individuals had to identify as Native Hawaiian or Pacific Islander; identify as gay, bisexual, or queer; were "out" about their sexual orientation; [45] could speak and write in English; aged 19–24 years; live in the US and territories; and were assigned male sex at birth. Participants were recruited for individual one-hour video-conference interviews through multiple sources: paid Facebook ads, posts on Instagram and Grindr, email blasts to various LGBTQ listservs, NHOPI participants from previous studies, and flyers posted around local Hawai'i university and college campuses. Existing interviewees were also asked to provide referrals to recruit more participants (snowball sampling). Recruitment materials included a link and QR code that took potential participants to an online screener to ensure they met the study criteria. If they met the criteria, they were sent an email requesting their confidential, voluntary participation in the study. Participants received a $50 gift card for their time. Consent forms were emailed to participants and signed copies were returned via email in advance. Verbal consent to the study and of receipt of the consent form was given again before the start of the interview. The Primary Investigator (PI) of this study who conducted the interviews is a native of Hawai'i and has worked in the field of HIV/AIDS in Hawai'i and globally for approximately 15 years, with specific involvement with AIDS Service Organizations (ASOs) in the state. She is also a faculty member at an undergraduate institution in Hawai'i and mentors many NHOPI young people. Interviews were conducted until the PI felt that answers to interview questions were repeated and data was redundant; at this point, the PI determined data saturation had been achieved. [46] Demographic data were collected through the online screener as well as during the interview.

A semi-structured interview guide was developed by the investigative team informed by the CAN-DO-IT model,

Table 1 Application of CAN-DO-IT Model to Qualitative Interview Guide

CAN-DO-IT Model Step	Interview Guide Questions
Background (not from CAN-DO-IT Model)	-When did you first come out? -Did you have any LGBT friends? -Did you feel accepted in your teenage years-why or why not? -Do you feel being NHOPI placed additional or fewer expectations on your sexuality? -What role did being NHOPI play on your understanding of sexuality and your desire to meet others?
A: Acquiring Expertise N: Navigate Platform and Strategy	-As a teen, what places did you go to meet other gay/bi/queer teens/people? -As a teen what services did you use and where? -What would've prevented you from following through on participating from a study like this as a teen? -Why might a NHOPI teen be interested or not in participating in a research study focusing on sexual orientation? -Research on NHOPI teens and adults, regardless of sexual orientation is very difficult; why do you think that is? -Where do NHOPI gay/bi/queer teens hang out in your opinion (physical or online spaces)? -What online spaces do you currently use and why do you use them? -Are there specific online spaces you go to because they cater to NHOPI people?
D: Developing Advertisements	-What gets your attention online? -What images get your attention? -What videos do you like or watch? -What kinds of ads get your attention?

[41] particularly the A, N, D steps given their importance of recruitment across a range of research and service delivery domains. In order to acquire expertise ("A") about the NHOPI gay teen male population, we asked recruitment-related questions detailed in Table I. The model specifies that researchers conducting the research should have experience working with the study population. The authors of this paper have expertise in the areas of NHOPI culture, language, and health disparities, NHOPI youth, HIV service utilization and disparities, gay teen male health research, and eHealth. Questions to address the "A" step also overlapped with the "N" step and focused on characterizing recruitment platforms. In trying to get a better idea of what platforms and strategies to select when conducting recruitment for this population, we asked questions that would help us to understand where NHOPI gay teen males spend their time online. For "D" (i.e., advertisement development), we asked interviewees specific questions that would speak to the type of recruitment content that would get their attention. Specifically, we focused on questions directly referring

to the NICE heuristic: Noticeable, Intriguing, Credible, and Engaging. [41].

Analysis

Interviews were audio recorded with consent and transcribed verbatim. Data analysis was conducted utilizing the Reflexive Thematic Analysis (RTA) method. [47] RTA was chosen because discovering barriers to research participation and informing online recruitment strategies amongst NHOPI gay young adult males requires us to understand the lived experience of NHOPI gay young adult males and the intersection between race/ethnicity and sexuality (if any). It is also a method that can be used in applied research. NHOPI communities are underrepresented in research, for example there was a documented lack of data on NHOPI during the COVID pandemic [4] and the impacts of limited research on delivery of evidence-based interventions has been described. [48] To our knowledge this is the first study to specifically examine NHOPI gay teen male recruitment, so this study was conducted to specifically come up with strategies to address this.

Consistent with the RTA method, a single person conducted the coding (PI) and no codebook was created. According to Braun & Clarke, the developers of RTA, when it comes to data analyis and why multiple coders are not suggested, they say: *"The use of inter-rater reliability is underpinned by the (realist/positivist) assumption that there is an accurate reality in the data that can be captured through coding. Our approach to TA sees coding as flexible and organic, and coding should evolve throughout the coding process. We understand coding as an active and reflexive process that inevitably and inescapably bears the mark of the researcher(s). With no one 'accurate' way to code data, the logic behind inter-rater reliability (and multi-independent coders) disappears. We argue that inter-rater reliability scores can be understood as showing that two researchers have been trained to code data in the same way, rather than that their coding is 'accurate'".* [47] Both semantic (explicit, descriptive accounts) and latent (interpretive) levels of coding and generation of themes were done. This movement through different levels of analysis was necessary due to the overarching research aims. Addressing these aims requires explicit data to be described regarding recruitment strategies and barriers to engagement in research when it comes to NHOPI gay teen males. However, it is important to also understand the underlying meanings as to why specific recruitment strategies are preferred and why these barriers exist. Codes were then broadened into themes by the interviewer in consultation with three authors of this paper. The iterative process of rearranging codes between themes and discussing preliminary themes was done and

then ultimately final themes were defined. Identifying information was removed so there was no way anything could be linked back to the respondents. Approval for this study was granted by the University of Hawai'i Institutional Review Board (#2019 – 00904).

Results

A total of 20 individuals who met the study criteria were interviewed. Ages ranged from 19 to 24 years old, with a mean of 21. Nine participants were from the contiguous US, seven were from the State of Hawai'i, and four were from designated Pacific territories of the US. The screener only asked participants if they identified as NHOPI, and did not give specific Pacific Islander category choices. However, during the interview, specific race and ethnicity data were gathered. Of the 20 participants, nine identified as Native Hawaiian, two identified as Samoan, one identified as Chamorran, one identified as Micronesian, one identified as Tongan, and the other six identified as Pacific Islander and did not provider further specification. When it came to sexual orientation, 23.5% identified as bisexual, 70.6% as gay, and 5.9% as queer.

The analysis identified three themes that informed recruitment strategies to engage NHOPI gay teen males and described potential barriers that exist when it comes to engagement in health research and targeted health services.

Theme #1: Culture is a crucial factor for recruitment and engagement- whether participants realized it or not.

To gather information regarding recruitment content (D in the model), we asked what gets their attention when it comes to online spaces, including ads, videos, or other recruitment materials. Almost all interviewees mentioned their culture. Some described specific NHOPI cultural elements. Other participants directly stated that NHOPI culture and/or being NHOPI had nothing to do with what would get their attention. However, when discussing what would get their attention, they described the same types of elements described by others who directly tied it to culture.

Explicitly put, one participant explained: "And like art, art is culture. There, like, there is no separation between art and culture. Art is a representation of culture in the way that it was created. Even if it's a reflection on the past, or a projection of the future, like it is a reflection of what you think today about the past, or about the future. So I mean, like dances, paintings, like, I don't know, that's what would also get me there. In the advertising, that's probably what would have gotten me if it was there."

One participant stated he would like to see the performing arts in recruitment materials:

I was in like, the performing arts a lot. And I think, in a similar way, I mean, hula is an art. It's a performance art. And, actually, I guess what I mean by performing arts is more like musical theater and like, just the theater world. Also, I grew up in and like a lot of that in a similar way is, there's a lot of queer people involved in telling these stories.

Hula as described by the participant above, is a Hawaiian dance and an important part of Hawaiian culture. Whereas the above participant did not explicitly use the word "culture" to describe hula, another participant immediately described that he would like to see his culture expressed in recruitment materials and described hula: "I remember like dance where, like hula where maybe like, that was the imagery? Or maybe I'm just making that up and that's what I want to see. I don't know. But that I mean, I think showing, showing culture is really, is really important."

Not only did interviewees want to see art and their culture expressed in recruitment materials and strategies, but they suggested going to specific art venues for recruitment:

We had high school musical theater awards for our like musicals every year. And that was like a big; especially junior, senior year…it was all like surrounding Texas schools. So all of us in one area, I got to meet a lot of like gay and queer individuals. So that was actually a really great place to meet.

Theme #2: Confidentiality is key in recruitment to provide a safe space for NHOPI gay teen male research participation.

This theme was identified through the questions that were trying to Acquire Expertise ("A") such as where did they go as teens to meet other gay teens, what services did they use/were available, and what would've prevented them as a teen from participating in a health study. Many participants were from rural areas, small towns, and isolated islands where everyone knows each other. They mentioned being afraid of being "outed" and said if they participated in any LGBTQ study, confidentiality was essential; especially if they had not "come out" yet. One participant said: "I feel like if you made privacy and anonymity the main focal point of it, because most kids like are not in that space. I think where they're like able to accept it. Or like maybe their parents aren't like super progressive in their views and they don't want their parents to find out because I know like, that was like a big thing for me, too." Another participant from a rural area specifically pointed out: "being in a town of less than 900 people, there was no one that was out anyway."

Because of this fear, many searched for a "safe space". The majority of participants had a hard time in school because they felt that there was no safe space available for

them to either come out or be who they are. For those participants that did find a safe space, they found it in specific circles in high school and out of high school. In high school, safe spaces were where other gay kids hung out—like theatre and performing arts clubs. Some schools had GSAs (Gay-Straight Alliance or Gender and Sexuality Alliance) or LGBTQ clubs. Specific people in participants' lives were also referred to as safe spaces; people like friends or school counselors. One participant, who lived in a rural area, where he was also the only Pacific Islander in the whole school and town, shared: "I like sought refuge with our guidance counselor. And I told him everything that was happening, of course was crying and being like, 'They think I'm gay, but I'm not,' and like all this stuff. And he was like, really wonderful and just like kept saying, like, because I think he probably knew, and he just kept saying he's like, 'You know, even if you are, it's okay, like, this is a safe space for you if you ever need me to like come down here, I hear you saying you're not, but it's fine, too. But like, if you ever need anything, you can come down here.' So that was, I think the one safe space that I had in school."

Participants were searching for safe spaces even after high school. One interviewee who was in college said "I would say that I'm fortunate enough that during my undergrad days at the university is really a safe space for LGBTQ + community for students because in there we have our own Gay Straight Alliance group, and I also met some of my LGBTQ + friends who really inspired me to come out, to be true to yourself in general and also to be proud of who you are."

Because of this fear and lack of physical safe spaces, participants suggested that the best place to meet and recruit young NHOPI gay teen males was online. All participants described the online platforms they visited and different strategies they used ("N" in the model) to meet other gay teens or even other NHOPI teens. As mentioned earlier, many of the participants grew up in rural towns and islands. There were little to no resources for young LGBTQ people in these rural areas. The fear of being outed in a community where everyone is related or knows you, made it hard for self-expression and to meet other LGBTQ young people. For these reasons, many participants said they achieved this by going online. They would seek refuge in anonymous chat rooms and other social media sites like Twitter, Instagram, Facebook, Snapchat, or Kik. Others even went on dating applications like Grindr even though they knew they were younger than the age required by the terms of service. As one participant said, "And there is a very good LGBT community that's circulating around the Twitter community. And I think it's nice just to, I think it's a good safe place for especially for transgender rights as well. Like watching people slowly transition or watching someone's parents

finally call them by the right pronoun, it definitely is a good space for the communities just come together and just speak their minds really. Twitter is a good spot [to recruit]."

Theme #3: NHOPI gay teen males experience multiple identity conflicts that must be considered for recruitment and engagement initiatives.

This is probably the most intriguing theme to be identified in this study. This single theme is key in Acquiring Expertise ("A") and begins to shed some light on understanding the difficulty of reaching not only the NHOPI gay teen male population, but NHOPIs in general when it comes to research. It speaks to the complexities that are involved when it comes to self-identity. There seems to be many forms of conflicting narratives that interviewees are struggling with that prevent them, especially in their vulnerable, formative years, from having a true sense of self. Without this, many are unable to gain the confidence and self-esteem they need to participate in research where they feel they have something meaningful to contribute. Participants explained that this alone was a barrier to NHOPI research recruitment, engagement, and participation.

This theme is multidimensional and will be described in three specific aspects: (a) religion; (b) perceived acceptability of being gay (culturally acceptable or not); and (c) aggregation of Native Hawaiians and Pacific Islanders.

3a) Many participants cited religion as a major barrier to coming out and participating in research. They described their families being very religious, as well as religion being a significant part of NHOPI culture: "Probably, honestly, I want to say it's like, you know, how like, there's like a very big religious affiliation within that community like Native Hawaiians and Pacific Islanders. Everyone in my family goes to church and they're like, super like conservative Christians. So that makes it like a little bit uncomfortable with yourself at the time because you're learning so many things like about how it's a sin and you're going to go to hell and burn in flames forever after you die because you're gay. And so I don't know. There's like the word religious trauma aspect of it."

Another participant shared an exchange with his mother when coming out, and how it was important that family back home on their island did not find out he was gay: "But I think in the coming out experience first is kind of hard. Especially being in a Catholic setting, as a Pacific Islander it was just hard. I remember my mother told me, don't be telling people, especially your family from back home in Guam like she didn't want any of her family to know." It became clear after talking to many of the participants, that coming out or participating in a study that focused on health or sexuality that could possibly out them, was difficult because their families were members of religious communities that explicitly condemn homosexuality.

3b) Many of the participants discussed the "double discrimination" they experienced by being gay, and also a racial minority. This seemed to be another major barrier to participation in research. One participant thoroughly explained: "Because how minority and gay representation is sort of a problem, the standard when people think of gay is unfortunately, just like a straight, I mean, straight, like a white male gay person. So if you don't really feel like you're represented positively or like, meaningfully within the community, I guess, like, my thoughts would be like, why would you want to participate in research."

Another participant pointedly identified the conflict within him. He felt that the fear of being outed and feeling discriminated against for being gay was compounded by being a minority in his small hometown: "It added additional complexities that I would not have had if I were white. And so I think like navigating, living in a rural town, as I think like literally the only AAPI [Asian American and Pacific Islander] person, besides my mom and little brother in the town that definitely added a complexity to it. Because on top of like, gay jokes, there were Asian jokes, and it just made, like I had to navigate both of those identities in that small town."

The individuals that shared in their interviews that they were Native Hawaiian, discussed the major conflict that existed being Native Hawaiian and gay. They talked about this one very masculine, warrior side when it comes to being Native Hawaiian, and then also the recognition of a feminine side of a man that was accepted as well amongst Native Hawaiians. One participant succinctly describes this conflict: "And I think that like hyper masculinity, and this, like fem or soft person existed on this side [Hawaiian] of the family…So long as I still went and played football and did the sports, they wanted me to play and play baseball, and work out and go to the gym with my cousins and lift weights. Kind of like everything that the son should be doing, and I did do it…But on the flip side of that, I also think the [Hawaiian] culture influenced me and like, Māhū is such a huge part of ancient Hawaiian culture. The Māhū were the teachers, or the hula instructors and going into the hula world, I quickly learned how gay it is…I very quickly learned like, how interrelated like being Māhū or queer in Hawaiʻi is with like hula, and kind of just like the upholding of tradition, which is like what Māhū are known for. They kind of teetered that line between kāne (male) and wahine (female). It was, it was just kind of a balance between both and it was like the third gender if I remember correctly. It was a powerful thing."

3c) Aggregation of Native Hawaiians and Pacific Islanders: Participants were very aware and informed about the issues that arise when Native Hawaiians and all other Pacific Islanders are lumped together. Many discussed the fact that they are all so different culturally. Therefore, trying to reach them as a group can be difficult, because a strategy that may be appropriate for one culture, is not for another. A Micronesian participant described this precisely by saying: "…we're all so different. When I think of it as a Micronesian, I'm a lot different from other Polynesian people and we all have different views, and then groups are more tight knit than others are. Some are more family focused, whereas others are more like individually focused and want to do good for yourself and all that. I feel like it's not really you know, like, since we're all so different, it's hard to kind of give our representation of us as a whole."

Another participant added "I think part of it is just the identities of Pacific Islanders are so complex. And so when they are identifying whether it's like in a survey, or in a census, like often times, they get written away as like multiracial, or other, and, like the end that can be so small that they are lumped into some of these other groups. And so I think like, that is part of the reason."

Discussion

The purpose of this qualitative study was to interview near peers of NHOPI gay teen males to inform recruitment strategies for future studies with NHOPI gay teen males and identify the barriers for NHOPI gay teen males when it comes to engaging them in health research (specifically eHealth) and services targeted at this population. Utilizing the CAN-DO-IT model, we focused our interview questions on the A, N, and D parts of the model to inform recruitment strategies and barriers.

In describing physical or online spaces they went to meet other gay or queer teen males, interviewees implicitly and explicitly described different aspects of culture; mostly the arts. Interviewees spoke of physical spaces such as school clubs that focused on music, theatre, or dancing. When describing online spaces and what got their attention, they talked about beautiful paintings, imagery, and even said they would want to see things that represent their culture, like hula dancing (indigenous dance of Hawaiʻi). Although no prior studies on NHOPI gay teen male research recruitment strategies were found, other studies concluded that any interventions for NHOPI should focus on culture and ensure cultural integrity [10,49].

Although all interviewees identified as NHOPI, some were born, raised, and lived on the Hawaiian or Pacific islands, while others were born and raised within the contiguous US. If participants were not from the islands (ancestral homeland) they admittingly knew less or nothing about their culture, but eagerly wanted to learn. At the same time, when describing elements of recruitment materials that would get

their attention, many of them described wanting to see beautiful imagery or different forms of art that were similar to the elements participants from the islands wanted to see; however, these participants explicitly said these were cultural elements. One study investigating Hawaiian identity, found that health was linked to cultural identity. 50 In addition, the study concluded that in order to be "a Healthy Hawaiian," one must practice a traditional lifestyle and have access to the land. This would simply be impossible for someone born and living away from the islands. This concept, coupled with our own findings of strong interest in learning more about ancestral cultures, suggest that in developing future advertisements ("D") and other recruitment materials such as social media posts, ads, or flyers, not only should these cultural elements described by our participants be included, but accompanying services could have some form of cultural education; especially if recruiting participants nationally and internationally.

In trying to Acquire Expertise ("A") and Navigate Platform and Strategy ("N"), it was nearly unanimous that any recruitment strategy or study of gay teen males (especially sexuality research) must emphasize and ensure confidentiality. 43,51 Participants specifically spoke to the need for confidentiality protections from parents if they were to participate in their teen years, an issue that has been well documented in prior research with gay teen males 43,44 and for which IRB approvals of parental waivers are an effective, ethical, and legal solution. 3, 52–54 Most people that live within the Pacific Island region do so in rural areas. 55 In Hawai'i, 12% of Native Hawaiians live in rural areas versus 8.5% of the total state population. 16 Many of the interviewees discussed growing up in rural areas and described different challenges when it comes to their sexuality and taking part in any study that focused on sexual health or their sexual minority identity. Many said that they would be apprehensive to take part in research focusing on sexuality because "everyone knows everyone" in a small rural town and if they had not "come out" yet, it would be a deterrent if there was any chance of being outed. Interviewees mentioned knowing very few gay young people in the rural areas they grew up in and that other residents were less accepting of them. This is corroborated in the literature; Henriquez and Ahmad 56 found that LGBTQ individuals living in rural areas experience more stigma and social isolation, making them a hard-to-reach population. They also found that less resources existed for LGBTQ people in rural areas. This is aligned with what participants shared- that there were little to no "safe" physical spaces for them to go.

Because of the need for confidentiality and anonymity, as well as the lack of resources and physical safe spaces for NHOPI gay teen males, participants thought that online platforms and strategies ("N") should be prioritized for recruitment efforts; specifically on Instagram, Grindr, Facebook, Snapchat, or Twitter. This is not a new recruitment strategy. 57 Many studies have been successfully utilizing online recruitment strategies to reach and engage gay males in HIV research. 41,58 At the same time, it is well documented that racial and ethnic minorities 59 and teens will show little representation in samples using generic online outreach approaches. Rather, qualitative research with these populations is necessary to illicit their perspectives on recruitment strategies that avoid further stigma and maximize outreach prior to engaging full scale recruitment efforts. In fact, this was the goal of the present study; similar examples of qualitative research to inform recruitment of gay teen males can be found in the work of Nelson 60 and for black gay young adult males in the work of Fields. 61 Similar mixed-methods research has been used not just to design recruitment strategies, but also to inform the implementation (i.e., reach and delivery) of HIV services, such as PrEP, for teen gay males. 62.

Specific barriers to not only being recruited, but participating in health research, were identified in this study. Identity conflict was evident, resulting in participants feeling like they could not meaningfully contribute to research (i.e., they feel it is hard to talk to a researcher about your identity when you are struggling with your identity). As researchers, it became clear to us just how crucial Acquiring Expertise ("A") is. Only by doing this, was the theme of different identify conflicts identified. We could also see how these three different conflicts within this theme would make it difficult to navigate different strategies for recruitment ("N").

Tension between NHOPI pre-colonial history and current cultural context was apparent when talking to participants. Those who identified as Native Hawaiian struggled with the masculine expectations of their family that men should be strong Native Hawaiian warriors. On the other hand, Native Hawaiian participants recalled learning that the greatest Native Hawaiian rulers and leaders had male partners. Although masculinity may be viewed as an integral part of NHOPI contemporary culture, sources for traditional Hawaiian culture indicate that to differentiate a masculine role from a feminine role may have been a foreign concept. Women served as warriors, weavers, fishermen, and farmers amongst various practices as did the men. 63 As far as the inferred historical, cultural acceptance of homosexuality, participants referred to the term "*Māhū*," which is described as the third gender in ancient Native Hawaiian society that embraced feminine and masculine qualities. 64 Participants may also have been thinking of the traditional Hawaiian term *'aikāne*. It is the most closely associated practice that shares some of the more contemporary behaviors observed with homosexuality. According to Andrews Hawaiian Dictionary 65 the definition of *'aikāne* is, "An intimate friend of

the same sex; a friend or companion of same sex", "Those who mutually give and receive presents, being of the same sex." The 'aikāne relation was a revered and accepted practice within traditional Hawaiian culture where the highest of royal chiefs participated, including Kamehameha the Great. Research into two other Pacific Island cultures that included Samoa and Aotearoa indicate that there are traditional roles with some similarities to Hawaiian *'aikāne*- the Samoan *fa'afafine*, and the Maori *takatāpui*.66 The fa'afafine and takatāpui, like the 'aikāne, were individuals dedicated to family, household, and service to their companions. 67.

Religion (mainly Christianity) was introduced upon the arrival of missionaries in Hawai'i and throughout the Pacific Islands in the early 1800s. 68 Many NHOPIs, including their rulers and leaders, accepted the missionaries and their teachings that ultimately reshaped NHOPI beliefs. 68 Participants mentioned attending Christian private schools or growing up in religious households that both condemned homosexuality. A Gallup poll showed that religious beliefs in the US were the most common reason for not supporting same-sex marriages, 69 which aligns with the tensions participants described between religious-informed teachings and family perspectives against what they knew of their indigenous cultural teachings and practices.

Another dimension to this identity conflict described by participants is the discrimination and stigma they felt being NHOPI and also being a gay male. Participants referred to this as "double discrimination" which suggests the stigma they experienced was additive. The results of our study and the ways in which the participants described this "double discrimination" coincides with the term "intersectional stigma." This intersectional approach suggests that these two forms of stigma (racial and sexual minority) can be multiplicative rather than additive. 70,71 Interestingly, further intersectional stigma regarding HIV was not a theme identified within the interviews, despite HIV stigma being well documented as intersecting with other forms of stigma in communities disproportionately impacted by HIV. 72 For example, in our prior mixed-methods research with young gay males of color we uncovered themes related to HIV stigma as a barrier to seeking out or participating in an online HIV prevention program (i.e., not even wanting to search for the word "HIV" online or of fear someone will see their search and assume they have HIV). 33 Future qualitative studies with NHOPI gay males should explore experiences of intersectional stigma further.

Although there are similarities amongst NHOPI cultures, many participants pointed out that the aggregation of Native Hawaiians and Pacific Islanders in research is a problem and questioned if they would want to participate in research that lumped them together. The history of lumping different demographic communities together is fought. For example,

there is the widespread practice of lumping NHOPI together with larger samples of Asian Americans, despite very different sociocultural contexts—a practice that obscures understanding NHOPI health disparities and their solutions. 12 Even when disaggregated from Asians, NHOPI are often grouped together instead of into their specific ethnic groups, such as in the NHBS system MSM cycle that included 43 NHOPI participants out of 10,104. 73 Native Hawaiians make up approximately 40% of the NHOPI total population of minority indigenous islanders in the US; a proportion that could obscure health problems of the other smaller Pacific Islander group when they are lumped together. Participants were aware of the cultural differences between specific NHOPI populations and raised concerns about the validity of research that is uninformed about these differences. This point is not that research and interventions cannot focus on NHOPI communities together, just that they should be aware and responsive to differences when they exist. Challenges and proposed mixed-methods solutions to "small population" research should be considered 74 as well as culturally informed approaches to aggregation. 75 Our work also suggests the value of sharing with participants how researchers are informed and attuned to these issues.

Limitations

There are several limitations to this study that should be acknowledged. The funding for this study focused on domestic NHOPI disparities, therefore, a criterion for participation was US or US territory residency. This excludes participation from many other PI countries and NHOPI US citizens living abroad, therefore our results may not comprehensively reflect all NHOPI gay teen males. Also contributing to this limitation is that almost half of the interviewees were Native Hawaiian. While this reflects the demography of the NHOPI population, the results and conclusions may be dominated by the experiences of Native Hawaiians. Another limitation is that these interviews were done in the middle of the COVID-19 pandemic. Due to institutional face-to-race research restrictions regarding COVID-19, all interviews were done over video conferencing instead of in-person. Although in-person has benefits (easier detection of body language), video conferencing is accepted as closely resembling in-person qualitative research and in fact, has many other benefits. 76,77 Finally, while for some larger populations, this study's sample size of 20 may be considered small, it is important to contextualize the fact that this is a small population (estimates at around 4,000 for 13–18-year-old NHOPI MSM) and one that has hardly been reached in prior health research (e.g., CDC NHBS of adult MSM has 43 total participants out 10,104).

Conclusion

To our knowledge, this is the first study to investigate NHOPI gay teen male health research recruitment strategies and barriers. Findings can inform not just recruitment research but health services such as HIV prevention initiatives focused on this population. Given the relatively small size of this population and its geographic diffusion, including across rural areas, online eHealth interventions are likely one of the best options for reach and delivery of effective interventions with fidelity. As such, we focused particularly on learning from participants strategies to reach them with eHealth interventions. Our approach in this study is an example of a process of how you could work with the NHOPI community (in our case, near peers) to co-develop a campaign. It is evident from these qualitative findings that to effectively recruit and design interventions for NHOPI gay teen males, careful attention to specific cultural differences among this group is necessary; for example, when it comes to gender/sexuality roles (fa'afafine, takatāpui, 'aikāne) that are similar but yet distinct between Native Hawaiians and other Pacific Island cultures. Ideally, focusing on only Native Hawaiians or only one Pacific Island group, and if this is not possible, then showing appreciation for the differences among these groups. Recruitment materials should reflect culture as well; especially the arts such as hula, music, and images. It is also important to consider where NHOPI participants are born and raised. If they are not born and raised in their ancestral homeland, their knowledge and sense of connection to their culture may be limited. Many of our participants that were born and raised within the contiguous US recognized this and wanted to learn more about their culture. Future interventions could include some cultural educational component and emphasize that content in advertising materials, especially if recruiting outside of the Hawaiian and Pacific islands. Much of the NHOPI population resides in rural areas with limited resources and safe spaces for gay teen males. Recruitment materials and interventions must explicitly stress confidentiality and anonymity, if possible, to successfully engage NHOPI gay teen males. In these rural areas, where religious affiliation is more common and stigma is heightened, the need for confidentiality and safe spaces for NHOPI gay teen males are further exacerbated. In rural areas, access to competent sexual health services is also more difficult.[78] Many turned to online social media sites in search of a safe space. Online sites should continue to serve as recruitment and possibly implementation sites for research.

More research is needed when it comes to understanding the cultural acceptance and understanding of homosexuality in NHOPI communities. Many of the Native Hawaiian participants struggled with the existing conflicting narratives of being gay within their culture. Perhaps more in-depth investigation into this could help NHOPI gay teen males when it comes to self-identification and acceptance. Contributing to this, is the realization that more work needs to be done surrounding intersectional stigma experienced by NHOPI gay teen males and how it may be a barrier to their recruitment and engagement in health research. Any recruitment platform or strategy used must be sensitive to the different conflicts of self-identity that may exist among NHOPI gay teen males. Perhaps even explicitly suggesting in recruitment materials or efforts that these conflicts may exist and reassuring NHOPI gay teen males that even though they may exist, their input is valuable and important.

All findings and suggestions in this study can be mapped onto the CAN-DO-IT model to guide researchers in carrying out effective recruitment campaigns with this population. In addition to targeted online ads for recruitment into this study, we also asked participants to recruit people they knew that fit the criteria into the study. This peer recruitment strategy proved to be worthwhile and could be included in the design of recruitment for future studies.

Declarations

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