FIELD NOTES

The Health Needs of the Fa'afafine in American Samoa and Transgender Research Methodology

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Since the early years of anthropological ethnography, the Samoan third gender community, fa'afafine, has been the subject of research about theories and etiologies of gender and gender behavior. However, few studies have assessed their health needs. Without the necessary data, solutions to health problems in the fa'afafine community are unclear. This paper seeks to discuss this issue and offer suggestions for how research can be designed to better assess fa'afafine health needs.

First, this article will review current research on fa'afafine communities, highlighting how many methodologies carry ethnocentric bias and focus on etiology instead of the health data needed to create interventions for the community. Second, this article will discuss the health needs that arise from the cultural context of the fa'afafine with a focus on violence, HIV and sexual health, institutional recognition of gender variance and maternal and child health. Finally, suggestions will be provided for a third gender affirmative methodology that is inclusive of fa'afafine but also applicable to other gender variant communities globally. These recommendations include (1) structuring research appropriately to explore variation in these groups, (2) restructuring gender variables, (3) conducting community-guided and community-serving research, (4) considering historical dimensions of fa'afafine, gender variant and transgender marginalization and (5) including gender variant health issues in women's health practices.

This paper was written based on a review of secondary sources as well as the author's field notes and observations as a professional working on a project in the Department of Obstetrics and Gynecology at the Lyndon B. Johnson Tropical Medical Center in Tutuila, American Samoa.

Introduction

There have been many anthropological studies examining the cultural and social contexts of the fa'afafine since initial ethnographies in the 1930s. In Samoan culture, there are three distinct genders, man, woman and fa'afafine. Commonly described as a third gender category, fa'afafine translates as, "in the manner of a woman". It describes individuals who are born anatomically male, but are culturally identified as women. However, data on fa'afafine health needs and consideration for cultural changes in recent years are lacking.

A review of literature on health concerns of the fa'afafine reveals that studies were mostly concerned with gender variant behavior, etiology and Western hypotheses of male androphilia (homosexual behavior). There are no studies that focus directly on the health status or needs of the community. This paper will discuss fa'afafine health needs and common research recommendations. These topics necessarily involve addressing politics in health research and recognizing that Western methodologies do not always fit the social contexts of the medical needs of communities in developing nations. Information is drawn from secondary sources and the author's ethnographic field notes and professional observations gathered on Tutuila, American Samoa, to discuss the gaps in current research and pose more questions. Finally, the paper will offer recommendations for a methodology that is culturally appropriate for fa'afafine and other gender variant groups.

Terminology

It should be noted that this article uses the term gender variant to describe communities, identities and behavior that do not fit binary understandings of gender. Gender variance is a broader term that is more inclusive of different cultural gender identities. The term transgender is used in the U.S. to define any individual that identifies as a gender that does not match the one they were assigned by society. In Samoan culture, fa'afafine is not culturally defined in the same way as transgender people are in the U.S., but transgender is often used as a cross-cultural cognate both colloquially and professionally. So "gender variant" is used to acknowledge cultural differences, but also to relate and discuss the similar experiences between these communities.

American Samoa: American Samoa is an unincorporated territory of the U.S. located in the Samoan Archipelago, a group of seven islands. Tutuila is the main island of the U.S. territory. The other islands, including Upolu, the most densely populated, and Savai'i, the largest by land mass, are part of the independent country of Samoa (also called Western Samoa). The estimated population on Tutuila is 62,600.¹ About 95% of American Samoa's population is on the island of Tutuila, which is home to the only hospital in the territory, Lyndon B. Johnson Tropical Medical Center. About 60% of the population lives in poverty and are dependent on government assistance.¹ The World Health Organization's Non-Communicable Disease report states that the two main sources of income on the island consist of tuna canning and U.S. government assistance.¹ According to the WHO, LBJ Medical Center had 49 practicing physicians, 15 dentists, two pharmacists and 127 nurses in 2003.² Other health institutions include the American Samoa Department of Health and local pharmaceutical dispensaries. The island's population is mostly American Samoan and Western Samoan, with communities of Chinese and other Polynesian immigrants. There are currently no estimates of the fa'afafine population in American Samoa.

Defining Fa'afafine: The term fa'afafine is a third gender category in Samoan culture that encompasses a variety of individuals. Traditionally, the term describes biological males raised as females (and addressed with female pronouns) after their family recognized feminine qualities in their behavior. Generally, fa'afafine display some form of feminine behavior or gender presentation and take on social roles belonging to women. However, the extent and manner of their gender presentation varies and fa'afafine have male gender roles as well.³ Though traditionally defined as women by society, they are a heterogeneous group in which some pass for women; others only adopt elements of female presentation and still others are more masculine.⁴ Some may dress as women full-time, part time, or only adopt certain aspects of female appearance, like makeup or nail polish. Some fa'afafine identify themselves more as men. It should also be noted that fa'afafine may not always present their gender in the same manner day-to-day. Many identify as women, but most would define themselves as biologically and socially distinct from women.³ Traditionally, their gender roles have included domestic labor (as with biological females) and the parenting of orphaned children or children that community members have no means to care for.³

Many studies assert that fa'afafine form relationships solely with men.^{3,4} Fa'afafine consulted during the course of this project had relationships with men, women and other fa'afafine. While many fa'afafine would consider relationships with other fa'afafine lesbian in nature, such relationships (both fa'afafine and same-sex female relationships) do occur even though they are not socially accepted. These relationships illustrate how modern sexual behavior contradicts traditional Samoan views of relationships, which does not recognize same-sex female relations.

In American Samoa, there is a gender variant category encompassing biological females, though this group is not socially recognized by traditional culture. They are locally called tomboys and generally partner with women. Many of the biological women consulted had relationships with tomboys after getting out of abusive relationships with men. Culturally, this is not considered lesbianism by American Samoans, and same-sex female relationships occur, albeit discreetly. Some scholars have speculated that this more modern fluidity of sexuality and gender in Samoan culture is a product of globalization.^{5,8} That is to say that liberal Western secular values of sexuality and gender expression have been adopted by many Samoans, which contradicts the more conservative religious values so integral to the culture. This is partially true, in that fa'afafine partake in the sexualized gender expression of Western drag queens. However, fa'afafine simultaneously seek to keep the fa'asamoa (the Samoan way). For example, they take great pride in the annual pageant which involves Western drag queen lip-synching performances and runway fashion shows. This event is televised on the local network and the village of the winner takes pride in the victory. In addition, the fa'afafine the author consulted with were all active in their church or religious communities, participated in traditional dances and rituals and described themselves in distinctly different terms than drag queens or LGBTQ. In this case, globalization brings both change and adherence to tradition. Despite

their social visibility, how fa'afafine are regarded or accepted in Samoan culture today is contested as Samoan religion and culture come into dialogue with Western values. Therefore, the research is limited on the current social acceptance, social status and health status of fa'afafine.

Reviewing Current Research on the Fa'afafine Community:

In qualitative research, the narratives of the marginalized status of fa'afafine are inconsistent because cultural acceptance is currently being debated among Samoans. Fa'afafine are assigned domestic and child-care roles from pre-colonial Samoan cultural norms, and simultaneously, face misogyny and homophobia. This stems from modern globalization and the change in sexual/gender norms shaped by Christianity, both historically and today. Currently 98% of the Samoan and American Samoan population is Christian.⁶ Many sources state that globalization changed the fa'afafine gender performance, which clashed with traditional gender norms and thus introduced homophobia.^{7,8,9} They state that fa'afafine have adopted radically different presentations of gender from the western drag tradition, which brings increased public anxiety to Samoa. They argue that culturally this has fostered an urge to catalogue and discriminate against these new categories of behavior and gender expression.⁷

The complexity of cultural acceptance is exemplified in the current legal context in Independent (Western) Samoa, where recent reports indicate an increasingly homophobic national climate.⁷ In 2013, homosexual relations were made illegal, and same-sex marriages remain legally unrecognized. This legal ban stemmed from debates in July 2006 when two reverends put out a public call for a ban on homosexuality, sparking a national discussion that mobilized the 2013 ban. It is unknown how the ban affects fa'afafine sexual relations. No legal precedents have been set, and Samoans do not consider relations among fa'afafine to be homosexual. As a result, social acceptance in qualitative research is conflicted.

Clinical and quantitative research on fa'afafine are focused on the development and socio-behavioral patterning of their gender and lacks useful data for health and social services planning. Studies tend to examine birth order and family structure of fa'afafine, genetic vs. behavioral explanations of the occurrence of fa'afafine, the nature of fa'afafine tendencies to care for children, the relationship between an individual's gender role and the development of homosexual behavior and the child and adult patterning of gender atypical behavior.^{3,4,9-18}

Many authors are interested in investigating the biological basis for male androphilia (male-to-male sexual relations) in a non-Western population to make inferences about its evolution and etiology. For example, one study investigates the birth order of fa'afafine to find that they have more siblings on average. The author interprets this as support for a biological and evolutionary basis for male androphilia.⁸ Another study uses quantitative methods to suggest a higher sibling ratio among fa'afafine, particularly more female siblings.¹⁷ One article presents evidence against the hypothesis of social construction as an origin of fa'afafine behavior.³

Another study argues that fa'afafine evolved in Samoa as an adaptation for promoting indirect fitness. This means fa'afafine help ensure reproductive success of the society by caring for children that they did not produce.¹⁰ Another article tests the kin selection hypothesis (i.e. that male androphiles were naturally selected to be helpers of kin with fa'afafine).¹¹ Barlett finds that fa'afafine, who she calls "androphilic males," exhibit more cross-gender behaviors in childhood.⁴ Though these studies provide data on behavior, data regarding the social circumstances and health needs of the fa'afafine community are still lacking. Such data is needed by service providers. However, previous studies do provide three useful findings for service providers and public health efforts. For example, one study dispelled the traditional cultural myth that individuals who are selected to be fa'afafine belong to families with too many male children, finding that most fa'afafine have multiple sisters.^{14,15} Another article also estimated the fa'afafine population in Independent Samoa (between 1.43% - 4.65%), which could be useful for quantifying populations for interventions.¹⁵ Another study discusses the heterogeneity of gender expression, gender identity and sexuality of fa'afafine; it also recognizes that fa'afafine can change their gender expression over time or socially behave as women intermittently.⁴

Though these findings are helpful, these studies do not suggest guidelines for working with this population. These articles neither recommend nor outline a plan of care that addresses the health concerns or wider social concerns of the community.3,4,9-18 These studies also use heterosexual males as a comparison group for fa'afafine, which inaccurately frames them in a Western paradigm as homosexual or "androphilic" males.^{3,4,9-18} This misrepresents understandings of this group, which should be categorized by gender, and not sexuality. The lack of quantitative or qualitative data on fa'afafine health issues and research biases reinforce the marginalization of this group, which leave professionals and researchers with no framework to adequately work with these populations. In the absence of assessments that measure the social and health needs of this community, what is known about the health needs of this population? The following section discusses some possible areas of need recorded in field notes from observations and discussions with people on the island.

Fa'afafine Health Needs in American Samoa

Health issues that affect the general population in American Samoa include high prevalence of noncommunicable diseases, or "lifestyle diseases". Cancer, alcohol dependency, obesity, diabetes and high blood pressure are common. 62% of the population are physically inactive.^{1,19-21} However, injuries due to road accidents and domestic violence are on the rise and pose significant health burdens.¹⁹ In other gender variant populations, we know that gender identification can affect health behavior and health access and would therefore require different strategies to achieve optimal health outreach and intervention.²² In American Samoa, in addition to health concerns affecting the general population, specific issues that affect the fa'afafine community include lack of institutional recognition of third gender status, violence, HIV, sexual health issues and maternal and child health concerns. These issues have implications for outreach and prevention. They will be discussed in the following section along with qualitative accounts from field notes collected while working in American Samoa to highlight possible health issues for the fa'afafine community in the absence of a formal assessment of health needs. Common themes that arose from talking to fa'afafine can help policy-makers better formulate health initiatives by highlighting areas of need. Institutional Recognition of Third Gender Status

One issue that poses challenges to community research and health initiatives for fa'afafine is that health institutions do not record third gender status and thus fail to track health status specifically for this group. Medical records do not have a separate gender category for the fa'afafine; instead they are categorized as males. The inadequacy of intake forms to capture gender variance has been noted in transgender communities in the U.S. as well.²² Thus, using the hospital for health data on the community is problematic in tracking health outcomes and service utilization. The hospital and department of health in American Samoa currently do not have any community initiatives, programs or services that specifically address the health needs of the fa'afafine community. This is a common global trend faced by gender variant people who find that health care services are not suited or tailored to their needs.

Violence

The violence fa'afafine experience is tied to male privilege. Samoa is a male-dominated culture in which women are socially disadvantaged.⁷ Fa'afafine have increasingly experienced public discrimination. Inaccurately referred to as homophobia, this de novo misogyny is part of a pattern of oppression and marginalization of women and nonmale genders that is pervasive in the culture. It is not only the marginalization of women but also of third-gender women.

Stemming from this marginalization of women, violence is a psychological and physical reality for fa'afafine. Violence serves to isolate the fa'afafine, disrupt their access to and utilization of health services and may be responsible for certain health outcomes. However there are currently no data on how fa'afafine experience interpersonal, sexual or domestic violence. On the other hand, it is known that domestic violence is a major issue for biological females. Domestic violence cases are increasing and are responsible for many cases of hospitalization (coma, deaths, injuries, harm to fetus, etc.).¹ After examining patient charts from the labor and delivery unit, it appears that trauma to fetus is a common complication tied to domestic violence. No studies exist on how domestic violence affects fa'afafine, although their experience is related to the same cultural values of male privilege that impact women.

Networking with the Society of Fa'afafine in American Samoa (SOFIAS) created the opportunity to hear about and participate in discussions regarding the social safety of fa'afafines as members of the community. The author, a transgender woman, was constantly asked if anyone had given her trouble during her time on the island and advised to call any community members if she "ran into trouble," which had a subtext of violence. Many fa'afafine shared experiences of harassment out in public alone. They also frequently mentioned that bullying of fa'afafine youth is a major issue in the local schools. All of the fa'afafine the author consulted had experienced harassment. They also expected and were prepared to deal with potentially aggressive situations. These fa'afafine always traveled in groups and served as a network for each other. They also were mindful of how they avoided confrontation. Temukisa, one member of SOFIAS, stated that she tends to stay close to family or friends and avoids going out alone. She explained that fa'afafine face verbal, physical and sexual harassment (as noted in other research).²² She advised, "You have to stick up for yourself. You have to put up a fight. Some people have no respect at all." The author encountered a similar sense of social danger and harassment during the project. According to the biological females with whom the author spoke, this violence and threat of violence occurs in similar ways to them, though it is more frequently experienced by fa'afafine. A woman never travels alone and is socially encouraged to stay close to the family unit. Therefore this social marginalization is more akin to the harassment of women than homophobia. Violence is a commonality that socially unites women and fa'afafine, as both groups tend to look out for each other and stick to each other's company.

Other undocumented health concerns for fa'afafine (related to violence) are suicide and deteriorating mental health. Marginalization, social violence and the poverty on the island compound mental health issues. Currently data is needed for suicide within the fa'afafine community or fa'afafine youth. Generally, suicide is particularly prevalent amongst youth in Samoa at a rate of 11.7 per 100,000 (compared to

10.9 among U.S. teens).¹⁹ In addition to these general youth health issues, fa'afafine youth live in a hostile social environment and experience an emerging pattern of ostracizing by their peers.⁷ These factors may serve to tilt fa'afafine into life situations and behavior that put them at risk of other health issues.²²

HIV and Sexual Health

There are no prevalence and incidence estimates of HIV (or other sexually transmitted infections) in American Samoa. It may be a serious health issue for the fa'afafine community, who may be socially more at risk as seen with other gender variant populations.^{22, 23} SO-FIAS has recognized HIV as a potential threat to their community and has mobilized awareness campaigns on the island. Condom usage is low and access varies with imports to the island. Data from the Youth Risk Behavior Survey reported that 65.5% of females and 54.3% of males in American Samoa did not use a condom during their last sexual intercourse.²⁴ In addition, 38% were never taught about HIV or AIDS infection in school.²⁴ Sexual activity outside of marriage and condom use are contentious topics that sometimes conflict with religious beliefs. Fa'afafine discussed that obtaining condoms is often met with assumptions of promiscuity, which is compounded for fa'afafine whose sexual relations are contentious in Samoan culture. Therefore, fa'afafine face stigma in accessing preventive services.

Another cultural barrier to treatment and prevention is also experienced by biological women. After working in the hospital, the author noted that chlamydia was prevalent on the island, despite the available treatment at the hospital. Samoans and palagi (off-islander) clinicians stated that many families have joint bank accounts controlled by the matai (chief), the eldest male in the family. To access the treatment, one would have to request money from the matai; such actions are often met with stigma and blame. Many women never get treated, leading to the increased prevalence of birth complications. It can be inferred that the stigma for HIV could manifest in a similar fashion for fa'afafine, who would have to ask the matai for funds to get tested or treated. This could be a tremendous cultural barrier to services.

The fa'afafine the author consulted also provided insight into paths of transmission for HIV and STIs. Some of the fa'afafine had disclosed that they had sexual contact with foreign men and married men. Additionally, many Samoan men cheat on their wives and take a fa'afafine lover after a divorce. Fa'afafine are directly impacted by the sexual health behaviors of men. Given these paths of transmission and barriers to accessing condoms, HIV and other STIs pose a significant health challenge for this community. Future research needs to determine the prevalence of STIs and HIV and monitor them within this community.

Maternal and Child Health

Fa'afafine are commonly viewed as good parents to children and are expected to take up the role of proper child-care, especially in rural communities. This motherhood role has been romanticized in previous literature, obscuring the fact that some fa'afafine migrate to urban communities to escape this responsibility.⁷ However, the cultural expectation is still strong, and many fa'afafine still become mothers and take pride in such customs. Some of the fa'afafine the author consulted were mothers and were given children when they were older. The villages in which they resided both recognized and respected their role as primary caregivers for their children. Notably all of these fa'afafine were also single parents, perhaps due to the tendency of men to exploit them for money and pleasure.⁷ This phenomenon is compounded by the fact that marriages to fa'afafine are not yet legally recognized.⁷ Because the fa'afafine often take on caretaker roles, they could benefit from health and social welfare programs aimed at assisting single mothers and older caregivers. The methodology of maternal and child health projects must recognize these non-female individuals as commonly the sole providers of care and support for some children. Public health interventions or research aimed at mothers and children need to take into account that some mothers may be neither biologically female nor genetically related to their children. Additionally, fa'afafine are expected to contribute disproportionately to the household since custom dictates that they should do women's work but be better at it than women.⁷ Therefore programs, interventions and policies that seek to affect change in women's domestic sphere, maternal and child health and/or childcare should include fa'afafine in their strategies.

Transgendering research methodology

In order to better address the health needs of the fa'afafine communities, five changes in research methodology should be implemented; these recommendations may also be applicable to other gender variant groups. Gender variant research in U.S. transgender communities has moved from mental health etiologies to more public health community based research/interventions in recent years.²³ However, when it comes to the fa'afafine in Samoa, research is still preoccupied with psycho-behavioral etiologies and views fa'afafine as a condition. The gaps in the literature, the biased methods and frameworks of existing research and the growing need for third gender health research by pacific nations highlight the utility of these following recommendations.^{25,26} Other authors are cited alongside recommendations made by the author of this paper. These recommendations are modeled on the feminist epidemiology of Marcia C. Inhorn, a medical anthropologist.²⁷ Feminist epidemiology, an examination of antifeminist biases in research on women's health, is an alternative epidemiological framework which would seek to address gender, race and class in public health prevention. Inhorn's work has implications for health practice with transgender or gender variant communities, which structure the following recommendations.

Recommendations

1. Structure research appropriately to explore variation in third gender groups

Research involving third gender or gender variant people should focus primarily on those communities' issues and not conflate the subjects with other groups.²⁸ As stated previously, many studies of fa'afafine use heterosexual males as comparisons. Similarly, most research in the U.S. includes gender variant people in analyses of other sexual orientation groups.²⁹ For instance, studies of HIV risk include transgender women in samples of men who have sex with men.^{23,30} Conflating fa'afafine and gender variant individuals with samples of other social groups in analysis without strong reasons to do so would cause selection error. However, it is still common to include individuals grouped by gender as an added sub-group to research with groups defined by sexual identity.²⁸ This produces results that confuse or conflate the experience of gender variant individuals with that of other groups. This practice also disregards diversity within gender variant sub-groups.

Many studies do not consider or compare differences between gender subgroups. For example, in the U.S., there is a lack of information about transgender men or women who identify themselves as men based on gender constructions.²³ Similarly, in Samoan culture, gender variant females are less socially visible than fa'afafine. Additionally, the experiences of fa'afafine individuals vary widely, depending on whether they live in urban or rural areas.⁷ Therefore, in addition to analyses focusing on specific gender variant groups, researchers should also examine the dynamics of race, location, religion, class, sexuality, disability and age within the fa'afafine and other gender variant communities so that the analyses capture this wide diversity and its socio-political contexts.^{28,30}

2. Structure Gender Variables to Account for Gender Variance

Research on fa'afafine or gender variant communities should seek to make these communities institutionally visible. Instruments and databases should include methods of recording alternative gender variables, for they would be useful in contexts like Samoa. In order for policy makers and institutions to be aware of gender variant community needs, there needs to be data to support policy, funding and outreach. New Zealand's health statistics system recently published a conceptual framework on collecting data on sexual orientation, citing the sexual and gender diversity of the Polynesian immigrant population as an impetus. Though the framework focuses on designing ways to record sexual orientation variables, the authors also recognize the need for research on structuring gender variables for culturally diverse populations. Gender variables often frame the way sexuality is understood and needs to be considered in designing survey instruments.³¹ Working with Polynesian gender variant communities, the authors found that respondents report their sexual orientation in relation to their gender identity (not biological sex), but would report to health officials based on their biological sex in a medical context.³¹Therefore researchers would have to ask questions differently and understand how third gender individuals would respond depending on the context research is being conducted.

Structuring gender variables is essential for research with gender variant communities. Answer options to survey questions could include man, woman, a culturally specific word for a gender variant category, "other" (to capture any gender category not considered) and a "Please describe you answer" option for respondents to elaborate on their choice. A separate question should record biological sex to control for instances where a gender variant may list themselves as a gender category that is not associated with their biological sex. Culturally specific understandings of gender categories should structure analysis. This would allow data to be captured and tracked for vulnerable sub-populations and make these sub-populations institutionally visible to service providers and allow for more effective outreach and care planning.

3. Community Guided and Community Serving Research

In addition to structuring methodology to provide better data on fa'afafine and gender variant communities, research should be directed by community needs and applied to address those issues. Previous research with the fa'afafine community has frequently been ethnocentric in design and has not produced data that health professionals can apply to serve the community. This leaves many questions about fa'afafine health status and their experience of health issues that may affect them in similar ways that have been documented in other third gender groups. As opposed to researchers dictating the agenda, fa'afafine life experiences and concerns should directly and explicitly inform research goals, hypotheses and methods, which would make the research more relevant to the participating community.^{27,28} This would ensure research serves to utilize data, to solve problems in gender variant communities, or to mobilize activism.²⁷ Theorizing and constructing etiologies, as done by previous studies with fa'afafine, does not adequately address inequality or health disparities. Feminist health research and transgender/gender-variant affirmative research should be applied sciences, seeking to address marginalization through investigating the communities' health and social issues.²⁷

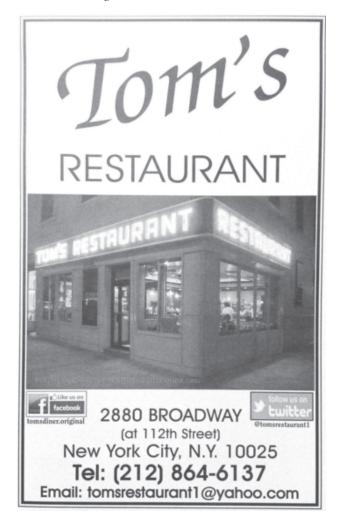
4. Historical Consideration of Marginalization Experience

It has been suggested that considering ecological (social, histor-

ical and political contexts) factors surrounding gender variant health issues is important for working with gender variant communities globally.²² For fa'afafine, understanding Samoa's colonization and Christianization is integral for understanding current conflicted social acceptance. Sexual and gender norms have changed greatly since Samoa's colonization. Fa'afafine are caught between traditional values and new values brought with globalization. Understanding this conflicted social acceptance can help providers understand the social contexts of fa'afafine health outcomes and help the providers navigate cultural attitudes in health service delivery. In addition, research should elucidate and discuss historical and present experiences of gender variant individuals and relations to institutions that affect their health and human rights.²⁷ Projects should account for how governments/institutions have previously worked with fa'afafine (and other gender variant groups). This would address any community distrust of research efforts and would advance social justice goals. Addressing histories of marginalization will improve how we interpret data about these communities.

5. Include Gender Variance in the Scope of Women's Health Research & Practice

When research is mobilized and applied to intervention programs, professionals should recognize that transgender, third gender, gender variant health issues are interconnected with women's health issues. For fa'afafine clients, maternal and child health programs need to take into consideration that motherhood in Samoan culture is not based on female biology. Clinics and programs need to be prepared for serving women with male anatomy or men with female anatomy in a women's health setting. Given the author's observations in American



Samoa, this article argues that the inclusion of third gender women in women's health practice would be useful for health initiatives in other cultures. Women's health initiatives should be prepared to serve gender variant communities and address their marginalization in any country.

Conclusion

Previous research with fa'afafine has been primarily focused on behavior etiology and is ethnocentric in design. This has left an absence of data about fa'afafine social and health needs, which service providers need to serve this community. The lack of data is also found in research of other transgender, third gender or gender variant groups globally. The absence of social and health needs data reinforces the social marginalization of fa'afafine and other gender variant groups, as providers lack information for intervention. This poses a challenge to public health and prevention efforts. Obtaining this information is a clear next step to better serving transgender, third gender and gender variant groups.

Study of fa'afafine provides an opportunity to restructure global health models of research, service delivery and outreach to incorporate third gender, gender variant and transgender communities. A fundamental assumption of Western women's health is that gender is a binary, and that women are defined in a population by biology. This assumption is challenged when gender binary models are confronted with different cultural contexts. In Samoan culture, fa'afafine demonstrate that motherhood and female social roles are not fixed to a female biology. Therefore, women's health needs to incorporate third gender communities in order to serve the health of all women, mothers and families as defined by the local culture. This is especially important as fa'afafine face marginalization, stemming from the same cultural misogyny biological women face. Marginalization and social vulnerability are compounded by the fact that health institutions and health research use gender binary models, obscuring what health experiences and outcomes are unique to fa'afafine. By understanding local categories of gender, public health efforts can maximize their cultural competency and reach historically underserved communities.

For the fa'afafine community, there is a need for research that measures the impact of health issues and directions for public health involvement in the following: (1) recording third gender status in health systems data, (2) addressing violence, (3) HIV and (4) maternal and child health issues. Suggestions for conducting this research include (1) structuring research to capture diversity of fa'afafine and gender variant sub-groups, (2) structuring gender variables that adequately record third gender identities, (3) tailoring research to community needs to ultimately serve health improvement, (4) addressing historical experiences of social marginalization and (5) recognizing gender variant or third gender groups as integral to women's health initiatives. This can help providers and researchers strategize and best serve fa'afafine, third gender, transgender or gender variant people. With better data on health needs and better third gender research methods, public health providers and researchers can confront the challenge of incorporating fa'afafine (and other gender variant people globally) into a health and medical system that has been developed for a Western gender binary society.

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