

# Exploring a shared history of colonization, historical trauma, and links to alcohol use with Native Hawaiians living in rural Hawaii.

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# Exploring a shared history of colonization, historical trauma, and links to alcohol use with Native Hawaiians living in rural Hawaii.

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#### Abstract

Background: Today's Native Hawaiians (NHs), American Indians (AIs), and Alaska Natives(ANs) are the contemporary descendants of the original Indigenous peoples who occupied lands before the arrival of European explorers and settlers and the establishment of the United States (US) of America. AIs and ANs are defined explicitly as citizens of sovereign federally recognized tribes and groups with Nation-to-Nation relationships with the US government. Indigenous peoples, before colonialization, were healthy. However, NHs, AIs, and ANs in the US today experience disproportionately higher rates of physical and mental health disparities and significantly higher rates of cigarette smoking, alcohol, and other substance use, suicide rates, and traumatic exposure than other ethnic groups in the US. In Hawaii, NHs are at significantly greater risk for adverse health outcomes and high-risk health behaviors as compared to other ethnic groups. Recent reports highlight high rates of substance use; 47% of NH adults report current alcohol and tobacco use, and 35% report lifetime substance use, including cannabis and opioids. Rates of alcohol use disorder, depression, and generalized anxiety disorder prevalence have been reported as 27%, 27%, and 19%, respectively. Lastly, approximately 30% of NH adults report past-year treatment needs for lifetime illicit substance abuse.6 Despite the high risk for alcohol and substance use, there is little known about the risk factors leading to alcohol use and misuse that are unique to NHs today.

**Objective:** This study aimed to explore the lived experiences of colonization, historical trauma, and alcohol use among Native Hawaiians living in rural Hawaii. Most studies using Historical Trauma theory have focused on American Indian tribes, and at the time of this study, only one quantitative study existed that specifically focused on historical trauma and substance use among Native Hawaiian college students. Native Hawaiians and American Indians suffer from a startlingly high degree of physical and mental health disparities and alcohol and other substance misuse. Indigenous scholars posit that historical trauma is intergenerationally transmitted to subsequent generations and is the primary cause of today's health and substance use disparities among these Indigenous populations.

**Methods:** This qualitative study was guided by Husserl's transcendental phenomenological design. The modified Stevick-Keen-Colaizzi method was used for data analysis. The Historical Trauma Conceptual framework and Story theory guided the study. The socio-psychological Explanatory Framework illustrated how intergenerational trauma transmission can occur through storytelling and can be passed down to subsequent generations.

**Results:** The participants primarily identified as female, aged 50 to 59, were married or partnered, and were employed. The final qualitative themes that emerged from the analysis included: (1) Alcohol did not exist in Hawaii before European explorers arrived, (2) Alcohol helped expand colonialism in Hawaii, (3) Alcohol is used today as a coping strategy for feelings of grief and anger over losses (land, people, cultural traditions, and language), and (4) The Kupuna (elders) teach the younger generations to drink alcohol.

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**Conclusions:** Native Hawaiians, like American Indians, experienced Historical trauma, which is transmitted intergenerationally, resulting in mental and physical health disparities, substance misuse, and feelings of discrimination.

Alcohol did not exist in Hawaii before European explorers arrived in Hawaii. Alcohol was introduced to NHs and is a component of Historical trauma. NHs use alcohol to self-medicate feelings of losses and is the foundation of problems with alcohol and other substances today.

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# **Original Manuscript**

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#### **Abstract**

#### **Keywords**

#### Introduction

Today's Native Hawaiians (NHs), American Indians (AIs), and Alaska Natives (ANs) are the contemporary descendants of the original Indigenous peoples who occupied lands before the arrival of European explorers and settlers and the establishment of the United States (US) of America. AIs and ANs are defined explicitly as citizens of sovereign federally recognized tribes and groups with Nation-to-Nation relationships with the US government. Notably, Indigenous peoples, before colonialization, were healthy. However, NHs, AIs, and ANs in the US today experience disproportionately higher rates of physical and mental health disparities and significantly higher rates of cigarette smoking, alcohol, and other substance use, suicide rates, and traumatic exposure than other ethnic groups in the US. 3-5

In Hawaii, NHs are at significantly greater risk for adverse health outcomes and high-risk health behaviors as compared to other ethnic groups.<sup>3,4</sup> Recent reports highlight high rates of substance use; 47% of NH adults report current alcohol and tobacco use, and 35% report lifetime substance use, including cannabis and opioids. Rates of alcohol use disorder, depression, and generalized anxiety disorder prevalence have been reported as 27%, 27%, and 19%, respectively. Lastly, approximately 30% of NH adults report past-year treatment needs for lifetime illicit substance abuse.<sup>6</sup> Despite the high risk for alcohol and substance use, there is little known about the risk factors leading to alcohol use and misuse that are unique to NHs today.

Indigenous scholars have hypothesized that historical trauma is a primary cause of social stress, mental health disparities, and problems with alcohol and substance use among Indigenous peoples today.<sup>3,4,7–9</sup> Much research has focused on the links among historical trauma and its impacts.

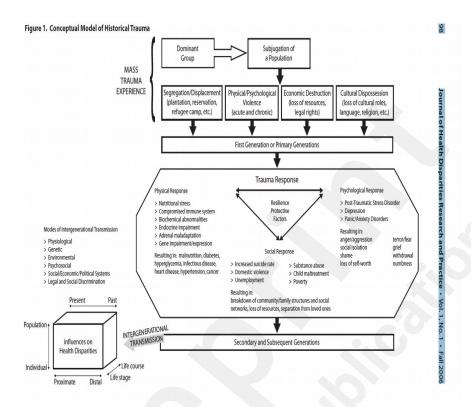
However, these studies have focused mainly on AIs. There is a need to fill the gap in research by exploring whether these links are present in the NH populations. There is scant research specifically on NHs' experiences related to historical trauma. Although there is cultural diversity among Indigenous tribes and groups, significant similarities exist in the events that led to historical trauma and the ways that the historical trauma response manifests. Problem alcohol use among AIs has been defined as a historical trauma response (HTR) to the emotional and psychological stressors resulting from colonization. Therefore, the objective of this project was to begin to fill this gap in understanding the NH perspectives related to historical trauma and the links associated with historical trauma and problem alcohol use among NH adults.

Historical trauma is defined as the emotional and psychological wounding over the lifespan and across generations from mass group trauma experiences that are associated with the historical losses of land, people, language, and culture of colonization by an outside group. What is unique about historical trauma is its widespread impact on Indigenous populations, which was done with a purposeful and destructive intent that resulted in the collective suffering of the primary generation and then transmitted to present-day descendants, making this form of trauma exceptionally devastating for individuals, families, and communities. <sup>5,7,10,11</sup> The historical trauma response (HTR) is a constellation of physical, psychological, and sociological symptoms experienced by the descendants. <sup>7,9</sup> HTR at the individual level includes adverse childhood events, mental health disparities, and problem alcohol use; at the familial level, parental stress, and problem alcohol use; and at the community level, the breakdown of cultural customs and traditions and problem alcohol use in the community. <sup>5,7,9</sup> The consequences of HTR can be transmitted intergenerationally as descendants continue to identify with ancestral pain. <sup>7,9</sup>

#### **Historical Trauma Conceptual Model**

The Historical Trauma Conceptual framework provides an explanatory model of how historical trauma originated and was transmitted through intergenerational transmission to

succeeding generations and links to mental health disparities and problem alcohol use, which is the focus of this study. See Figure 1 below.



#### **Methods**

Considering Indigenous ontology and epistemology, a qualitative transcendental phenomenological approach was identified as the best for this study as it empowered the NH participants to share their day-to-day experiences of historical trauma's impact on their daily lives. This approach is grounded in Edmund Husserl's philosophy and was founded on comprehensive descriptions of meanings, perceptions, and experiences of the phenomena under study. All the procedures and methods of this study were reviewed and approved by the University of Hawaii's Institutional Review Board.

#### Sample and Procedure

The recruitment of the NH adult participants involved purposive non-probability sampling.

The participants did not want to publicly disclose their location in Hawaii for fear of identification

and stigmatization. The inclusion criteria were: (1) NHs living in Hawaii who self-identify as full or part NH, (2) aged 30 to 60 years, (3) able to speak fluent English, (4) willing to have a face-to-face interview that was audio recorded and, (5) willing to provide perspectives related to the topics under study. The generations between 30 and 60 years of age were selected as they could reflect on both the children and grandparent generations' perceptions of colonization, historical trauma, and problematic alcohol use. Individuals under the age of 30 and over 60 were excluded. Data saturation was reached with 10 participants, which was determined to be an adequate sample size for the following reasons: 1) the analysis was able to reveal clear interpretations of the data, 2) there were no new findings with further interviews, and 3), and the narratives became redundant. The sample size for this study was large enough to acquire enough data to describe the phenomenon of interest sufficiently and to address the research questions. This was in keeping with Glaser and Strauss' suggestion that saturation is a criterion for determining the appropriate sample size in a qualitative study. The sample size in a qualitative study.

The study's trustworthiness was established using credibility, transferability, dependability, and confirmability. The principal investigator, a Cherokee Nation citizen who lived in the community, first met with the Kupuna (elders) to discuss the cultural and health-related similarities and differences between the Cherokee and NHs. These meetings continued over the two years before the study was conducted. These relationships ensured the cultural validity of the research findings and prevented any further harm that previous researchers within this community may have caused in the past.

#### **Measures**

A semi-structured script of open-ended questions was used to conduct the interviews.

Interviews were conducted using the Talk Story or mo'olelo method, a culturally specific storytelling method used by NHs. The interviews took place in August 2019 at mutually agreed upon private, comfortable, and quiet locations. As the interviews were conducted, no time restraints allowed the participants to tell their stories. The interviews lasted from 60 minutes to 80 minutes. At the

beginning of each interview, information was given about why the research was being conducted, along with biases and assumptions. The participants were compensated with a \$25 gift card. The interviews were recorded and transcribed verbatim using NVivo version 10.

#### **Table 2: Guiding Interview Questions**

- 1. Can you share any stories about alcohol use in Hawaii before Captain Cook arrived in Hawaii?
- 2. Can you share any stories about the kupuna and alcohol use when they were growing up and you were growing up?
- 3. Can you share any stories of how alcohol is used by Native Hawaiians in your area currently?

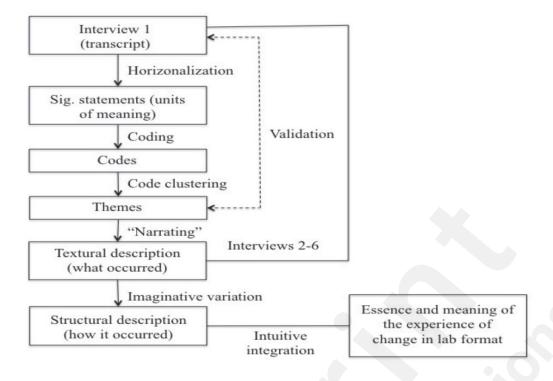
#### **Analytic Strategy**

Thematic analysis was utilized to interpret the transcripts using the Modified Stevick,

Colaizzi, Keen method. 12 This method followed an inductive approach, forming theoretically driven interpretations of the meanings identified in each transcript. This method allowed for the in-depth exploration of all participants' subjective experiences of the phenomenon of interest of the study.

Each transcript was reviewed many times to determine the unchanging horizons, the invariant constituents, and the meaning units to identify the initial codes and, finally, the significant core themes. Triangulation was achieved by comparing the participants' transcripts to one another and the literature review. The rigor of the study was enhanced by triangulation and member checking. Then, the analyses established associations and patterns of meaning across the initial notes within each transcript, contributing to the initial codes and themes.

Example of General Protocol for Transcendental Phenomenological Reduction (Chopra et al., 2017).<sup>16</sup>



The initial steps of the analysis included: 1) epoche or bracketing, 2) reduction of the data including, a) horizonalization or the determination of the unchanging horizons, the invariant constituents, or the meaning units, b) identification and clustering of core themes, and c) the construction of core themes using verbatim dialogue from the participants' stories. The final steps of the analysis included 1) the construction of individual textual descriptions (what occurred) from the stories of the participants, 2) the construction of an individual composite textural description from the stories of all of the participants, 3) the construction of individual and composite structural descriptions (how it occurred) underlying the participants' experiences, including the following structures, a) universal structure of time, b) universal structure of space, c) universal structure of bodily concerns, d) universal structure of materiality, e) universal structure of causality, f) universal structure of self-in-relation, and g) universal structure of relation-to-others, and finally 4) the synthesis of meanings and the construction of a universal or a composite textural and structural description of the participants' experiences. Finally, a universal or composite textural-structural description from all of the participants' stories was completed through imaginative variation by

synthesizing and integrating the individual textual-structural descriptions into a universal or composite description of the participants' experiences represented as a whole.<sup>12</sup>

#### **Results**

The participants primarily identified as female, aged 50 to 59, were married or partnered, and were employed. See Table 1. The final qualitative themes that emerged from the analysis included: (1) Alcohol did not exist in Hawaii before European explorers arrived, (2) Alcohol helped expand colonialism in Hawaii, (3) Alcohol is used today as a coping strategy for feelings of grief and anger over losses (land, people, cultural traditions, and language), and (4) The Kupuna teach the younger generations to drink alcohol. Rich descriptions and quotes are provided in the following summary and Table 2.

Table 1: Participant Demographic Characteristics (N=10)

Characteristics	n (%)	
Identified Gender		
Male	2 (20)	
Female	8 (80)	
Age (in Years)		
30-39	3 (30)	
40-49	2 (20)	
50-59	5 (50)	
Marital Status		
Married or Domestic Partner	8 (80)	
Divorced	2 (2)	
Employment Status		
Employed for Wages	7 (70)	
Self Employed, Homemaker, or retired	3 (30)	

#### Theme 1: Alcohol did not Exist in Hawaii before Explorers Arrived

The participants described their perceptions related to when NHs were first exposed to alcohol. One participant reported, "The thing I know is, I don't think we had alcohol before Captain Cook." Other participants noted, "Alcohol was introduced by Europeans. The historical accounts are that it was deliberately introduced once its impact on Indians was understood." Several other participants described how okolehao (a mildly alcoholic brew made from the ti plant native to Hawaii) was introduced to NHs by European explorers: "I don't think we had alcohol....but the introduction of okolehao started NHs' problems with alcohol." Before, you know, we had *okolehao*, which was alcohol. I know we didn't have it before Captain Cook, though...." Others described that before European explorers arrived, *awa* was used (*Awa* is a non-alcoholic, nonnarcotic, mildly psychoactive substance): "What I know is that we had *awa*, but I don't think we had alcohol..."

Many of the participants described that alcohol was deliberately introduced to NHs. "Alcohol is a legacy that continues to affect the quality of life for us." Another participant expressed, "If he (Captain Cook) didn't come, we wouldn't have the issues we have today....there would be no alcohol."

#### Theme 2: Alcohol helped expand colonialism in Hawaii.

Most of the participants described their beliefs that alcohol expanded colonialism in Hawaii. This caused frustration among the participants, and many noted the sadness related to the introduction of alcohol, how it was used to expand colonialism in Hawaii which has contributed to the ongoing alcohol use problems they have today. One participant noted that they were "feeling

frustrated that the US does not care about managing alcohol use in NHs because they have gained control of the land." Another noted, "the kupunas' say that when our queen was overthrown, and the lands were taken away, it was taken away with the use and trade of rum and alcohol. Another noted, "The kupunas drink because of this (the loss of land), and now a lot of people drink because of what we lost and that we drink the most beer in the state of Hawaii because it is cheaper than anywhere else in Hawaii here." Multiple participants recognized that alcohol and the regulation of alcohol by settlers was used to help overthrow the NH monarchy. For example, one described "that alcohol and the regulation of alcohol by the colonizers before Hawaii became a state was used as a means to help overthrow our monarchy," plus another stated, "the regulation of alcohol by them (colonizers) before Hawaii became a state was used to help overthrow the monarchy." Lastly, one participant stated that "after 1893, look at what happened....you could see there's a history...with alcohol at that point with the laws. Right? But what happened after that it was like they didn't care anymore because they already got the land. Right?"

Theme 3: Alcohol is used today as a coping strategy for feelings of grief and anger over losses (land, people, cultural traditions, and language).

Participants shared their experiences about the use of alcohol in their community. They reported that many NH people in their community "are alcoholics." Several expressed that "NHs drink alcohol to numb feelings of low self-esteem and being pushed down." Others shared that diminished self-esteem and grief related to the loss of land, people, cultural traditions, and language. "Participants clearly articulated how alcohol was used as a coping mechanism and as self-medication. For example, one participant shared, "yeah, I think many Hawaiians drink....because of emotional pain because we Hawaiians lost so much, and I think that some just party with it. I really believe so a lot." Another participant said "I believe that especially with the men too. Right? Hawaiians, they're pushed down, so they use alcohol. I just recently lost my fiancée, and he had a bad upbringing, and he dealt with a lot of demons. So, he did drugs... you do all of that because once

somebody strips your identity, who you are, then it's hard because it brings down the self-esteem."

Later this participant went on to say, "When you get people always knocking you down, it's hard, and I see that a lot in our community... and that's what they [men especially] do to cope is use alcohol or drugs." Several also noted that this lingering pain and the use of substances then leads to anger, which can also be expressed as violence. For example, one stated, "I think some of them [NHs] drink because they are angry about what's happened to us Hawaiians." Plus, another stated, "Alcohol is a really big problem here, which causes a lot of violence because people bottle things up...and so, when people are in pain, they drink more."

#### Theme 4: The kupuna (elders) teach the younger generations to drink Alcohol.

When asked to share how NHs currently use alcohol in their community and if the Kupuna ever talked about how alcohol was used when they were growing up, several of the participants reported that it is the Kupuna who are teaching the younger generations how to drink alcohol. One participant stated, "that the younger generation is like, the older generation in how they drink." Another participant reported, "the kupunas have taught the younger generations to drink alcohol." She expressed concerns "because ... she continues to see them drinking. "Another participant reported "that alcohol is sold at the cheapest in all islands in this area...NHs love alcohol." Several participants noted concerns about seeing many of the school-age kids drinking and using methamphetamine and about the impact of these substances on them and feel that the kids learn to drink when they see the kupuna drinking. One of the participants expressed feeling "that some of the kupunas do not think that drinking is a problem... but feels that methamphetamine is becoming a bigger problem among NHs than alcohol." One expressed that "our kupunas teach us how to drink. It's what our kupunas are doing — teaching the younger generation how to drink alcohol and be like that. Yeah, look when I say habit my mom and dad drank. Drinking was considered no problem whatsoever. However, there was a problem because as we fast forward with what some those kupuna were doing destroyed our family." Another participant stated, "there are a lot of alcoholics,

especially in my family. We grew up around it." Another participant stated, "I have to put that on my family, and I would say it's just a cycle like you know with my grandfather, and my uncle, who I would say is seventy. It's just normal to just drink, drink, drink." Later she commented that they (her grandfather and uncle) wake up wasted and drink again the next day. So, I think it's something when I look at that; it has been passed down."

Table 2:

Themes	Quotes
1. Alcohol did not exist in Hawaii before European	"Alcohol was introduced by Europeans.
explorers arrived,	"We didn't have alcohol before Captain Cook, and now we do."
2. Alcohol helped expand colonialism in Hawaii,	"When our Queen was overthrown, and the lands were taken away, it was taken away with alcohol."
	"Alcohol and the regulation of alcohol by the colonizers before Hawaii became a state was used as a means to help overthrow our monarchy."
3. Alcohol is used today as a coping strategy for feelings of grief and anger	"NHs drink alcohol to numb feelings of "low self-esteem and being pushed down."
over losses	"People are self-medicating away a lot of pain. It's all because we lost our land. Because somebody else took it, and then they said get out. You're on my land. I don't want you."
	"Unfortunately, people use it as a coping mechanism for their pain about all of the losses we've hadthey "self-medicate by having a beer, and then all it's all because we lost our land."
4. The Kupuna teach the younger generations to drink alcohol	"Some of the kupunas drink alcohol and that they are the ones that show everyone else how to drink."
	"Our kupunas teach us how to drink. It's what our kupunas are doing — teaching the younger generation how to drink alcohol and be like that."

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#### **Discussion**

The findings of this study highlighted the impacts and mechanism of the event that led to historical trauma and the historical trauma response in this rural community as it related to alcohol and problem alcohol use. Four themes emerged from the analysis, which described participants' beliefs and recollections of when alcohol was first introduced to NHs, how it was utilized as a part of colonialization, its use today as a coping mechanism and a strategy to diminish pain and loss, and how alcohol use and misuse is perpetuated in the NH community over generations.

Participants were able to describe their accounts related to when alcohol was first introduced to NHs, and these accounts are largely historically accurate. A review of the historical records revealed that the first documented accounts of alcohol (grog, i.e., rum and water) appeared in Hawaii in 1778. By 1790, European settlers had introduced *okolehao* (iron bottom) made from the ti plant, native to Hawaii, and distilled in crude cast iron pots. The first NH chief to buy rum was in 1791. By the early 1800s, NH chiefs regularly drank gin, brandy, vodka, rum, and okolehao, and by 1810, excessive alcohol consumption had become a habit of many of the NH chiefs. Alcohol was the earliest modern psychoactive drug to be introduced to NHs, and it was imported in large quantities during the 19th century.<sup>12</sup>

Notably, the use of *awa* was prevalent in Hawaii long before European contact; *awa* was the only substance known in Hawaii. It was considered sacred, and its use was highly regulated by strict ceremonial rules, making abuse difficult. Traditional NH culture had no perception of psychoactive addiction because *awa* lacked the neurobiological chemistry to create that effect. *Awa* is "nonnarcotic, non-opiate, non-alcoholic, non-fermented, non-hallucinogenic, and is not physiologically addictive." NHs quickly became addicted to alcohol, which had rapidly taken over from *awa* as the

drug of choice.

Secondly, participants described their views on how alcohol helped expand colonialism in Hawaii. Their views related to this point are also supported in the historical literature. This began when European settlers intentionally disrupted NH ontology and epistemology. NHs understood identity through genealogical, kinship ties, and place of birth. The missionaries introduced Christianity, which taught new ways of thinking, including patriarchal norms and the concepts of race and class. 18,19 These new concepts replaced traditional NH concepts with ideas of difference, inferiority, and division, and with these changes. European settlers managed to influence NHs to advance their interests. <sup>20,21,17</sup> Liu and Alameda stated, "the violence permeated every level, from disruption of traditional ontology and epistemology and violent displacement with Christianity and other Western systems to the appropriation of lands, loss of traditional economy and ultimately the loss of self-government." The factors giving rise to this include health impacts on the NHs after contact with European settlers and their deliberate attempts to shape NH society to their own interests. <sup>22,17</sup> NHs were healthy at first contact with European explorers and settlers. <sup>2</sup>. During the late eighteenth and early nineteenth centuries, infectious diseases were introduced to NHs, and the population was reduced by 84% sixty years. This allowed NHs to be displaced from large tracts of land they had farmed and lived on for generations, converting them from self-sufficiency to dependence on outsiders.<sup>17</sup> Some NHs tried maintaining cultural and religious traditions, while others adopted Christianity. The contradictions between the NH-disrupted traditional spiritual practices and Christianity connect with how they conceptualized illness and the enticement to use alcohol because of its intoxicating effects as a more effective means of self-medicating in times of enormous losses. For example, when the missionaries arrived in 1820, they raised concerns over whether the NH monarchy could manage alcohol use and public disorder, which interfered with commerce and trade. These concerns influenced the NH monarch to transition to Christian laws, firstly as oral declarations concerning everyone to regulate alcohol use. 23 The critique of NH's use of alcohol was part of the

larger colonial discussion suggesting that they were not capable of political self-governance; drinking by NHs was considered a problem, but not in the same way that drinking was a problem for whites. The NH's use of alcohol was increasingly considered a threat to social order, although white foreign sailors and merchants' use of alcohol demonstrated unwanted behaviors as well. Because of these views, a unitary system of laws with dual legal codes for alcohol use was established, criminalizing alcohol use in NHs but not in whites. The alcohol regulation with NHs contrasted with the circumstances of alcohol regulation with AIs only in that the NH monarchy was influenced by the American missionaries to adopt the same prohibition policies that the U.S. government established to control drinking among AIs. The salient point from this is that the regulation of alcohol among both AIs and NHs was a means of acquiring and maintaining political autonomy over them, which eroded cultural traditions and power, resulting in cultural shifts using alcohol.<sup>23,24,8</sup>

The third theme, alcohol use, is linked to historical trauma and self-medicating from losses. NH mental health was traditionally related to *pono*, a state of balance attained through proper behaviors with the environment, the people, and the spiritual realm. The cause of illness was believed to be rooted in the spirit instead of the physical body. Alcohol's intoxicating effects were found to be better at self-medicating than *awa* when so many losses were occurring. Alcohol had become widely used to self-medicate and quickly displaced *awa* as the psychoactive drug of choice.<sup>17</sup> These observations are consistent with research findings from a scoping review, which found that 86.4% of studies found evidence of a positive link between alcohol and other drug use and historical trauma.<sup>25</sup> One study found that thinking about historical trauma demonstrated higher levels of historical loss predicted alcohol use disorder among AIs. Similarly, Another study established that symptoms of historical trauma were significantly positively associated with past-month alcohol use among AIs living in urban areas.<sup>26</sup> A pattern of consistent findings has been identified in qualitative studies with AIs identifying that historical trauma contributes to the use of alcohol in their communities.<sup>27,28,29,8,30,5</sup> Pokhrel and Herzog's study on historical trauma among NHs college students'

findings suggests that perceived discrimination mediated the effects of historical trauma on substance use or was a predictor of substance use, which highlights the need for more investigations on perceived ethnic discrimination. <sup>4</sup> Their study also noted that historical trauma might have a protective effect on substance use but stressed the need for additional research on historical trauma. Two other quantitative studies conducted by Whitbeck established that historical loss thinking is prevalent among AIs and also associated with the use of alcohol<sup>29,30</sup>. Another study established that AI participants with higher historical loss thinking had a higher likelihood of using alcohol within the past 30 days. <sup>26</sup> Walls and Whitbeck's study of the multigenerational effects of relocation experiences on Indigenous family groups focused on historical trauma as a contributor to AI health disparities, including alcohol use, and to the advantages of treating cultural loss as a source of stress.<sup>32</sup> They examined the multigenerational effects of relocation experiences on AI family groups. Als living on Indian reservations reported higher levels of drinking problems. The grandparent generations' relocation experiences were significantly associated with drinking, and the drinking problems were significantly associated with depressive symptoms and other substance use problems. Discrimination was found to be a trigger for historical loss thinking, and perceived discrimination was found to be positively associated with historical losses, which were positively associated with problem alcohol use in women. Wiechelt et al. established that participants with higher historical loss thinking had a higher probability of alcohol use within the past 30 days. <sup>26</sup> Also, many of the traumatic events described by the participants involved both parents and children and were associated with the onset of alcohol misuse.<sup>27</sup>

The participants described how historical trauma and problem alcohol use disrupted their families and their communities. They explained how maladaptive behaviors were maintained and spread through intergenerational historical trauma from the Kupuna to the younger generations, undermining healthy family functioning and child development. This is consistent with the literature, which indicates that childhood trauma experiences may impede adult's abilities to provide responsive

caregiving as they lack models of parenting in their own lives.<sup>34,5</sup> The literature shows how the intergenerational cycles of trauma manifest within families. which extends to communities impacted by historical trauma.<sup>34</sup> Walls & Whitbeck demonstrated that the grandparent generation's participation in government relocation programs negatively impacted not only the grandparent generation's well-being, leading to depression, alcohol, and other substance use problems but also subsequent generations' well-being. Indigenous peoples began using alcohol as a way to self-medicate to cope with emotional pain.<sup>31</sup> A new finding from this study is that Methamphetamine is replacing alcohol as a coping strategy in their community. It describes how it is easy to get through the USPS or FedEx and that it is cheaper than alcohol and has more powerful effects.

#### Limitations

The results of the study should be viewed in light of its limitations. First, the study was conducted in a single rural Hawaii community, with participants being predominantly female. In other urban areas, NHs on other islands and or males may have different or additional perceptions; therefore, generalizability is limited. Additionally, despite data saturation, the number of participants was small. It is uncertain if a larger sample size could have affected the resulting themes. Lastly, bias may occur as the study only included those willing to be interviewed. Despite these limitations, findings provided robust insights into NHs' perceptions related to historical trauma and alcohol use.

#### **Implications and Recommendations for Future Research**

This study is significant for several reasons and has implications for future research. When it was conducted in 2019, it was the only study that used the Historical Trauma Conceptual model and NH storytelling (mo'olelo) methodology to explore the impact of colonization and historical trauma among NHs. Historical trauma can be transmitted intergenerationally through different mechanisms, such as oral or storytelling transmission, which were explored here.

Additionally, it is essential to take into consideration Indigenous groups' geographical and

regional differences in how trauma is experienced and also how individuals within groups experience trauma.<sup>10</sup> For example, the cumulative effects of historical trauma in NHs are mitigated by the existence of resiliency and protective factors that are unique to them, requiring additional research. The findings of this qualitative study can be considered as contributing to the current knowledge base on the impact of colonization and historically traumatic experiences as an underlying predictor of alcohol and other substance use among NHs. However, multilevel, systemic evaluations are needed to assess Indigenous communities for collective trauma while observing cultural differences between groups. While communities must be evaluated, individual family and community interventions must be developed.<sup>10,33,34</sup>

Future research should further expand knowledge related to the health impact of colonization and historically traumatic experiences in diverse context-specific geographic regions. Indigenous groups must drive the research. Additionally, healing intervention models should be grounded in Indigenous worldviews to eradicate emotional distress that emerges as a legacy of historical trauma. Currently, the HLS and the HLAS do not include a full measure of depression or PTSD symptoms. Research would be strengthened by expanding and developing new measures tailored to individual Indigenous groups through participatory research. 7,31,32,

#### Conclusion

The results of this study provide important insight into NHs, lived experiences of historical trauma, and alcohol use. The results characterize the colonizing events that led to historical trauma, the introduction of alcohol and links to the problem of alcohol use today, the impact, and the mechanisms of transmission. This study reveals commonalities in the historical trauma response, expressly the loss of culture, the introduction of alcohol, self-medication with alcohol, and intergenerational transmission of historical trauma and problem alcohol use from elders to younger generations. The findings can be integrated into the current literature on related occurrences of historical trauma to advance our understanding of the historical trauma response. Necessary next

steps include including this knowledge to guide the development of culturally grounded trauma-informed interventions. The long-term goal of historical trauma research is to develop culturally relevant interventions that are informed by the communities to improve the quality of life and empower Indigenous peoples to reclaim traditional knowledge, their identity, and health and to help heal communities so that they are unburdened by grief over historic losses.

Additionally, more context-specific research is needed to validate the historical trauma model, which has implications for healing and prevention. Thoughts and awareness of historical trauma may not be harmful to health if the issues that are associated with them are addressed and individuals within a group who have experienced the transmission of intergenerational trauma are provided with the resources and tools to manage the stress that is associated with it. Research must fully understand, validate, and operationalize the historical trauma conceptual model's theoretical constructs and link them to health outcomes. Additionally, risk factors, resiliency, protective cultural factors, and survivance must be explored among Indigenous populations to include in the interventions. The knowledge gained from this study can be used to inform policies aimed at addressing historical trauma in NH communities.

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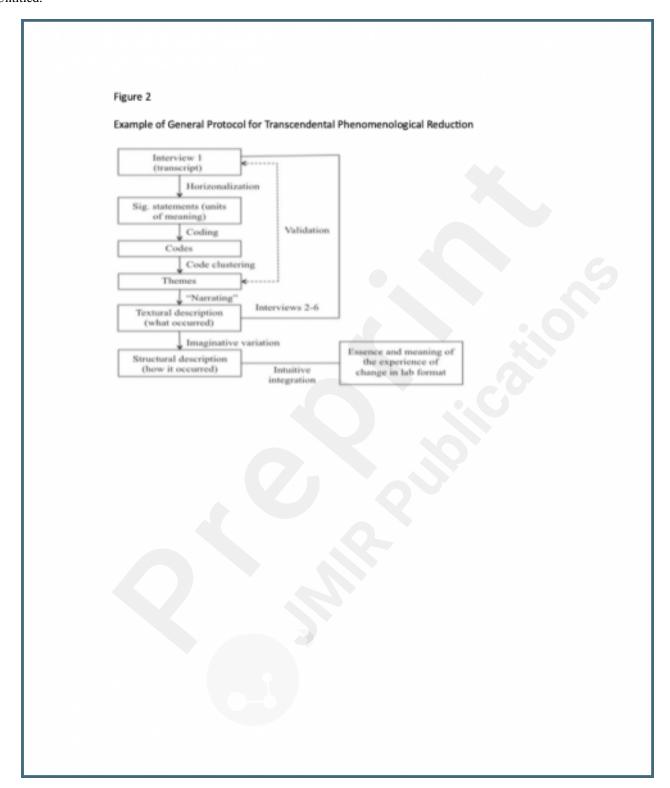
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# **Supplementary Files**

#### Untitled.



## **Figures**

#### Untitled.

