Associations between sexual violence, domestic violence, neglect, and alcohol consumption among Lahu hill tribe families in northern Thailand

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Abstract

Background: Domestic violence is one of the largest silent problems in the world. Women, children, and elderly individuals often fall victims to family members who use alcohol. However, there is lack of scientific evidence on alcohol consumption and domestic violence among Lahu hill tribe families.

Objectives: The objective of this study was to investigate the prevalence of family violence, violence against women, and alcohol-related harm to children and elderly individuals and to determine the correlations between alcohol consumption and family violence among Lahu tribe families in northern Thailand.

Method: A cross-sectional study was applied to collect data from participants living in 10 randomly selected villages from the list of Lahu villages in Chiang Rai Province, Thailand. A validated questionnaire and the Alcohol Use Disorders Identification Test were used to collect information from the participants in private and confidential rooms at a community hall between March and August 2019. Data were described and tested for correlation at the significance levels of \( \alpha = 0.05 \) and \( \alpha = 0.01 \).

Findings: A total of 350 of 719 recruited Lahu families participated in the study (response rate = 48.7%). Among female participants, 22.3% reported history of sexual harassment and 4.1% had been forced to have sex. Children and elderly individuals reported several experiences with people who had used alcohol in the past year; 6.4% had been left to live alone, 5.0% experienced financial neglect, and 1.8% had been neglected while sick. In a correlation analysis, it was found that age (\( r = -0.02, p \text{ value} < 0.009 \)), education (\( r = 0.15, p \text{ value} < 0.047 \)), marital status (\( r = 0.25, p \text{ value} < 0.001 \)), and religion (\( r = 0.20, p \text{ value} < 0.008 \)) were significantly correlated with verbal arguments among family members. Experience of sexual harassment was correlated with the presence of a drinker in the family (\( r = 0.22, p \text{ value} < 0.001 \)).

Conclusion: Government and relevant agencies should cooperate to reduce the consumption of alcohol among Lahu men. Moreover, a specific training program to personally improve one’s skill in responding to domestic violence among children, women, and elderly individuals should also be developed and implemented in Lahu communities.

Keywords

children, domestic violence, hill tribe, Lahu, the elderly, women

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Introduction

Domestic violence is one of the largest silent problems in the world; it involves one person taking power over another, which can lead to several subsequent physical, mental, and social problems.1 According to the definition of domestic violence or domestic abuse provided by the United Nations (UN), such abuse is a pattern of behavior...
in any relationship that is used to gain or maintain power and control over an intimate partner; this abuse can be physical, sexual, emotional, or psychological and can take the form of either actions or threats of action that influence another person.2 Domestic violence can happen to anyone, particularly women, children, and elderly individuals who have someone in their family or a partner who uses substances, especially alcohol.3,4 Children aged ≤ 15 years and elderly individuals aged ≥ 60 years have been defined as dependent persons.5 A dependent refers to a person who needs partial or full aid or support from another relative for his or her survival.5 These groups of people are also well known as victims of domestic violence from family members, particularly those who use alcohol.6 The United Nations Children’s Fund (UNICEF) reported that more than 275 million children around the world have been exposed to violence in their homes and that number is increasing globally.7 A large proportion of children who have experienced domestic violence will develop psychosomatic illness, depression, and suicidal tendencies.8 The World Health Organization (WHO) reported that one in three (35.0%) women worldwide have experienced either physical and/or sexual intimate partner violence or nonpartner sexual violence in their lifetimes and that 38.0% of the murders committed against women are perpetrated by their partner.9 Moreover, the WHO reported that women who have low education attainment and a low socioeconomic status are more likely to experience domestic violence, while men who live in poor economic conditions, have a low education level, and use alcohol are more likely to perpetrate violence.10

In 2020, the WHO estimated that every one in six elderly people, defined as those aged 60 years and above, will experience some form of abuse, particularly from people in their family, which can lead to serious physical injuries and long-term psychological consequences.11 The prevalence of elderly abuse perpetrated by family members is growing in accordance with the increasing aging population worldwide,11 including in Thailand.12 Therefore, it can be summarized that children, women, and elderly individuals are the main victims of domestic violence, particularly in families with poor economic status13 and low education levels,14 such as the hill tribe people of Thailand.

The hill tribe people of Thailand consist of a group of people who have migrated from South China for centuries.15 They are six main groups: Akha, Lahu, Hmong, Yoa, Karen, and Lisu.15 The Lahu people are classified as the second largest group among the hill tribes in Thailand,16,17 and high levels of substance use, especially of alcohol, are reported in the community18 in both males and females.19,20 The Lahu people have their own language and culture, and their villages are settled in the border areas of Thailand and Myanmar, which are far from cities.16 Today, more than 45.0% of the Lahu people in Thailand live below the national poverty line, which is less than US$1000 per year per person,21 and they have a generally low education level.19,20 The Lahu family traditional structure consists of an extended family of three generations, namely, children, parents, and grandparents, living together.15 In the context of the Lahu people, males dominate all societal activities both inside and outside of the families.15,16

Lahu people are known as a group of hill tribes who favor and widely use alcohol in their society.19 They use alcohol on different occasions, such as wedding ceremonies, new house ceremonies, and almost all religious rituals.20 A study among the Lahu people in northern Thailand reported a prevalence of alcohol use of 57.4%.19 Moreover, there were several patterns of alcohol use in different gender and age categories20 that could be associated with domestic violence in Lahu families. However, there was no scientific evidence available in this particular population’s context. Therefore, the objectives of this study were to investigate (1) the prevalence of family violence, violence against women, and alcohol-related harm to children and elderly individuals and (2) the correlations between alcohol consumption and family violence among Lahu tribe families in northern Thailand.

**Methods**

**Study design and setting**

A cross-sectional study was conducted to gather information from Lahu people living in 10 out of the 216 Lahu villages located in Chiang Rai Province, Thailand, in 2019.16 The villages were chosen by a random selection method.

**Study population**

The study populations were Lahu people who were living in selected villages and who had at least one person who used alcohol in the family. However, those who were unwilling to join the study and those who could not communicate effectively due to physical or mental illnesses were excluded from the study.

**Sample size assumptions and calculation**

The prevalence of domestic violence in Thai families was reported to be 41.8% in a previous study.22 The sample size of this study was calculated based on the standard formula of a cross-sectional study, 
\[ n = \frac{Z^2\alpha^2}{e^2} \times \frac{P(1-P)}{\epsilon^2}, \]
where \( Z \) is the value of the standard normal distribution corresponding to the desired confidence level \( (Z = 1.96 \text{ for } 95\% \text{ CI}) \); \( P \) is the expected true proportion, which was determined based on a previous study; and \( e \) is the desired precision level. Therefore, a total of 316 families were required for the study. Accounting for an additional 10.0% to cover any...
errors in the study process, a total of 348 families were needed for the analysis.

**Research tool and measurements**

The questionnaire was developed by using various sources of information, such as a literature review, the researcher’s professional experience, discussions with health care workers who were working at a small hospital located in a Lahu village, and discussions with Lahu community leaders. The questionnaire was tested to improve its validity and reliability before its use. The item-objective congruence method (IOC) was used to detect and improve the validity of the questionnaire by asking three experts in the field, namely, a psychologist, a psychiatric nurse who worked at the clinic, and a public health worker, to give scores and comments on each item of the questionnaire. After the questionnaire passed the validity test, it was pilot tested in 20 Lahu families from two Lahu villages in the Mae Chan District, Chiang Rai Province, Thailand. The pilot test was conducted two times (test–retest method). Cronbach’s alpha value of the whole questionnaire set was 0.77.

Finally, the questionnaire consisted of six parts. In part 1, seven questions were asked to collect family information, such as the number of family members, the annual family income, the number of children aged ≤15 years, the number of women, and the number of elderly individuals aged ≥60 years. In part 2, six questions were asked about those family members who use alcohol, such as their history of accidents after alcohol use, conflicts with family members, and conflicts with people outside the family. In part 3, seven questions were asked to collect information about women who had experienced violence from family members who used alcohol, such as having experience with sexual harassment and being forced to have sex. In part 4, five questions were asked to collect information about children (aged ≤15 years) and elderly individuals (aged ≥60 years) who had experienced harm or violence from those family members who used alcohol, such as experiences related to being left to live alone, being ignored regarding financial support, and being ignored in regard to the provision of essential items for life. In part 5, 12 questions were asked to collect information about forms of violence or harm done to children (aged ≤15 years), women, and elderly individuals (aged ≥60 years) by family members who used alcohol, such as experience with being forced to buy food and drink, being forced to use substances, and being forced to ask for money from or loan money to other people. Part 6 consisted of the standard 10-question Alcohol Use Disorders Identification Test (AUDIT).23

**Data gathering procedures**

Access to the targeted villages was granted by the district officer. All the selected village headmen were contacted and provided with essential information regarding the study. A list of family members who met the criteria of having at least one family member who used alcohol was obtained from the village headmen. Each village was made aware of their appointment for data collection 3 days ahead of time. On the date of the data collection (March–August 2019), all the selected families were asked to confirm that they had at least one family member who used alcohol. All the participants were asked to complete an informed consent form before starting their interview in a private and confidential room located in the village.

To collect the general information (part 1), the family headman was asked the questions. For the remaining parts, children aged ≤15 years, women, and elderly individuals aged ≥60 years were asked questions about impacts experienced by their family members who used alcohol in regard to all aspects: physical health, mental health, and other. One of the researchers spoke the Lahu language, and she was assigned to gather information from children and other people who could not speak Thai. The interviews lasted 30 min each.

All the interviewers were trained during a 2-day course. During the process of data collection, a psychiatric nurse who was one of the research team members observed and monitored the proceedings to ensure that the participants were approached safely and were not too emotionally invested in the questions. For children less than 10 years old, all information was obtained from their parents. The unit of analysis in this study was the family.

**Data analysis**

The data were double entered into Excel sheets and checked for any errors. The data file was transferred into SPSS version 24, 2020 (SPSS, Chicago, IL) for analysis. In the descriptive step, the categorical data were described as percentages, while the continuous data were described as the mean and standard deviation (SD) when the data presented a normal distribution. When the data were skewed, they were presented in form of the median and interquartile range (IQR) instead. Spearman correlations were performed to test the correlations between the variables at the significance levels of α=0.05 and 0.01.

**Ethical consideration**

All the study protocols were approved by the Mae Fah Luang University Research Ethics Committee on Human Research (No. REH-60107). All methods were performed in accordance with the relevant guidelines and regulations of the institutional ethical review board and the Declaration of Helsinki. Before starting the interview, all participants were provided all relevant and essential information. Written informed consent was obtained on a voluntary basis before starting the interview. For participants aged less than 16 years, informed consent was obtained from a parent. Those who could not understand Thai were explained all the
information with the help of the village health volunteers who were fluent in both Thai and their local language before they placed their fingerprint on the informed consent form. Moreover, all questionnaires were destroyed after coding and data entry into the Excel sheets, which did contain identifiable information for any individual.

Results

A total of 350 out of the 719 (48.7%) Lahu families in Chiang Rai Province, Thailand, were recruited for the study based on having at least one family member who used alcohol. No selected families or individuals refused to participate in the study. Based on family registration, the average family consisted of five individuals (mean = 5.5, SD = 2.1). However, an average of four members (mean = 4.8, SD = 1.9) lived together at the time of data collection. The average annual income was 55,778 baht (median = 42,500 baht, IQR = 60,000 baht) or US$1860. Three-fourths (74.0%) of the participants reported that there was enough income to support their family, and 85.9% had their own land, with an average of 10 rai (approximately 4 acres) (Table 1).

In all, 269 families (78.0%) had at least one family member who was aged less than 15 years (two on average), 29.3% had a family member who was aged 60 years or above, 0.6% had a family member who had chronic illness and needed help in their daily lives, and 3.8% of the Lahu families had a person with disabilities (Table 1).

A total of 1028 people living in 350 Lahu families reported having at least one person who used alcohol in the family. The majority of the people who used alcohol in the families were males (65.0%), aged 16 to 59 years (88.7%), and married (70.2%). Most of them were illiterate (42.4%) and worked as farmers (49.8%) (Table 2).

A total of 512 people (49.8%) out of the 1028 participants reported using alcohol in the past year. Based on the results of the AUDIT assessment, 81.3% were determined to be low risk, 12.5% were determined to be at the hazardous level, and 6.2% were determined to be at the harmful or dependent level (Table 3).

Table 1. General characteristics of Lahu families with a family member who used alcohol.

| Characteristics                          | n  | %    |
|------------------------------------------|----|------|
| Total (family)                           | 350| 100.0|
| Number of family members on the family registered list (person) |    |      |
| ⩽5                                      | 198| 56.9 |
| 6–10                                    | 142| 40.8 |
| >10                                     | 8  | 2.3  |
| Number of family members living together (person) |    |      |
| ⩽5                                      | 235| 67.5 |
| 6–10                                    | 111| 31.9 |
| >10                                     | 2  | 0.6  |
| Family annual income (baht)              |    |      |
| <50,000                                  | 230| 67.8 |
| 50,001–100,000                           | 64 | 18.8 |
| >100,001                                 | 47 | 13.9 |
| Owns own land                           |    |      |
| No                                      | 48 | 14.1 |
| Yes                                     | 293| 85.9 |
| Family member aged ⩽15 years            |    |      |
| No                                      | 76 | 22.0 |
| Yes                                     | 269| 78.0 |
| Family member aged ⩾60 years            |    |      |
| No                                      | 244| 70.7 |
| Yes                                     | 101| 29.3 |

Table 2. Characteristics of Lahu people who used alcohol in the past year.

| Characteristics                          | n   | %    |
|------------------------------------------|-----|------|
| Total                                    | 1028| 100.0|
| Reported not used alcohol in the past year| 516 | 50.2 |
| Reported using alcohol in the past year  | 512 | 49.8 |
| Sex                                      |     |      |
| Male                                     | 333 | 65.0 |
| Female                                   | 179 | 35.0 |
| Age (years)                              |     |      |
| ⩽15                                      | 18  | 3.5  |
| 16–59                                    | 454 | 88.7 |
| >60                                      | 40  | 7.8  |
| Mean = 35.4, SD = 14.3 (Min = 10, Max = 77) |     |      |
| Marital status                           |     |      |
| Single                                   | 119 | 23.2 |
| Married                                  | 359 | 70.2 |
| Ever married                             | 34  | 6.6  |
| Religion                                 |     |      |
| Buddhist                                 | 271 | 52.9 |
| Christian                                | 240 | 46.9 |
| Islam                                    | 1   | 0.2  |
| Education                                |     |      |
| No education                             | 217 | 42.4 |
| Primary school                           | 163 | 31.8 |
| Secondary school                         | 108 | 21.1 |
| High school and above                    | 24  | 4.7  |
| Income                                   |     |      |
| No                                       | 80  | 15.6 |
| Yes (whole year and continuously)        | 432 | 84.4 |
| Medical illness                          |     |      |
| No                                       | 487 | 95.1 |
| Yes                                      | 25  | 4.9  |
| Required to visit a medical office regularly |     |      |
| No                                       | 3   | 12.0 |
| Yes                                      | 22  | 88.0 |

SD: standard deviation.
Those respondents who used alcohol reported several forms of conflicts: 27.7% had verbal conflicts with family members, 11.7% had destroyed items, and 10.7% had physically abused family members (Table 4).

There were several forms of sexual abuse reported by Lahu women from a person who used alcohol in their family; 22.3% had experienced sexual harassment, 5.0% had experienced nonconsensual hugging and kissing, and 4.1% had experienced nonconsensual intercourse (Table 4).

**Table 3.** Harm levels among Lahu people who used alcohol assessed by AUDIT (n=512).

| Level of harms                  | n  | %   |
|--------------------------------|----|-----|
| Low risk                       | 416| 81.3|
| Moderate risk of harm           | 64 | 12.5|
| High risk or harmful level      | 16 | 3.1 |
| Dependence likely              | 16 | 3.1 |

AUDIT: Alcohol Use Disorders Identification Test.

The impacts found among the dependent population (children aged 15 years and elderly individuals aged 60 years) were reported in different forms: 6.4% reported being left to live alone, 5.0% reported being financially neglected, 1.8% reported being neglected while sick, and 5.0% reported being taken away from their homes (Table 4).

Some of the participant characteristics were correlated with some forms of domestic violence. For instance, age (r = −0.02, p value < 0.009), education (r = 0.15, p value < 0.047), marital status (r = 0.25, p value < 0.001), and religion (r = 0.20, p value < 0.008) were significantly correlated with verbal arguments with family members. Alcohol use (r = 0.22, p value < 0.001) was correlated with sexual harassment of people in the family (Table 5).

**Discussion**

Most Lahu people in Thailand live in poor economic conditions and have low education levels. Almost half of Lahu families are multigenerational households. Males were

**Table 4.** Prevalence of family violence, violence against women, and alcohol-related harm to children and elderly individuals among Lahu families.

| Characteristics                          | Family level (Family) | Individual level (Person) |
|-----------------------------------------|-----------------------|----------------------------|
| Characteristic                          | N        | %     | n    | %     |
| Characteristics of violence             |          |       |      |       |
| Having verbal arguments with a family member | 350     | 100.0 | 1028 | 100.0 |
| Once a week                             | 97       | 27.7  | 192  | 1.8   |
| Once a month                            |          |       | 47   | 27.9  |
| Once a year                             |          |       | 107  | 63.7  |
| Destroying items                        |          |       | 41   | 11.7  |
| Once a week                             |          |       | 75   | 7.3   |
| Once a month                            |          |       | 6    | 10.3  |
| Once a year                             |          |       | 11   | 18.9  |
| Physically abusing a family member      |          |       | 41   | 70.7  |
| Once a week                             |          |       | 66   | 6.4   |
| Once a month                            |          |       | 4    | 7.8   |
| Once a year                             |          |       | 7    | 13.7  |
| Nonconsensual hugging and kissing       | 16       | 5.0   |      |       |
| Nonconsensual squeezing and stroking    | 8        | 2.5   |      |       |
| Nonconsensual intercourse               | 13       | 4.1   |      |       |
| Being spoken to under the influence of jealousy | 28  | 8.8   |      |       |
| Nonconsensual intercourse               | 24       | 7.6   |      |       |
| Threatened with separation              |          |       |      |       |
| Lahu children and elderly individuals   |          |       |      |       |
| Being left to live alone                | 14       | 6.4   |      |       |
| Financial neglect                       | 11       | 5.0   |      |       |
| Being taken care of by other people     | 14       | 6.4   |      |       |
| Being ignored regarding the provision of essential items for life | 9 | 4.1 |      |       |
| Being neglected while sick              | 4        | 1.8   |      |       |
| Being taken away from one’s home        | 11       | 5.0   |      |       |
identified as the group most likely to use alcohol. Among those people who used alcohol, one-fifth reported drinking at hazardous-to-dependent levels. Several forms and different frequencies of violence were reported by Lahu families that had at least one member who reported using alcohol. Sexual abuse was a major violence perpetrated against Lahu women, while children and elderly individuals faced neglect in regard to not receiving essential items for daily life from those who used alcohol.

In our study, almost half of the Lahu families in the observed villages were reported to have at least one family member who used alcohol. This outcome reflects how much the use of alcohol is favored among the Lahu people. A closer examination of the people who used alcohol showed that two-thirds of them were male and that the majority were married and had a low attainment of education. This might be because married couples are more likely to have children and elderly individuals living under the same roof as extended family. In Lahu society, poor economic conditions, low education levels, and male dominance are also characteristic. The ratio of Christians to Buddhist was found to be close (1:1.2). The prevalence of alcohol use among the Lahu people was similar to that found in a study conducted by Singkorn et al. in 2019. However, the proportion of alcohol use among Thai families (68.0%) has been found to be higher than that among Lahu families. There are few publications that study the use of alcohol by family units, such as our study.

Among the Lahu people who had at least one person who used alcohol in their family, the variables of age and domestic violence were found to be weakly negatively correlated. This finding coincides with a very interesting study conducted in Thailand that collected information from newspapers from 2011 to 2015 and found that young children in Thai families were the major victims of family members who used alcohol. Vleeman and Reuber also reported that children living with parents who used alcohol face several and wide ranges of negative experiences and often developed psychological and physical symptoms as a result. Finally, the WHO confirmed that children living in families with alcohol problems are the major victims of domestic violence worldwide.

In the Lahu families studied, low education attainment was correlated with an increase in some forms of domestic violence. Lloyd reported that domestic violence is associated with poor education levels in both victims and domestic violence instigators. A study in Saudi Arabia reported that the improvement of the education level of women could lead to the reduction of domestic violence for women and children. Marium reported that the improvement of women’s education has decreased domestic violence rates in rural Bangladesh. Moreover, a study in Malawi supported the idea that education is a key factor in improving domestic violence problems.

In Lahu families, people who reported living with their spouse were more likely to experience domestic violence. This might be because married couples are more likely to have children and elderly individuals living under the same roof as extended family. In Lahu society, poor economic conditions, low education levels, and male dominance are also characteristic. The WHO reported that intimate partner violence is a major problem in Thai families. Laheem and Boonprakarn reported that in the context of Thai society, men have more power than women, and women are the victims of their spouses in regard to physical, mental, and sexual abuse. A study in Thailand

### Table 5. Correlation between general profiles and substance use of participants and domestic violence.

| Factor          | Harms                        | Verbal arguments with family members | Physical abuse of family members | Verbal argument with people outside the family | Physical abuse of people outside the family | Sexual harassment |
|-----------------|------------------------------|-------------------------------------|----------------------------------|-----------------------------------------------|-----------------------------------------------|-------------------|
| Age             | r = –0.23 (p value = 0.081)  | r = –0.20 (p value = 0.009***)       | r = –0.23 (p value = 0.105)      | r = –0.27 (p value = 0.122)                   | r = –0.27 (p value = 0.851)                   | r = –0.04 (p value = 0.394)                     |
| Sex             | r = –0.09 (p value = 0.646)  | r = 0.11 (p value = 0.638)           | r = 0.17 (p value = 0.047***)     | r = 0.02 (p value = 0.96)                     | r = 0.02 (p value = 0.979)                    | r = 0.00 (p value = 0.998)                      |
| Education       | r = 0.17 (p value = 0.220)   | r = 0.08 (p value = 0.868)           | r = 0.17 (p value = 0.20)        | r = 0.08 (p value = 0.096)                    | r = 0.08 (p value = 0.279)                    | r = 0.03 (p value = 0.555)                      |
| Marital status  | r = –0.23 (p value = 0.083)  | r = –0.25 (p value = 0.001***)       | r = –0.23 (p value = 0.070)      | r = –0.25 (p value = 0.20)                    | r = –0.25 (p value = 0.070)                   | r = –0.05 (p value = 0.254)                     |
| Religion        | r = –0.07 (p value = 0.595)  | r = 0.20 (p value = 0.783)           | r = –0.15 (p value = 0.08)       | r = –0.15 (p value = 0.364)                   | r = –0.15 (p value = 0.101)                   | r = –0.07 (p value = 0.087)                     |
| Alcohol use     | r = –0.09 (p value = 0.698)  | r = 0.07 (p value = 0.190)           | r = 0.06 (p value = 0.374)       | r = 0.06 (p value = 0.638)                    | r = 0.06 (p value = 0.311)                    | r = –0.38 (p value = 0.001***)                  |
| Smoking         | r = 0.05 (p value = 0.717)   | r = 0.02 (p value = 0.759)           | r = 0.05 (p value = 0.79)        | r = 0.05 (p value = 0.190)                    | r = 0.05 (p value = 0.094)                    | r = –0.05 (p value = 0.216)                     |
| Amphetamine use | r = –0.13 (p value = 0.339)  | r = 0.08 (p value = 0.309)           | r = 0.13 (p value = 0.309)       | r = 0.13 (p value = 0.395)                    | r = 0.13 (p value = 0.406)                    | r = 0.03 (p value = 0.427)                      |

*Significance level at $\alpha = 0.05$; **Significance level at $\alpha = 0.01$. 

- Physical abuse of family members
- Verbal arguments with family members
- Verbal argument with people outside the family
- Physical abuse of people outside the family
- Sexual harassment
also noted that more than 50.0% of married women reported being hurt by their husbands in the prior year. In our study, alcohol use and sexual harassment were found to be significantly correlated among people living in Lahu families. Some studies have reported on the correlation between alcohol use and sexual abuse. Furthermore, in the Thailand Smoking and Drinking Behavior Survey of 2017, it was reported that alcohol use by family members was the main factor associated with domestic violence among Thai families.

Some limitations were found during this study. While alcohol use is very common among Lahu people for both males and females, the reporting or discussion of domestic violence or problems within the family is not widely accepted in Lahu society. Therefore, all the participants were approached using the proper method and the experience of the research team, which has long-term experience with performing research among the hill tribes and understands that the trust between participants and researcher is the key to obtaining such information. Some participants did not speak Thai, in which case local volunteers were then asked to collect the information. Fewer than half of the recruited families agreed to participate in the study, thus the possibility of selection bias should be considered in the interpretation of the study findings. Moreover, domestic violence is a very sensitive topic, thus social desirability bias also could have affected the study findings. In addition, the analyses in this study were exploratory. Domestic violence is a complex problem with multiple predictors in addition to alcohol consumption. Future studies should consider measuring other predictors of domestic violence and adjusting for these predictors as potential confounders using multivariate analyses techniques in order to provide a more detailed and complete understanding of domestic violence among Lahu hill tribe people.

Conclusion

Domestic violence within a Lahu family that has at least one member who uses alcohol is very common. Children aged ≤15 years, women, and elderly individuals aged ≥60 years are the major victims of domestic violence within such Lahu families. Violence occurs in the form of physical, mental, and sexual abuse and ranges from small problems to very harmful problems. Lahu women are vulnerable to sexual abuse, while children aged ≤15 years and individuals older ≥60 years are vulnerable to being neglected regarding the provision of essential goods for their daily life. This outcome reflects the urgent need to develop a program to reduce alcohol use among the Lahu people. Moreover, training programs that aim to personally improve one’s skills in response to domestic violence for major vulnerable populations, such as children aged ≤15 years, women, and elderly individuals aged ≥60 years, are urgently required. In addition, government and nongovernment entities are responsible for addressing this problem and should thus integrate their work and implement programs that can reduce the problem of domestic violence, especially in regard to alcohol use, in Lahu society. Conducting prospective research to further understand the context of and identify the factors associated with domestic violence among Lahu families is also crucial to reduce recall bias and selection bias.

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Author contributions

P.S., N.P., and T.A. developed the research tools, collected the data, interpreted the analysis, and drafted the final manuscript. O.S., R.T., and P.U. collected the data and analyzed and interpreted the data. R.S. developed concept of the research and analyzed the data. All authors read and approved the final manuscript.

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